Exploring Needs and Supportive Factors for Students with Autism Spectrum Conditions who Show Signs of Anxiety within the Mainstream Secondary School Setting

A thesis submitted to The University of Manchester for the degree of Doctorate in Educational and Child Psychology in the Faculty of Humanities

2013

Dawn Suzanne Menzies

School of Education
Contents

List of Tables .................................................................................................................. 9
List of Figures ................................................................................................................. 10
Abstract .......................................................................................................................... 11
Declaration ...................................................................................................................... 12
Copyright Statement ...................................................................................................... 13
Preface .............................................................................................................................. 14
Acknowledgements ........................................................................................................ 15
Dedication ........................................................................................................................ 16
List of Acronyms and Abbreviations ............................................................................. 17
1 Introduction .................................................................................................................. 18
   1.1 Rationale .............................................................................................................. 18
   1.2 Terminology ........................................................................................................ 20
   1.3 Thesis overview .................................................................................................. 20
      1.3.1 Literature Review ....................................................................................... 20
      1.3.2 Methodology ............................................................................................... 21
      1.3.3 Results ......................................................................................................... 21
      1.3.4 Discussion .................................................................................................... 21
2 Literature Review ........................................................................................................ 22
   2.1 Chapter Introduction ............................................................................................ 22
   2.2 Structure of the Literature Review ...................................................................... 22
   2.3 Literature Review Strategy .................................................................................. 22
      2.3.1 A note on ‘good’ practice and ‘effective’ practice ...................................... 23
   2.4 Autism Spectrum Conditions .............................................................................. 24
      2.4.1 Asperger’s syndrome and ‘High Functioning Autism’ .............................. 25
      2.4.2 Prevalence of Autism Spectrum Conditions ............................................. 26
      2.4.3 Inclusion and Autism Spectrum Conditions ............................................. 26
      2.4.4 Education and Autism Spectrum Conditions ........................................... 28
   2.5 Anxiety .................................................................................................................. 28
      2.5.1 Anxiety in children and young people ......................................................... 29
      2.5.2 Anxiety within school-age children ............................................................ 29
   2.6 Autism Spectrum Conditions and Anxiety ......................................................... 30
      2.6.1 Identification of anxiety in children and young people with Autism Spectrum
            Conditions ....................................................................................................... 32
   2.7 Perspectives on Anxiety Regarding Students with Autism Spectrum Conditions
      in the School Setting ............................................................................................... 35
      2.7.1 Presentation of anxiety in students with Autism Spectrum Conditions ...... 37
      2.7.2 Factors contributing to anxiety in students with Autism Spectrum Conditions
            in mainstream secondary schools ................................................................... 39
      2.7.3 The impact of anxiety for students with Autism Spectrum Conditions ...... 43
2.7.4 Strategies, support and approaches for students with Autism Spectrum Conditions and anxiety ......................................................... 45
2.7.4.1 Environmental and sensory adaptations and supports. .................. 46
2.7.4.2 Support with transitions. ...................................................... 46
2.7.4.3 Social support. ................................................................... 47
2.7.4.4 The development of peer awareness, understanding and support. ...... 48
2.7.4.5 The development of improved self-awareness. ............................ 48
2.7.4.6 Use of specific interests and preferred activities ......................... 48
2.7.4.7 The development of stress management. .................................... 49
2.7.4.8 Cognitive behavioural support. ............................................. 49
2.7.4.9 Support from school practitioners. .......................................... 50
2.7.4.10 School practitioner training and development ......................... 51
2.7.4.11 Whole school approaches. .................................................. 51
2.7.4.12 Collaborative working. ...................................................... 52
2.7.4.13 Parent-school collaboration. .............................................. 53
2.7.4.14 Medical intervention. ....................................................... 53
2.7.5 Access to anxiety support for students with Autism Spectrum Conditions. ... 54
2.7.6 The role of the Educational Psychologist ...................................... 55
2.7.7 Summary of the literature review. ............................................ 56
2.8 Research Aims and Expected Contribution to Knowledge ................. 59
2.9 Research Questions .................................................................... 60
3 Methodology ................................................................................. 61
3.1 Chapter Introduction .................................................................... 61
3.2 Rationale .................................................................................... 61
3.3 Ontological and Epistemological Position ....................................... 61
  3.3.1 Positivism, Relativism and Social Constructionism ....................... 62
  3.3.2 Realism. .................................................................................. 63
    3.3.2.1 Critical Realism. ............................................................... 63
  3.4 Axiology ...................................................................................... 64
3.5 Design ......................................................................................... 67
  3.5.1 Qualitative approach. ............................................................... 67
  3.5.2 Case study design. .................................................................... 67
    3.5.2.1 Theoretical framework................................................... 68
    3.5.2.2 Theoretical propositions and rival explanations ..................... 69
    3.5.2.3 Multiple case study design. ............................................. 70
    3.5.2.4 Critique of the design .................................................... 72
  3.5.3 Participant sampling. ............................................................... 74
    3.5.3.1 Sample size ...................................................................... 74
    3.5.3.2 Sampling criteria. ........................................................... 74
    3.5.3.3 Participant recruitment and identification. ........................... 77
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6</td>
<td>Data Collection</td>
<td>80</td>
</tr>
<tr>
<td>3.6.1</td>
<td>Semi-structured interviews</td>
<td>80</td>
</tr>
<tr>
<td>3.6.1.1</td>
<td>Interview questions</td>
<td>81</td>
</tr>
<tr>
<td>3.6.2</td>
<td>Card sort exercises</td>
<td>81</td>
</tr>
<tr>
<td>3.6.3</td>
<td>Interview process and details</td>
<td>83</td>
</tr>
<tr>
<td>3.6.3.1</td>
<td>Adaptations to the interview process for individuals with ASC</td>
<td>84</td>
</tr>
<tr>
<td>3.6.4</td>
<td>Documents</td>
<td>85</td>
</tr>
<tr>
<td>3.6.5</td>
<td>Critique of data collection</td>
<td>87</td>
</tr>
<tr>
<td>3.6.5.1</td>
<td>Interviews</td>
<td>88</td>
</tr>
<tr>
<td>3.6.5.2</td>
<td>Documentary data</td>
<td>88</td>
</tr>
<tr>
<td>3.7</td>
<td>Data Analysis</td>
<td>89</td>
</tr>
<tr>
<td>3.7.1</td>
<td>Thematic analysis</td>
<td>89</td>
</tr>
<tr>
<td>3.7.1.1</td>
<td>Process of carrying out thematic analysis</td>
<td>91</td>
</tr>
<tr>
<td>3.7.2</td>
<td>Thematic networks</td>
<td>93</td>
</tr>
<tr>
<td>3.7.3</td>
<td>Critique of data analysis</td>
<td>94</td>
</tr>
<tr>
<td>3.8</td>
<td>Reliability and Validity</td>
<td>95</td>
</tr>
<tr>
<td>3.8.1</td>
<td>Reliability</td>
<td>95</td>
</tr>
<tr>
<td>3.8.2</td>
<td>Validity</td>
<td>97</td>
</tr>
<tr>
<td>3.8.3</td>
<td>Reflexity</td>
<td>100</td>
</tr>
<tr>
<td>3.9</td>
<td>Analytic Generalisability</td>
<td>100</td>
</tr>
<tr>
<td>3.10</td>
<td>Ethical Considerations</td>
<td>101</td>
</tr>
<tr>
<td>3.10.1</td>
<td>Respect for human dignity</td>
<td>101</td>
</tr>
<tr>
<td>3.10.2</td>
<td>Integrity and quality</td>
<td>102</td>
</tr>
<tr>
<td>3.10.3</td>
<td>Respect for free and informed consent</td>
<td>102</td>
</tr>
<tr>
<td>3.10.4</td>
<td>Respect for vulnerable persons</td>
<td>103</td>
</tr>
<tr>
<td>3.10.5</td>
<td>Respect for privacy and confidentiality</td>
<td>103</td>
</tr>
<tr>
<td>3.10.6</td>
<td>Voluntary participation</td>
<td>104</td>
</tr>
<tr>
<td>3.10.7</td>
<td>Procedures should avoid harm</td>
<td>104</td>
</tr>
<tr>
<td>3.11</td>
<td>Time-line and Time Budget</td>
<td>105</td>
</tr>
<tr>
<td>3.12</td>
<td>Operational Risk Analysis</td>
<td>105</td>
</tr>
<tr>
<td>3.13</td>
<td>Summary of Methodology</td>
<td>105</td>
</tr>
<tr>
<td>4</td>
<td>Results</td>
<td>107</td>
</tr>
<tr>
<td>4.1</td>
<td>Chapter Introduction</td>
<td>107</td>
</tr>
<tr>
<td>4.2</td>
<td>Presentation of results</td>
<td>107</td>
</tr>
<tr>
<td>4.3</td>
<td>Vignettes for cases</td>
<td>108</td>
</tr>
<tr>
<td>4.3.1</td>
<td>Vignette for case one</td>
<td>108</td>
</tr>
<tr>
<td>4.3.2</td>
<td>Vignette for case two</td>
<td>109</td>
</tr>
<tr>
<td>4.3.3</td>
<td>Vignette for case three</td>
<td>109</td>
</tr>
<tr>
<td>4.3.4</td>
<td>Vignette for case four</td>
<td>110</td>
</tr>
</tbody>
</table>
4.4 Thematic networks linking to research question one ..................................110

4.4.1 Global theme: recognising factors contributing to anxiety. ..................110
  4.4.1.1 Organising theme: managing change ...........................................110
  4.4.1.2 Organising theme: unstructured time ..........................................113
  4.4.1.3 Organising theme: environmental and sensory factors ....................113
  4.4.1.4 Organising theme: academic pressures and expectations .................115
  4.4.1.5 Organising theme: negative peer behaviour ..................................116
  4.4.1.6 Organising theme: social situations and interaction .......................117
  4.4.1.7 Organising theme: negative thinking patterns ................................119
  4.4.1.8 Organising theme: difficulty processing and managing feelings .......121
  4.4.1.9 Organising theme: home circumstances ......................................122

4.4.2 Global theme: recognising the signs and impact of anxiety ..................122
  4.4.2.1 Organising theme: physiological manifestations ............................124
  4.4.2.2 Organising theme: outward emotional expression ............................126
  4.4.2.3 Organising theme: difficulty with emotional regulation ....................126
  4.4.2.4 Organising theme: impact upon emotional wellbeing .......................128
  4.4.2.5 Organising theme: poor self perception ......................................128
  4.4.2.6 Organising theme: impact upon social interaction ..........................129
  4.4.2.7 Organising theme: increased repetitive and autistic behaviours .........131
  4.4.2.8 Organising theme: sub-optimal performance ..................................133
  4.4.2.9 Organising theme: risk of lowered attendance and exclusion ............134

4.5 Thematic Networks Linking to Research Question Two ..........................135

4.5.1 Global Theme: perceived effective actions and strategies to address the
  anxiety. .................................................................................................135
  4.5.1.1 Organising theme: well planned transition to secondary school ..........135
  4.5.1.2 Organising Theme: structure, planning and organisational support ....138
  4.5.1.3 Organising theme: adaptations in lessons .....................................139
  4.5.1.4 Organising theme: a safe space .................................................139
  4.5.1.5 Organising theme: use of anxiety management strategies .................140
  4.5.1.6 Organising theme: peer support networks ....................................143
  4.5.1.7 Organising theme: social skills support .......................................144
  4.5.1.8 Organising theme: positivity and acceptance ...............................145
  4.5.1.9 Organising theme: adult support with anxiety management .............148
  4.5.1.10 Organising theme: staff deployment and approach .......................149
  4.5.1.11 Organising theme: staff knowledge and understanding ....................151
  4.5.1.12 Organising theme: good home-school liaison ................................152
  4.5.1.13 Organising theme: external support .........................................153
  4.5.1.14 Organising theme: barriers to effective practice ...........................154
  4.5.1.15 Organising theme: perceived positive outcomes ...........................155

4.6 Summary of Results .............................................................................157
5 Discussion

5.1 Chapter Introduction

5.2 Success of the Research in Achieving the Study Aims

5.3 Discussion in relation to the Research Questions

5.3.1 Research question one.

- 5.3.1.1 Change and lack of structure.

- 5.3.1.2 Transition to secondary school.

- 5.3.1.3 Environmental and sensory factors.

- 5.3.1.4 Increased repetitive and autistic behaviours.

- 5.3.1.5 Academic and social pressures and expectations.

- 5.3.1.6 Negative thinking patterns.

- 5.3.1.7 Poor self-perception.

- 5.3.1.8 Negative peer behaviour.

- 5.3.1.9 Social situations and interaction.

- 5.3.1.10 Impact upon social interaction.

- 5.3.1.11 Emotional wellbeing.

- 5.3.1.12 Processing and managing feelings.

- 5.3.1.13 Physiological manifestations and outward emotional expression.

- 5.3.1.14 Emotional regulation.

- 5.3.1.15 Exclusion and attendance.

- 5.3.1.16 Lowered performance within school.

5.3.2 Research question two.

- 5.3.2.1 Well-planned transition to secondary school.

- 5.3.2.2 Structure, planning and organisational support.

- 5.3.2.3 Adaptations in lessons.

- 5.3.2.4 Staff knowledge and understanding.

- 5.3.2.5 Staff deployment and approach.

- 5.3.2.6 Adult support with anxiety management.

- 5.3.2.7 Use of anxiety management strategies.

- 5.3.2.8 A ‘safe’ space.

- 5.3.2.9 Social skills support.

- 5.3.2.10 Peer support networks.

- 5.3.2.11 Positivity and acceptance.

- 5.3.2.12 Good home-school liaison.

5.4 Theoretical Propositions and Rival Explanations

5.4.1 Analysis of the research propositions.

5.4.2 Analysis of the rival explanations.

5.5 Contributions and Limitations of the Research

5.5.1 Contributions of the research.

5.5.2 Limitations of the research.
5.6 Implications of the research. ................................................................. 183
5.6.1 Implications for students. ............................................................... 183
5.6.2 Implications for parents/carers. ..................................................... 184
5.6.3 Implications for schools. ............................................................... 185
5.6.4 Implications for Educational Psychologists. ............................... 189
5.6.5 Implications for the Local Authority ............................................. 192
5.6.6 National implications. ................................................................. 193
5.6.7 Implications for future research ................................................... 194
5.7 Reflections upon the Research ......................................................... 195
5.8 Conclusion ..................................................................................... 196
6 References ...................................................................................... 198
7 Appendices ....................................................................................... 214
APPENDIX A: Literature Search Strategy ............................................. 215
APPENDIX B: Inclusion and Exclusion Criteria for Phase 1 of the Literature Review . 218
APPENDIX C: Inclusion and Exclusion Criteria for Phase 2 of the Literature Review . 220
APPENDIX D: Theoretical Propositions ................................................ 221
APPENDIX E: Rival Explanations ......................................................... 231
APPENDIX F: Criteria for Student Inclusion and Recruitment Checklist .... 232
APPENDIX G: Students’ School Details ................................................. 234
APPENDIX H: The Original Planned Participant Recruitment Process ....... 235
APPENDIX I: Recruitment Letter to SENCos ....................................... 236
APPENDIX J: Recruitment Letter to SEN Officers and Specialist Teachers .... 238
APPENDIX K: Initial Information/Consent Letter for Parents ................. 240
APPENDIX L: Second Parent Consent Letter, Consent Form and Information Sheet re Taking Part in the Research .......................................................... 243
APPENDIX M: Information / Assent Letters for Older Students ............. 248
APPENDIX N: Information / Assent Letters for Younger Students ........... 251
APPENDIX O: Criteria for Practitioner Inclusion in the Research .......... 254
APPENDIX P: Information/ Consent Letter for Practitioners .................. 255
APPENDIX Q: Interview Schedule and Questions for Practitioners ........ 258
APPENDIX R: Interview Schedule and Questions for Parents ................ 261
APPENDIX S: Interview Schedule and Questions for Students ............... 263
APPENDIX T: Examples of Completed Card Sort Mats ......................... 266
APPENDIX U: Card Sort Exercise Prompts .......................................... 267
APPENDIX V: Card Sort Exercise Process ............................................ 269
APPENDIX W: Interview Details for Student Participants ....................... 271
APPENDIX X: Interview Details for Parent and School Practitioner Participants .... 272
APPENDIX Y: Example of Visuals Used to Support Student Interviews .... 273
APPENDIX Z: Example of Visuals to Aid Students During Interviews ........ 274
APPENDIX AA: Visual Cards for Students to Indicate Needs in Interviews .... 275
APPENDIX BB: Template for Research Diary ................................................................. 276
APPENDIX CC: Sample of use of Comment Boxes for Coding.............................. 277
APPENDIX DD: Sample of Table of Emerging Themes across Data Sources........ 279
APPENDIX EE: Sample Table of Quotes and Data Extracts for Emerging Themes ... 287
APPENDIX FF: List of Refined Themes............................................................... 304
APPENDIX GG: Sample of a Visual Template of Thematic Networks .................. 307
APPENDIX HH: Process of Collation of Cross Case Themes .......................... 308
APPENDIX II: Table of Final Themes and Excerpts for Across Cases .................. 318
APPENDIX JJ: Ethical Approval Confirmation .................................................. 356
APPENDIX KK: Statement of Ethical Good Practice ...................................... 357
APPENDIX LL: Research Timeline .................................................................. 364
APPENDIX MM: Research Budget ................................................................... 367
APPENDIX NN: Operational Risk Analysis...................................................... 368
APPENDIX OO: Thematic Networks for Case 1 (Ali) ........................................... 370
APPENDIX PP: Thematic Networks for Case 2 (Matthew) ................................. 373
APPENDIX QQ: Thematic Networks for Case 3 (Ryan) ...................................... 376
APPENDIX RR: Thematic Networks for Case 4 (Megan) .................................... 379
APPENDIX SS: Analysis of the Theoretical Propositions for Research Question One 382
APPENDIX TT: Analysis of the Theoretical Propositions for Research Question Two 384
APPENDIX UU: Analysis of the Rival Explanations .......................................... 386

Word count: 56,057
List of Tables

Table 3.1: Statement of Theoretical Framework Factors................................................................. 69
Table 3.2: Summary of Participant Details.......................................................................................... 76
Table 3.3: Details of all Participants..................................................................................................... 77
Table 3.4: Data Collection Methods.................................................................................................... 80
Table 3.5: Phases and Process of Thematic Analysis within the Research........................................... 92
Table 3.6: Overview of Actions Taken to Address Reliability .............................................................. 96
Table 3.7: Overview of Actions Taken to Address Validity ................................................................. 99
Table 5.1: Summary of Analysis of the Theoretical Propositions ......................................................... 174
Table 5.2: Summary of Analysis of the Sub-Propositions.................................................................... 174
Table 5.3: Analysis of the Rival Explanations....................................................................................... 178
List of Figures

Figure 2.1: Good Practice in Autism Education, based upon Charman et al. (2011) ........ 24
Figure 2.2: Research Questions .................................................................................. 60
Figure 3.1: Researcher Beliefs and Values .................................................................. 66
Figure 3.2: The Revised Participant Recruitment Process ........................................... 78
Figure 3.3: Documents Accessed During Documentary Data Collection ..................... 85
Figure 3.4: Order of Data Collection ........................................................................... 87
Figure 3.5: Description of Thematic Networks ............................................................. 94
Figure 4.1: Cross Case Thematic Network 1: Recognising factors contributing to anxiety 111
Figure 4.2: Megan’s Drawing Regarding Over-Thinking ............................................ 121
Figure 4.3: Cross Case Thematic Network 2: Recognising the Signs and Impact of Anxiety .................................................................................................................. 123
Figure 4.4: Cross Case Thematic Network 3: Perceived Effective Actions and Strategies to Address Anxiety ........................................................................................................ 136
Abstract
The University of Manchester

Dawn Suzanne Menzies

Doctorate in Educational and Child Psychology

Exploring Needs and Supportive Factors for Students with Autism Spectrum Conditions who Show Signs of Anxiety within the Mainstream School Setting

2013

The prevalence of anxiety amongst children with Autism Spectrum Conditions (ASC) is reportedly considerably higher than the general population (Ozsivadjian & Knott, 2011). Research considering intervention for children with ASC and anxiety has predominantly been from a clinical perspective, with limited evidence based literature being found that explored the needs of these students in relation to anxiety within the mainstream secondary school educational context. Anxiety can increase during adolescence for children with ASC (White, Ollendick, Scahill, Oswald, & Albano, 2009) and many of the anxiety related worries of children with ASC have been found to be related to school (Ozsivadjian & Knott, 2011). However, there is a dearth of research regarding practical support within an educational setting that can be implemented by schools on a needs basis to support students with ASC and signs of anxiety.

Four students with a diagnosis of an ASC who had presented with signs of anxiety were identified from mainstream secondary schools across one English local authority. A parent and an educational practitioner who worked with each student also participated. A qualitative multiple embedded case study design was utilised. Suitably differentiated methods for gaining this cohort of students’ views and engaging them in the research were employed. Data from semi-structured interviews and educational documentation were analysed for main themes using thematic analysis based upon Braun and Clarke's (2006) six phase model.

The perceived needs and difficulties of anxious students with ASC and what is considered to be effective practice in supporting them within a mainstream secondary school setting are outlined. The study provides some understanding of the needs of students with ASC and how schools support management of their anxiety. The research intends to extend knowledge of the needs of these students and what works in effectively supporting these students within a mainstream secondary school setting.

Keywords: autism, Asperger’s syndrome, anxiety, worry, mainstream secondary school, educational psychology, support, intervention, case study, thematic analysis, student perceptions.
Declaration

I declare that no portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.
Copyright Statement

The author of this thesis (including any appendices and/or schedules to this thesis) owns certain copyright or related rights in it (the “Copyright”) and she has given The University of Manchester certain rights to use such Copyright, including for administrative purposes.

Copies of this thesis, either in full or in extracts and whether in hard or electronic copy, may be made only in accordance with the Copyright, Designs and Patents Act 1988 (as amended) and regulations issued under it or, where appropriate, in accordance with licensing agreements which the University has from time to time. This page must form part of any such copies made.

The ownership of certain Copyright, patents, designs, trade marks and other intellectual property (the “Intellectual Property”) and any reproductions of copyright works in the thesis, for example graphs and tables (“Reproductions”), which may be described in this thesis, may not be owned by the author and may be owned by third parties. Such Intellectual Property and Reproductions cannot and must not be made available for use without the prior written permission of the owner(s) of the relevant Intellectual Property and/or Reproductions.

Further information on the conditions under which disclosure, publication and commercialisation of this thesis, the Copyright and any Intellectual Property and/or Reproduction described in it may take place is available in the University IP Policy (see http://documents.manchester.ac.uk/DoculInfo.aspx?DocID=487) in any relevant Thesis restriction declarations deposited in the University Library, The University Library’s regulations (see http://www.manchester.ac.uk/library.aboutus/regulations) and in The University’s policy on Presentation of Theses.
Preface

Prior to enrolling on the Doctorate in Educational and Child Psychology at The University of Manchester in 2009, the author completed a part-time degree in psychology, post graduate certificate and diploma in autism, and a certificate in Cognitive Behavioural Therapy. She is a qualified Youth Worker and holds a City and Guilds certificate in teaching and training adults. Prior to the doctorate course, the author worked with individuals with Autism Spectrum Conditions and associated needs for approximately 19 years in various settings. During this time she worked at the University of Strathclyde National Centre for Autism Studies managing a three year government project, where she led the planning and feedback of two research-based exercises: an audit of needs and services for individuals with ASD, their families and professionals; and a scoping exercise of multi-disciplinary working in the field of ASD. As part of the author’s PgDip. she researched and evaluated the use of Intensive Interaction as a method to aid communication and interaction with individuals who displayed severe challenging behaviour.
Acknowledgements

First and foremost I wish to express eternal thanks to my wonderful husband and best friend, Paul Menzies, whose support has kept me going and enabled me to successfully complete the course and this thesis. Not only have you looked after our home, provided practical help, and never complained about putting our life on hold, but you have also been the source of considerable unconditional encouragement, love and belief in me. I could not have done it without you and appreciate you more than you could ever know!

Huge thanks go to my Mum and Dad, Myrtle and Alan Larman for their love, support and practical help, without which I would have been lost. My Mum especially for the ongoing support with the everyday aspects of life and her encouragement, and my Dad for his enthusiasm, grammatical and linguistic knowledge, and proof reading skills. You have both been fantastic! Thanks also to my sister, Andrea Howes, for the final proof reading.

Specific gratitude goes to Dr. Clare Jones, who helped me through the final straight with excellent advice, support and editing expertise. You had no material or personal gain in helping me, but ended up being a great support during the last few months – thank you.

Many thanks to friends, both old and new, near and far, who have supported me through this and been very patient of their non-existent and frequently complaining friend. The humour, support, and encouragement offered online, by phone and text has kept me going. I will now hopefully see more of you in person! Thanks also to those friends who have offered online suggestions and help with my various questions and IT related problems.

Thanks also to my trainee EP colleagues who have gone out of their way to provide support, encouragement and help even after completing their own theses. I very much appreciate their responses to my constant questions and their patience through the last four years. Thank you particularly to Dr. Mike Humphreys, Dr. Edward Chilton, Jenny Templeton-Sprague, Dr. Naomi Parsons, and especially Dr. Lindsay Kay and Dr. Becky Simpson.

I would like to express appreciation to work colleagues for sharing their knowledge, and for their ongoing advice and support throughout my training. To those who also helped with recruitment of participants for this research I am most grateful. Thank you to colleagues within the three EP services in which I worked, who committed to supporting my training and development, and who patiently provided guidance and encouragement; this extends especially to Rona Taylor, Vanessa Grizzle, Janet Muscutt, Cath Hannaford, Bron Gendall, Adele Neil, Anne Rushton and Sue Posada. Thank you also to Drs. Katie Hedges, Gina Quibell, Louise Blacklidge, Clare Rogan, Lynne Matthewson, Frances Markland, Sarah McIntosh, Judith Liggett, and Michelle Kittles, who had recently completed their training and willingly shared their experiences, knowledge and insight, whilst also providing invaluable personal support. Special thanks go to my third year supervisor and manager, Stephen McCoy, for nurturing and encouraging me to develop the knowledge, skills and self-belief to finish the course and become a worthy EP.

I am grateful to the tutors and course team at the University of Manchester; with special thanks to Jackie Chisnall and Shelley Darlington for their help and patience, Dr. Caroline Bond for her ongoing guidance, encouragement and faith in my autism knowledge, Drs. Jan Stothard and Catherine Kelly for their guidance during the thesis process, Dr. Terry Hanley for support during the second year of the course, and Dr. Garry Squires for interesting and helpful guidance with my first thesis proposal. Particular gratitude is extended to Professor Kevin Woods, my personal tutor and thesis supervisor, for his availability, invaluable guidance, endless patience and belief in my ability to complete the course.

Finally and very importantly, special thanks go to all those parents, school practitioners and especially the students who participated in the research, along with SENCOs within schools in the area who supported the recruitment of the participants. The willingness of all to participate, give their time, and share their expertise and experiences so openly made this research possible and a less challenging process than it may have otherwise been. The dedication of the practitioners and parents, and the inspirational students who were involved, made this an enjoyable, enlightening and very interesting thesis to work on and will continue to inspire me and inform my practice, and hopefully that of others.
Dedication

This thesis is dedicated primarily to my amazing husband Paul Menzies, for his support, encouragement and belief in me, and for being my ‘better half’, as well as my wonderful Sunny boy for keeping me sane this last year.

It is also dedicated to all the individuals with autism and Asperger’s that I’ve had the honour to meet who have taught and inspired me over the years, especially: Thomas, Hugo, Chris, Ryan, Richard, Alex, John, Chris, Neil, Jack, Paul, PJ, Peter, Jake, Tristram, Michael C, Debbie, Michael D, Jamie, Gerry, Maurice, Debi, Duncan, Walter, Colin, Stephen, Danny and last but not least, the four students who took part in this research, ‘Ali’, ‘Ryan’, ‘Matthew’, and ‘Megan’.
List of Acronyms and Abbreviations

Below are commonly or locally used acronyms and abbreviations and their full terms.

<table>
<thead>
<tr>
<th>Acronym or Abbreviation</th>
<th>Full Terminology</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS</td>
<td>Asperger’s Syndrome</td>
</tr>
<tr>
<td>ASC</td>
<td>Autism Spectrum Condition (or Autistic Spectrum Condition)</td>
</tr>
<tr>
<td>ASD</td>
<td>Autism Spectrum Disorder (or Autistic Spectrum Disorder)</td>
</tr>
<tr>
<td>BPS</td>
<td>British Psychological Society</td>
</tr>
<tr>
<td>CAMHS</td>
<td>Child and Adolescent Mental Health Service/s</td>
</tr>
<tr>
<td>CBT</td>
<td>Cognitive Behavioural Therapy</td>
</tr>
<tr>
<td>CPD</td>
<td>Continuing Professional Development</td>
</tr>
<tr>
<td>DIE</td>
<td>Department for Education</td>
</tr>
<tr>
<td>DSM-IV</td>
<td>Diagnostic and Statistical Manual of Mental Disorders, 4th Edition</td>
</tr>
<tr>
<td>EHCP</td>
<td>Education, Health and Care Plan/s</td>
</tr>
<tr>
<td>EP</td>
<td>Educational Psychologist</td>
</tr>
<tr>
<td>HCPC</td>
<td>Health and Care Professionals Council</td>
</tr>
<tr>
<td>HFA</td>
<td>High Functioning Autism (please see footnote 2)</td>
</tr>
<tr>
<td>ICD-10</td>
<td>International Statistical Classification of Diseases and Related Health problems, 10th Revision</td>
</tr>
<tr>
<td>IEP</td>
<td>Individual Education Plan</td>
</tr>
<tr>
<td>IQ</td>
<td>Intelligence Quotient</td>
</tr>
<tr>
<td>LA</td>
<td>Local Authority</td>
</tr>
<tr>
<td>LEA</td>
<td>Local Education Authority</td>
</tr>
<tr>
<td>Ofsted</td>
<td>Office for Standards in Education, Children’s Services and Skills</td>
</tr>
<tr>
<td>PD</td>
<td>Personal Development</td>
</tr>
<tr>
<td>PE</td>
<td>Physical Education lesson/s</td>
</tr>
<tr>
<td>SEAL</td>
<td>Social and Emotional Aspects of Learning</td>
</tr>
<tr>
<td>SEN</td>
<td>Special Educational Need/s</td>
</tr>
<tr>
<td>SENCo</td>
<td>Special Educational Needs Co-ordinator</td>
</tr>
<tr>
<td>SENCOP</td>
<td>Special Educational Needs Code of Practice</td>
</tr>
<tr>
<td>SENDA</td>
<td>Special Educational Needs and Disability Act</td>
</tr>
<tr>
<td>ST</td>
<td>Specialist Teacher</td>
</tr>
<tr>
<td>TA</td>
<td>Teaching Assistant</td>
</tr>
<tr>
<td>TaMHS</td>
<td>Targeted Mental Health in Schools programme</td>
</tr>
<tr>
<td>TEP</td>
<td>Trainee Educational Psychologist</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
</tbody>
</table>

Below are codes and their meanings used specifically within this thesis:

<table>
<thead>
<tr>
<th>Code</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>OT</td>
<td>Organising Theme</td>
</tr>
<tr>
<td>(P)</td>
<td>Parent</td>
</tr>
<tr>
<td>(R)</td>
<td>Researcher</td>
</tr>
<tr>
<td>RQ</td>
<td>Research question</td>
</tr>
<tr>
<td>(S)</td>
<td>Student</td>
</tr>
<tr>
<td>(SP)</td>
<td>School Practitioner</td>
</tr>
</tbody>
</table>
1 Introduction

The research presented within this thesis was completed as part of the author’s training as an Educational Psychologist (EP). At the time of training, the author worked within a large Local Authority (LA) in the North West of England, where the research took place.

The LA has a mixed geography of affluent rural and semi-rural areas interspersed with former industrial towns which experience deprivation at the lower super output area level of the index of multiple deprivation (XXX Council, 2012). There is a larger percentage of residents from a white ethnic background than the national average. The most prevalent other ethnic groups are Asian or Asian British with populations marginally above the national averages. All other ethnic groups have a lower representation than nationally (XXX Council, 2011).

1.1 Rationale

The area of interest upon which the thesis is focused came about for two reasons. Firstly, the author’s specific interest in Autism Spectrum Conditions (ASC), which emerges from having worked in various ASC services for approximately eighteen years prior to becoming a Trainee Educational Psychologist (TEP). Secondly, the LA in which the author was working was assessing its ASC provision with a view to restructuring this. This was due to the needs of several students with ASC from within the LA now being served at out of county placements, at a high cost to the LA. In discussion with the Principal Educational Psychologist regarding this matter, a group of students with ASC were identified, whose needs were difficult to meet within current provision. This comprised students with ASC within mainstream high schools, who appeared to have difficulty with attendance in lessons and/or school and in reaching their potential, seemingly due to anxiety related difficulties. The author identified four such students in one high school during the first eight months working within the LA, and discussion with colleagues identified similar cases in other secondary schools.

Over the last two decades it has become increasingly widely reported that the prevalence of anxiety amongst children and young people with ASC is higher than the rate within the general population (Ozsivadjian & Knott, 2011). A plethora of studies indicate high prevalence rates of anxiety in children with ASC (e.g. Bellini, 2006; Davis et al., 2011; Farrugia & Hudson, 2006; Gillott, Furniss, & Walter, 2001; Helverschou & Martinsen, 2011; Kim, Szatmari, Bryson, Streiner, & Wilson, 2000; Mayes, Calhoun, Murray, Ahuja, & Smith,

---

1 This particular research is related to children and young people in statutory secondary education, who are thus aged 11 to 16. However, the literature referred to may relate to children and young people of various ages. For ease of reading, the term ‘children’ will be used, where the research relates to children, but not specifically school or education. Where the literature refers specifically to children and school/education, the term ‘student’ will be used.
In a study of children with ‘high-functioning autism’ (HFA)\(^2\) and Asperger’s Syndrome (AS), Kim et al., (2000) reported that there was evidence of higher rates of mood disorders, especially generalised anxiety disorder and separation anxiety.

This reportedly may manifest in difficulties such as unhelpful rumination of thoughts, somatic complaints, difficulty with attention and concentration, increased difficulty with social interaction and peer relationships, increased repetitive and sensory behaviours, and/or disruptive or ‘aggressive’ behaviour (Carrington & Graham, 2001; Greig & MacKay, 2005; Reaven, Blakeley-Smith, Culhane-Shelburne, & Hepburn, 2011; Rotheram-Fuller & MacMullen, 2011; Sofronoff, Attwood, & Hinton, 2005; Tobias, 2009; White, Oswald, Ollendick, & Scahill, 2009; Wilkerson & Wilkerson, 2004). The anxiety and related difficulties may result in needs, such as lowered self-esteem, effects upon academic performance, increased withdrawal, impact upon relationships, and school exclusion (Greig & MacKay, 2005; Humphrey & Lewis, 2008a; Ozsivadjian, Knott, & Magiatl, 2012; Reaven, 2009; Rotheram-Fuller & MacMullen, 2011; White, Oswald, et al., 2009; Wilkerson & Wilkerson, 2004; World Health Organization, 1992).

During the secondary school period, students with ASC are increasingly at risk of presenting with mental health needs (Attwood, 2004; Gillott et al., 2001; Reaven, 2011). It is argued that many schools are insufficiently able to meet the needs of students with ASC in mainstream secondary schools, due to a shortage of research in this area and the resulting lack of transfer of knowledge into practice (Humphrey & Lewis, 2008a). Students with AS or HFA are increasingly more likely to attend the mainstream school setting since the push for inclusion within the United Kingdom (UK) (Connor, 2000).

The majority of published work focuses upon clinical interventions and upon quantitative methods of data collection, without actively seeking the views of participants outside of the use of standardised measures. Studies have relied heavily upon the reports of parents (Brown, Ouellette-Kuntz, Hunter, & Kelley, 2010), or have reported the views of teachers and students, but not specifically in relation to anxiety (Humphrey & Lewis, 2008a; Morewood, Humphrey, & Symes, 2011). Very few articles focus specifically upon anxiety within the educational environment for children with ASC, especially AS and HFA.

Many of the anxieties of children with ASC have been found to be related to school (Ozsivadjian & Knott, 2011), yet there is limited literature reporting what can practically be

---

\(^2\) ‘High-functioning autism’ is a widely used phrase; however, grammatically this implies that it is the *autism* that is high functioning rather than the *individual*, which is not a logical concept. For this reason, the author prefers not to use this phrase and favours ‘high functioning individual with autism’ or ‘high functioning autistic child’ or similar. However, for ease of use HFA will be used as an abbreviation of the latter.
implemented to support students with ASC and anxiety within schools in any detail. The focus of research into anxiety has been upon clinical treatment (Donovan & Spence, 2000), yet interventions carried out in clinical settings are not necessarily generalised by children with ASC to school (Wood et al., 2009). A range of approaches has been suggested in relation to supporting students with ASC within mainstream secondary education, but not specifically focused upon anxiety (e.g. Carrington & Graham, 2001; Humphrey & Lewis, 2008b; Humphrey & Symes, 2010a; Jones et al., 2008; Tobias, 2009).

A gap in the literature therefore exists regarding the needs and difficulties of 'high-functioning' students with ASC displaying signs of anxiety within the mainstream secondary school setting, and practical support of such students therein. Through collaborative discussion, it was agreed that an exploratory multiple embedded case study research design would be used to gain information to inform practice and support for these particular students within the LA, which would hopefully provide steps toward improving their educational outcomes and experiences.

The overall aims of this research are to explore perceived need, difficulties and current effective practice, in order to extend knowledge of how to support students with ASC who show signs of anxiety within the mainstream secondary school setting.

1.2 Terminology

The term ‘Autism Spectrum Conditions’ (ASC) has been used throughout this text rather than the commonly used ‘Autism Spectrum Disorders’ (ASD). ASC is becoming a more widely used term in recent years, as ‘disorder’ is often deemed to be a negative way of viewing such individuals that may cause stigma, and does not necessarily address the cognitive strengths that individuals possess (e.g. Baron-Cohen et al., 2009). It better reflects the EP’s position in focusing upon the needs of the child rather than deficits (e.g. Monsen, Graham, Frederickson, & Cameron, 1998). Terminology and definitions regarding other elements of this research are contained within the relevant sections.

1.3 Thesis overview

The thesis is presented in four main chapters, followed by references and appendices; the following provides a brief overview of the content presented in each main chapter.

1.3.1 Literature Review

This chapter reviews the relevant literature regarding anxiety in mainstream secondary school students with ASC. Literature regarding student, parent and teacher perceptions of anxiety for students with ASC within mainstream secondary schools will be critically evaluated. Reported contributing factors to the anxiety, impact of anxiety upon students with
ASC, and effective practice for the support and management of anxiety in students with ASC, will be explored. The role of the EP will be considered, gaps in the literature will be identified, and the potential contributions to knowledge of the thesis will be outlined. Research questions derived from the gaps in literature will be presented along with the aims of the study.

1.3.2 Methodology

The rationale for the study, philosophical approaches underpinning the methodological decisions, and research design are presented within this chapter. The critical realist approach is explored and the multiple embedded case study design critically discussed. Data access, collection and analysis are described along with the advantages and disadvantages of the chosen techniques. Finally, an exploration of factors affecting reliability and validity, and ethical considerations, are discussed.

1.3.3 Results

A brief background to each case study is presented in this chapter, followed by a detailed description of the cross-case research findings in relation to each research question. Findings from the cross-case thematic analysis are presented as thematic networks, with each being described and supported with illustrative excerpts from the research data.

1.3.4 Discussion

This chapter discusses the key findings from the thematic analysis, described in the results chapter, in relation to the research aims with reference to relevant literature. The theoretical propositions and rival explanations are examined, possible implications of the findings are explored, and potential future research considered. Finally, limitations of the research are considered and reflections upon the research process are discussed.
2 Literature Review

2.1 Chapter Introduction

The focus of this chapter is to review the relevant available literature regarding anxiety in mainstream secondary school students with ASC, which will underpin the development of the research questions to be explored within this thesis. The search strategy used to identify relevant literature will be presented, followed by an overview of ASC which will also explore diagnostic criteria and prevalence within the school-age population to set the context for the study. Consideration of the prevalence and inclusion of students with ASC within schools in the United Kingdom (UK), with reference to guidance and legislation, will follow. Anxiety is then defined and described within the general child population as a background to an evaluation of the literature regarding anxiety in school-age children with ASC. The prevalence of anxiety in children with ASC and diagnostic criteria will be examined along with an exploration of the identification of anxiety in students with ASC. The chapter will then focus upon critically evaluating the literature regarding student, parent and teacher perceptions of anxiety for students with ASC within mainstream secondary schools. Factors considered to contribute to the anxiety and the impact of anxiety upon students with ASC are explored. Perceived effective practice for the support and management of anxiety in students with ASC is discussed. The role of the EP is considered, and finally a summary is presented which identifies gaps in the literature requiring exploration, and the potential contributions to knowledge of this thesis.

2.2 Structure of the Literature Review

The broad aims of this review are to explore and evaluate the existing literature regarding the apparent heightened anxiety of students with ASC within mainstream secondary schools.

Literature will be explored in order to consider existing evidence as a basis for the study described within this thesis, and to inform professional practice. Best fit literature will be presented, and the findings of this discussed.

2.3 Literature Review Strategy

The systematic search process to identify literature for the review is outlined fully in Appendix A. Additionally, consultation with EP colleagues, the university supervisory/tutorial team, and reference harvesting from the papers identified through the systematic search highlighted additional papers that met inclusionary and exclusionary criteria (see Appendices B and C).

A range of different types of literature, including journal articles, PhD. and doctoral theses, books, and grey literature, such as web based information, government reports and other
relevant reports (e.g. from national autism organisations), has informed the development of the research described in this thesis. A decision was made to include only journal articles that were peer-reviewed and reports based upon empirical studies. This was for several reasons, but primarily due to the plethora of ASC related information that is now widely available, and which often dominates within searches for information on the topic. This has been an area of concern for ASC practitioners and researchers with quality control and lack of scrutiny of such information being seen as problematic (Charman, 1999). There is a dearth of research-based information in many online search results regarding ASC, and in a 2002 study only 8% were found to contain dedicated research (Chowdhury, Drummond, Fleming, & Neufeld, 2002). Scientific validity of information from the internet was often questionable; 80% of online ASC-specific links provided information that could not be verified (Chowdhury et al., 2002) and treatments that were not evidence based were promoted through 21% of links (Reichow et al., 2012).

The literature search identified only two articles which met the main criteria (see Appendix B) specifically exploring the needs of students with HFA/AS in relation to anxiety in the mainstream secondary school context. Therefore closely matching articles were also evaluated and details of these will be specified within the text. Additionally, literature considering needs, intervention and support for students with HFA/AS within mainstream secondary school not specific to anxiety were considered and evaluated if they mentioned anxiety within their abstract and/or findings (see Appendix C).

### 2.3.1 A note on ‘good’ practice and ‘effective’ practice.

Many articles and guidance documents regarding ASC refer to ‘good practice’, yet few seem to specify or define what is meant by this. ‘Good practice’ can have different meanings for schools, LEAs, students and families (Department for Education and Skills/Department of Health, 2002a). The relationship between perceived ‘good’ practice and ‘effective’ practice is intertwined and typically referred to within the same context (Charman et al., 2011; Department for Education and Skills/Department of Health, 2002a, 2002b). As Charman et al. (2011, p.45) state, “…‘good’ practice can be taken to refer to effective practice – practice that promotes learning, well-being and independence all of which can be challenging for many pupils with autism.”.

The report ‘What is Good Practice in Autism Education?’ (Charman et al., 2011) described a tiered process of ‘good practice’ whereby at Tier 1, quality first teaching and school practice are explored; at Tier 2, specialist approaches are considered for students with SEN; and at Tier 3 highly specialist approaches for student with ASC are required. An illustration is provided in Figure 2.1.

In respect of this, the research described in this thesis will, both within the literature review and the data collection, explore existing practice within mainstream secondary schools that
is perceived to provide good or effective support for students with ASC and identify areas of commonality and difference across studies and cases. The research will not include comparisons of the effectiveness of specific packaged interventions or programmes as this would be outside the scope of the research.

![Diagram of Tiered Support System for Students with ASC]

**Figure 2.1**: Good Practice in Autism Education, based upon Charman et al. (2011).

### 2.4 Autism Spectrum Conditions

Wing and Gould (1979) described a continuum of autistic conditions, including different degrees and presentations of ‘impairments’ affecting social interaction in children. This encompassed ‘classic’ or ‘Kanner’s’ early childhood autism, so-called after psychiatrist Leo Kanner who first described autism (Baron-Cohen, 2008), and the condition that has come to be known as Asperger’s syndrome (Wing, 1981). Wing (1988) developed the notion of the ‘Triad of Impairments’ (Wing, 1996), whereby those she studied who came under the autistic spectrum all shared ‘impaired’ social interaction, communication, and imagination, alongside rigid, repetitive patterns of behaviour.

Autism, or Autistic Spectrum Disorder, is described as a lifelong developmental disability categorised as a ‘Pervasive Developmental Disorder’ within the diagnostic criteria presented in the International Classification of Diseases 10 (ICD-10) (World Health Organization, 1992) and Diagnostic and Statistical Manual Fourth Edition (DSM-IV) (American Psychiatric Association, 2000). The DSM-IV and ICD-10 are currently generally used in the process of
diagnosing children with ASC within the UK. Both are international classification systems to identify patterns of behaviour, skill and concern in the child, along with familial and psychosocial factors (National Initiative for Autism: Screening and Assessment, 2003). Both DSM-IV and ICD-10 make reference to core qualitative ‘impairments’ in social interaction and communication, and restricted and repetitive behaviour, interests and activities (American Psychiatric Association, 2000; World Health Organization, 1992), the latter of which is also often referred to as ‘inflexibility of thought’. Both specify that such patterns of behaviour should have emerged prior to age three years.

Many children with ASC may also typically experience difficulties with pragmatic language, language processing, social reasoning, empathy, emotional regulation and sensory differences, all of which can contribute to the development of anxiety (Ozsivadjian & Knott, 2011; Sofronoff et al., 2005).

Generally accepted psychological theory also considers that cognitive processes impact upon the behavioural and social presentation of individuals with ASC. Differences in ‘Central Coherence’, whereby integrating detailed information to make a coherent whole is affected, can impact upon individuals with ASC (Frith, 2003). This is also true for ‘Executive Functioning’, where difficulties in planning, organisation and flexibility are present (Ozsivadjian & Knott, 2011); and ‘Theory of Mind’, where understanding and reflecting upon the beliefs, intentions and feelings of others is affected (Baron-Cohen, Leslie, & Frith, 1985).

2.4.1 Asperger’s syndrome and ‘High Functioning Autism’.

Diagnostic criteria specify that no delay in cognitive or intellectual development should be present for a diagnosis of AS (American Psychiatric Association, 2000; World Health Organization, 1992). Individuals with AS are widely recognised to display a profile which includes difficulty in the following areas: developing friendships, nonverbal behaviour, social and emotional exchanges, empathy, understanding of social cues and conventions, conversational skills (Attwood, 2004). They also typically present with fluent speech, unusual prosody, a tendency to be pedantic and make literal interpretations, unusually focused or intense special interests, and a preference for routine and consistency (Attwood, 2004). Additionally, they may be prone to motor difficulties, sensory hypersensitivity, problems with self organisation and time management, and difficulty with expressing thoughts and feelings (Attwood, 2004).

‘High-functioning autism’ (HFA) is not a diagnostic term per se, and tends to be used informally to describe those with autism who do not have additional learning disabilities (Mesibov, Shea, & Adams, 2002), with an Intelligence Quotient (IQ) of below 70 (Thede & Coolidge, 2007). A main factor between whether an individual is classed as having AS or being HFA is whether they display evidence of a significant language delay prior to age three years (Sofronoff et al., 2005).
In a study of HFA and AS, Ozonoff, South, and Miller (2000) found limited differences between the two groups in adolescence. Whether AS and HFA can be clearly differentiated remains an argument in the field, but the important factor is to consider whether the needs of such children, with seemingly higher expressive language skills and cognitive abilities than more classic ASC, are being recognised appropriately (Connor, 2000). Additionally, although the umbrella term ASD is widely used and accepted, and typically includes both AS and HFA, distinguishing these as a sub-group from classic autism can in effect be useful as there may be considerations for practice such as different characteristics or propensity for additional needs, such as anxiety (Jones et al., 2008), to be discussed in section 2.6.

Students with AS and HFA will be the main focus of the research presented in the following chapters of this thesis, for reasons discussed in due course.

2.4.2 Prevalence of Autism Spectrum Conditions.

Although there is no one agreed universal figure regarding the prevalence of ASC, there is a widely accepted prevalence rate of around 1 in 100 (100 per 10,000) children in the UK (The National Autistic Society, 2012). No clear figures are available for the proportion of these individuals who are diagnosed with AS and/or would be classed as 'higher functioning' (HFA). However, it is estimated that more than 50% of children with ASC may have an IQ in the average to high range (The National Autistic Society, 2012).

A study investigating the school-age population of ASC concurred with this figure of around 1%, but also took into account as-yet undiagnosed children from ‘at risk’ populations, and the Special Educational Need (SEN) register (Baron-Cohen et al., 2009). The study found a total minimum prevalence of 157 ASCs per 10,000 children; a minimum rate of approximately 1.5% (Baron-Cohen et al., 2009). The authors went on to suggest that, “as autism-spectrum conditions are being increasingly recognised, these studies suggest that appropriate services should plan to meet the needs of between 1–2% of the primary school-aged population” (Baron-Cohen et al., 2009, p. 508).

With respect to gender in ASC, it is estimated from prevalence studies that the diagnosed ratio is four males to one female for autism, but up to ten males to one female for AS (Charman, 2008).

2.4.3 Inclusion and Autism Spectrum Conditions.

Inclusion can be defined as relating to “the learning and participation of all students vulnerable to exclusionary pressures, not only those with impairments or those who are categorised as having special educational needs” (Booth & Ainscow, 2000, p.12).
Over recent years, inclusion of students with ASC within mainstream schools has been supported by statutory guidance such as ‘Excellence for All Children’ (Department for Education and Employment, 1997), the Special Educational Needs and Disability Act (SENDA) (HM Government, 2001), and the Special Educational Needs Code of Practice (SENCOP) (Department for Education and Skills, 2001). SENDA placed a duty upon Local Education Authorities (LEAs) to ensure that a child who has a Statement of SEN is educated in a mainstream school unless this proves to be incompatible with parental wishes or detrimental to the efficient provision of education to other children.

Terminology and understanding around inclusion can be confusing and has changed during the last two decades, as prior to the publication of ‘Excellence for All Children’ (Department for Education and Employment, 1997), inclusion tended to refer to where a child was educated (e.g. specialist or mainstream provision) rather than an ongoing process (Humphrey, 2008). However, inclusion in recent terms, tends to refer to the presence, participation, acceptance and achievement in mainstream schools of pupils with a variety of additional needs, not just SEN (Booth & Ainscow, 2000). In terms of the former understanding, children with ASC, especially those with more prominent needs, are now more likely to be included within mainstream educational settings (Greig & MacKay, 2005); the number of students with ASC attending mainstream schools has significantly risen during the last decade (Humphrey & Lewis, 2008b).

Recently published Department for Education (DfE) statistics indicate that ‘autistic spectrum disorder’ was, at 20.8%, the most prevalent primary need of children with Statements of SEN within state-funded primary, state-funded secondary and all special schools (Department for Education, 2012a). For children at School Action Plus3 and with Statements of SEN within state-funded secondary schools the proportion with ‘autistic spectrum disorder’ was 8.6% across England (Department for Education, 2012b) and 9.7% within the Local Authority (LA) in which the research took place (Department for Education, 2012c).

Therefore, considerably more teachers working within mainstream education will teach more students with ASC within their day-to-day role than in the past; this figure is greater than students with other SEN, such as sensory impairments, physical difficulties or social emotional and behavioural difficulties.

It is difficult to quantify levels of ‘inclusive education’, as there is no one set of criteria for what constitutes this for students with ASC, and research around this is sparse and under-explored (Humphrey & Symes, 2011; Humphrey, 2008). It is argued that despite the

---

3 The different levels of educational support for students with SEN are outlined within the SENCOP (Department for Education and Skills, 2001). Students may be placed at School Action, School Action Plus or receive a Statement of SEN. Students at School Action Plus receive additional support both within and from outside of school (e.g. from EPs, Specialist Teachers or Speech and Language Therapists).
increasing access to mainstream education of students with ASC, their inclusion is generally not well understood and they are at risk of poor outcomes in comparison to other students (Humphrey & Lewis, 2008b; Morewood et al., 2011).

**2.4.4 Education and Autism Spectrum Conditions.**

The marked difference between the academic and cognitive abilities of students with AS and their adaptive skills has been highlighted by a study of the characteristics of AS (Smith-Myles et al., 2007). The authors reported that adaptive skills, such as communication, social, daily living, motor, leadership, and study skills were not commensurate with their average to above average IQ scores (Smith-Myles et al., 2007). This difference in skills can impact upon the learning, socialisation and behaviour of students with AS, and has implications for how such students should be taught. The authors proposed that despite their higher cognitive functioning, students with AS should access support with daily life skills, that students with ASC and additional learning difficulties may more typically access, to enable them to learn and function more independently (Smith-Myles et al., 2007).

It is suggested that many of the characteristics of ASC can severely impede learning, and that the different styles of learning, communicating and interacting can also have a significant impact upon students with AS (Leblanc, Richardson, & Burns, 2009). Typical characteristics such as resistance to change in routines, repetitive body movements, and differences in speech patterns, can cause stress for the student which may result in difficulty for them and school practitioners in facilitating their full inclusion into the mainstream school environment (Leblanc et al., 2009).

Students with ASC have been found to be significantly more likely to be excluded from school than students with other SEN, and even more so than those with no SEN (Humphrey & Lewis, 2008b).

**2.5 Anxiety**

Anxiety is typically defined as “feelings of fear, apprehension, worry or nervousness” (Chalfant, 2011, p.13). It is a multi-dimensional construct that impacts upon the physiological, behavioural, emotional and cognitive functioning of the individual (Chalfant, 2011; Weissman, Antinoro, & Chu, 2009). Appleton, (2008a) describes how anxiety acts as a mechanism for detecting threat and providing an early warning system, and “is characterised by wariness, watchfulness, inhibition, apparent conflict between approach and avoidance, ‘risk assessment’, searching memory for examples of similar situations, and ‘hypervigilance’” (p.10).

In terms of diagnosis criteria, DSM-IV refers to the umbrella category ‘Anxiety Disorders’ (American Psychiatric Association, 2000). ICD-10 refers to ‘Neurotic, stress-related and
somatoform disorders’ under which phobic anxiety disorders, obsessive-compulsive disorder, reaction to severe stress and adjustment disorders, and other anxiety disorders are categorised. ‘Generalized Anxiety Disorder’ is sub-categorised under ‘other anxiety disorders’, and Social Phobias under the subcategory ‘phobic anxiety disorders’. However, in DSM-IV having a diagnosis of a Pervasive Developmental Disorder is an exclusionary criterion.

It is as yet unclear whether ASC and anxiety are part of the same condition or co-existing conditions (see section 2.6.1), and whether an additional diagnosis can or should be given.

2.5.1 Anxiety in children and young people.

Community studies indicate that anxiety disorders are the most common childhood emotional conditions (Dadds & Barrett, 2001) and research suggests that anxiety is prevalent in between 5-10% (Appleton, 2008b) or 6-18% (Weissman et al., 2009) of the general population of children. Anxiety in children has been considered as a continuum encompassing transient worry, stress or anxiety (Schniering, Hudson, & Rapee, 2000), which many children typically experience in times of perceived threat. In some children, specific clinical anxiety disorders develop which can be distinguished from typical fear and worry, due to the severity and persistence of the manifestation and its impact upon functioning (Beesdo, Knapp, & Pine, 2009). It is argued that it is the intensity of the worry which can cause anxiety to become difficult to control and can thus lead to the development of clinical anxiety disorders (Muris, Meesters, Merckelbach, Sermon, & Zwakhalen, 1998; Weems, Silverman, & La Greca, 2000). It can be difficult to distinguish whether signs of anxiety in children are transient or clinical, due to the commonality of anxiety related signs in children (Reaven, 2009).

As the focus of this thesis is regarding early intervention for the management of anxiety, the general definitions of ‘anxiety’ (Appleton, 2008a; Chalfant, 2011; Weissman et al., 2009), rather than diagnostic definitions will influence the use of the term ‘anxiety’ throughout this thesis.

2.5.2 Anxiety within school-age children.

Children who are affected by anxiety are more likely to have difficulty with family, social and educational experiences, the last of which can result in increased likelihood of academic under-achievement. Due to the amount of time children spend at school, anxiety in a child is considered to impact considerably upon their functioning within the school setting. Their social, emotional, behavioural and cognitive development can be affected and this may impact upon aspects such as academic achievement, attendance, test anxiety, transitions, social groups and school refusal (Weissman et al., 2009). Conversely, school experiences can also impact upon a child’s anxiety levels; a change of school is especially linked to
factors such as somatic difficulties, academic underperformance, difficulty in peer relationships, school refusal and behavioural difficulties (Hightower & Braden, 1991).

Some children who experience anxiety may be compliant and behave well at school, and therefore teachers and parents may not be aware of their anxiety related needs (Donovan & Spence, 2000). Even when adults become aware of anxiety issues in school-aged children, they may often underestimate the seriousness of these (Donovan & Spence, 2000).

The majority of research regarding anxiety in school age children relies heavily upon the quantitative reports of adults (e.g. parents, teachers or clinicians) through use of rating scales and standardised measures of anxiety or social functioning. Studies which have considered the views of children tend to utilise quantitative self report instruments (e.g. Bellini, 2006; Farrugia & Hudson, 2006; Gillott et al., 2001; Sofronoff et al., 2005; White, Ollendick, et al., 2009). Therefore the practicality and transference of use to the real life school setting could be questioned.

Self reports of worry have been found to correlate with self reports of anxiety which supports the notion that worry and anxiety in children are related constructs (Muris, Meesters, et al., 1998; Weems et al., 2000). Several studies identified in the literature, particularly those of a qualitative nature, use the terms ‘worry’ or ‘stress’ rather than ‘anxiety’ (e.g. Browning, Osborne, & Reed, 2009; Osborne & Reed, 2011). For consistency, the term ‘anxiety’ will be used throughout this text, other than where specifically quoted or referred to by participants.

2.6 Autism Spectrum Conditions and Anxiety

Anxiety is a widely recognised health concern in children in general, yet until recently there has been limited literature regarding the nature and extent of anxiety in children with ASC (Sofronoff et al., 2005). Additional mental health needs are more likely in children and young people with developmental disorders, especially ASC, than in the population in general (Ozsivadjian & Knott, 2011; Reaven et al., 2011).

A report on the mental health of children in Great Britain (Green, McGinnity, Meltzer, Ford, & Goodman, 2005) found that 30% of children with ASC had a ‘clinically recognisable mental disorder’ (p. 190), and 78% of parents reported that their child with ASC experienced mental health needs.

Anxiety is indicated as being prevalent in individuals with ASC, at reported rates from 13 to 84% (Ozsivadjian & Knott, 2011). Those with HFA or AS are especially likely to present with signs of anxiety (Reaven, 2011; Smith Myles, 2003), and in children with ASC anxiety is one of the most frequently co-existing difficulties (Smith Myles, 2003; White, Oswald, et al., 2009). Although the large difference in suggested prevalence rates could make it difficult to
gain a realistic picture of the need in this area, recent studies indicate that approximately half of children with ASC would meet criteria for an anxiety disorder (Ozsivadjian et al., 2012).

Studies of mental health prevalence in individuals with ASC are far from consistent in their reliability and validity, which could account for the large range in suggested anxiety prevalence rates. The wide variation in age, diagnoses, and country of origin of the study participants could account for such differences. Studies have generally been of a clinical rather than community sample. These methodological factors make it difficult to gain a true and dynamic picture of needs within the UK at the current time.

The aforementioned study of mental health in children within Great Britain explored the needs of over 7,000 children aged five to 16 and found that three percent of the general population had an emotional disorder, compared to 16% of those with ASC, in whom this typically presented as an anxiety disorder (Green et al., 2005).

A recent National Autistic Society (NAS) survey which included a large sample of 558 participants reported that 85% of children with ASC experienced anxiety (Madders, 2010). The research was based upon qualitative discussions with children and young people with ASC, a quantitative survey of Child and Adolescent Mental Health Service (CAMHS) Clinical Directors, and a quantitative survey of parents. However, the rate of anxiety was established solely from the postal/online survey of parental reports, and thus a criticism of this is the potential for response bias, for instance, parents may be more likely to respond if they had an interest in this area due to their child’s needs. Furthermore, 43% of the respondents’ (Madders, 2010) children were described as having AS/HFA, and it could be that that prevalence is higher within this group (see below).

The extent of mental health prevalence in children with ASC is reported to vary depending upon age and life stage. Anxiety and difficulties in managing stress are said to increase during adolescence (White, Oswald, et al, 2009), particularly in higher functioning children, perhaps due to increased awareness of their social differences (White, Ollendick et al., 2009). Studies consistently indicate higher prevalence rates of anxiety in samples of adolescents with ASC than in primary-school age children (e.g. Bellini, 2006; Gadow, Devincent, Pomeroy, & Azizian, 2005; Ghaziuddin, Ghaziuddin, & Greden, 2002; Gillott, Furniss, & Walter, 2001).

Due to their communication difficulties and the social demands of adolescence, it is suggested that older children with ASC may experience particular negative emotional effects at this time, resulting in increased likelihood of mental health needs (Tantam, 2000). This may include factors such as difficulty identifying with peer groups, lack of social reciprocity and managing increasing autonomy (Kuusikko et al., 2008; Shtayermman, 2008; Tantam, 2000).
Furthermore, it is reported that children and young people with AS and HFA are more likely to experience mental health difficulties, especially anxiety, than those with classic autism (Attwood, 2004; Gillott et al., 2001; Muris, Steerneman, et al., 1998; Tonge, Brereton, Gray, & Einfeld, 1999). A study which analysed teacher reports of students’ presentation found that internalising problems such as sadness, anxiety, low self-esteem and loneliness, and social skill difficulties around cooperation, assertion and self-control, were higher in students with AS than autism (Macintosh & Dissanayake, 2006). A review of anxiety in children with ASC found that children with AS were the most likely to experience anxiety of all those across the spectrum within the reviewed studies, but suggested that cognitive functioning rather than specific diagnosis might be implicated (White, Oswald, et al., 2009).

Sukhodolsky et al. (2008) studied a large clinical sample of 172 children with ASC, and found that those without an additional cognitive difficulty (e.g. IQ below 70) were more likely to experience anxiety than those with an IQ below 70, based upon parental reports. It is suggested that a greater awareness of their own needs and diagnosis in those with higher cognitive ability may account for increased levels of anxiety (Niditch, Varela, Kamps, & Hill, 2012). However, a recent study by Strang et al. (2012) which investigated a clinical sample of 95 children did not find any difference in levels of anxiety dependent upon age or cognitive ability.

Despite this, there is a core of literature to suggest that individuals with AS/HFA and adolescents are more likely to experience anxiety than students with no SEN or students with autism and additional learning or cognitive difficulties (Attwood, 2004; Mattila et al., 2010; Niditch et al., 2012; White, Bray, & Ollendick, 2012; White, Oswald, et al., 2009). Moreover, regardless of the strengths and shortcomings of the various studies and the differences in reported prevalence rates of anxiety across the autism spectrum, the consistent picture is that the prevalence of anxiety is much higher in children with ASC than control groups. Furthermore, anecdotal information and practical experience of the present researcher within the LA provides a similar illustration. For these reasons the exploration of the ASC literature was focused upon adolescents with HFA/AS.

**2.6.1 Identification of anxiety in children and young people with Autism Spectrum Conditions.**

Anxiety in children with ASC can range from ‘mild’ symptoms, to severe diagnoses of multiple clinical anxiety disorders (White, Ollendick, et al., 2009). Signs of anxiety and core characteristics of ASC can be similar, such as repetitive behaviours and compulsions (Muris, Steerneman, et al., 1998). Anxiety in AS can present as an increase in the core characteristics of the condition, for instance an increase in ritualistic or unpredictable behaviour (Tantam, 2000). Due to this continuum of anxiety-related needs and the similarity in presentation of anxiety and core ASC characteristics, it can be particularly difficult to identify in children with ASC (Ozsivadjian et al., 2012).
The current diagnostic criteria within DSM-IV (American Psychiatric Association, 2000) and ICD-10 (World Health Organization, 1992) specify that Pervasive Developmental Disorders (PDD), under which ASC falls, are an exclusionary criterion for anxiety disorders, perhaps suggesting, without specifying, that an anxious presentation is a characteristic of autism (Ozsivadjian & Knott, 2011). There is growing debate as to whether signs of anxiety are an intrinsic element of ASC or whether they are part of a specific co-occurring condition in some individuals with ASC (White, Oswald, et al., 2009). There is some suggestion that ‘diagnostic overshadowing’ may occur, whereby signs of a specific condition (i.e. anxiety) are linked to a primary diagnosis (i.e. ASC) rather than to the condition itself (Blakeley-Smith, Reaven, Ridge, & Hepburn, 2012).

There is currently no consensus regarding this issue. Some studies have reported that clinical anxiety can be identified as separate from the ASC characteristics in these children (e.g. Farrugia & Hudson, 2006). Other authors have suggested causal relationships between anxiety and specific characteristics of ASC, such as social skills difficulties (Bellini, 2004), sensory responsiveness (Green & Ben-Sasson, 2010), and differences in ‘Central Coherence’ and ‘Theory of Mind’ functioning (Burnette et al., 2005). However, as not all children with ASC develop anxiety, and the pathway varies, it could be speculated that anxiety is an additional rather than an inherent factor in ASC (Ozsivadjian & Knott, 2011).

Regardless of whether diagnostic overshadowing occurs and whether anxiety in ASC is intrinsic or additional, the evidence suggests that anxious thoughts and behaviours exist to a high degree in adolescents with ASC. The author therefore suggests that the focus for research into practice within the educational field, such as the study within this thesis, should consider more the impact upon the child and possible mediating strategies rather than the diagnostic criteria and correlation analyses.

An additional problem with identifying anxiety in children with ASC is that the majority of assessment tools have not been designed with this population in mind and have been standardised upon typically developing children. Such measures may not suitably capture the presentation of anxiety in children with ASC (Ozsivadjian et al., 2012). Children with ASC may have specific sensory, emotional and processing differences that may result in anxiety presenting in a complex manner (White, Oswald, et al., 2009). In a study of anxiety and ASC using parent and child focus groups, Ozsivadjian et al. (2012) found that the majority of the features reported by participants were not contained within the typically used anxiety measures.

Furthermore, the cognitive and communication differences of those with ASC can render accurate identification of anxiety challenging. Self-reporting difficulties due to the inherent nature of ASC are thus reported to be an issue in the assessment of anxiety for children with ASC (Reaven, 2009). It is suggested that the children themselves may not recognise the
symptoms of their anxiety nor have the insight into their own feelings to report these; additionally, they may deny the presence of worry or anxiety, even when signs are obvious to parents and teachers (Smith Myles, 2003; White, Oswald, et al., 2009). This can make accurate recognition and assessment of anxiety in children with ASC particularly challenging.

It has been proposed that the difficulties that children with ASC characteristically have in understanding and expressing emotion and in introspection (e.g. Baron-Cohen et al., 1985; Baron-Cohen, 2008) can cause difficulty in accurate self-reporting. This means that self-reports of children have often either been omitted from studies, or considered to be lacking in reliability (e.g. Chalfant, Rapee, & Carroll, 2007; Sofronoff et al., 2005). Recent research which considered the concordance of self-reports and parental reports suggested that agreement between these was limited and that therefore self-reports should be interpreted with caution (Mazefsky, Kao, & Oswald, 2011). It has been suggested that parental reports of anxiety in children with ASC may rate the child higher and more accurately than the child may do (Mazefsky et al., 2011; Russell & Sofronoff, 2005; Vickerstaff, Heriot, Wong, Lopes, & Dossetor, 2007). Although children may affirm the presence of anxiety, they often lack insight into its relation to their social difficulties (Brown et al., 2010). However, it is posited that the impact of parenting a child with ASC (who may display challenging behaviours and complex adaptive skills), along with a lack of external support, can lead to strain which may influence the highest levels of need reported by parents (Brown et al., 2010). Conversely, other studies (e.g. Farrugia & Hudson, 2006) have found high levels of agreement between the reports of parents and of adolescents with AS.

Children with ASC may have difficulty in identifying patterns in their own emotions and social behaviour, and they typically experience difficulty in identifying anxiety. However, using multiple methods to gain insight into their views and needs rather than relying solely upon adult reports can address this issue (Rotheram-Fuller & MacMullen, 2011). Multimodal assessments, observational methods and the use of multiple informants can help to build a more detailed picture of anxiety children with ASC (MacNeil, Lopes, & Minnes, 2009).

Differences have also been found between reports by parents and teachers regarding psychosocial difficulties (including anxiety) in children with ASC, with little agreement being reported by some researchers (Gadow, Devincent, & Schneider, 2008; Hurtig et al., 2009). However, other studies such as Vickerstaff et al. (2007) have found a high correlation between parental and teacher reports.

It is possible that some researchers unwittingly give more weight to the views of adults than of children. For instance, a recent study by Ozsivadjian et al., (2012) regarding the use of focus groups to look at parent and child perspectives on anxiety in children with ASC, reported that, “much of what the four boys said in their focus group mirrored the mothers’ comments” (p. 115). Only two paragraphs were devoted to reporting the children’s views compared to five pages discussing the parental views. Within their study of mental health of
children in Great Britain, Green et al. (2005) reported that although they sought to carry out interviews with autistic participants, it was often, “not possible to conduct an interview with an autistic child” (p.193). Only 10 participants with ASC were interviewed which provided limited information from their perspectives. It is therefore perhaps due to the complexity of recruiting and gaining the views of children with ASC that researchers give less weight to their views, rather than just a possible difference or difficulty in self-reporting of children with ASC.

These varied reports give limited clarity, other than to suggest that gaining the views of multiple informants with a range of data collection methods may provide a richer picture of the needs of young people with ASC and anxiety. Dadds and Barrett (2001) supported this view with their suggestion that, as anxiety is a complex and subjective experience, data should be gained from multiple informants and settings and in different formats. It could be argued that there is a strong tendency toward using quantitative approaches, most specifically rating scales and questionnaires; however such methods tend to allow only a limited response to predetermined statements, and do not gain a more detailed, dynamic picture of what participants think or know about their experience (Coolican, 2009).

Few studies have used qualitative methods to gain a richer picture of how anxiety-related needs are experienced in reality by the children with ASC and those close to them, such as parents and teachers. In a review of anxiety in children and adolescents with ASC, White, Oswald, et al. (2009), reported an absence of empirical studies of interventions specifically designed for school for children with ASC and anxiety which focused upon the emotional and behavioural difficulties therein.

It is suggested by Carrington and Graham (2001, p.47) that, “more qualitative research in the field of autism is necessary to achieve an in-depth exploration of the real-life experiences of these individuals from their own perspective”. Furthermore, whilst knowledge is growing regarding the prevalence and treatment of anxiety, there is limited understanding regarding the impact for children with ASC (Ozsivadjian et al., 2012).

2.7 Perspectives on Anxiety Regarding Students with Autism Spectrum Conditions in the School Setting.

The previous section highlighted a lack of studies which have explored multiple views using methods other than standardised measures in considering the needs of children with ASC and signs of anxiety. Further to this, there appears to have been limited research focus and failure to consider the wider views of the children themselves (Browning et al., 2009).

Despite some articles illustrating the presentation and impact of anxiety within the school environment, few make reference to specific interventions or supports to address the issues
therein (Rotheram-Fuller & MacMullen, 2011). Fewer still consider the reality of experiences of such students within school settings, particularly secondary school (Browning et al., 2009). Gaining the perspectives of participants through triangulating the views of students, parents and practitioners, along with researcher observations, is important to gain a relevant and detailed picture of the phenomena (MacNeil et al., 2009). As the literature shows a lack of emphasis upon the perspectives and experiences of the students and those supporting them this will be a foci for the literature evaluation.

The following studies have been identified which specifically considered anxiety within the mainstream school environment for students with ASC.

Connor (2000) carried out qualitative research to explore the opinions and experiences of students with AS in comprehensive schools regarding day-to-day issues in school. A sample of 16 students was recruited from across comprehensive schools in England, including individuals displaying signs of anxiety, ‘disruptive’ behaviour and difficulty with social interaction. A criticism of the study is that Connor (2000) does not describe how the sample was identified. The opinions of nine Special Educational Needs Co-ordinators (SENCos) within these schools were also sought. The stated research aim was to “identify any common themes linked to anxiety or stress in the young people, and highlight the particular areas identified by the Co-ordinators as presenting management challenges” (Connor, 2000, p. 287); yet the interview questions and discussion do not appear to specifically address anxiety as a primary focus of the research.

Another paper identified in the literature considering anxiety for mainstream students with ASC, described a participatory action research project in a secondary school in New Zealand which focused upon two students with ASC who demonstrated communication inhibiting behaviours apparently due to stress and anxiety (Bevan-Brown, Carroll-Lind, Kearney, Sperl, & Sutherland, 2008). The action research used a collaborative approach involving teachers, Teaching Assistants (TAs), parents, family members, and educational research mentors. The article does not state the specific diagnoses of the students, other than ‘ASD’, nor any cognitive levels of functioning. The article content, however, suggests that both students may also have experienced additional generalised learning difficulties to a significant extent. As this could not be established either way, as the students attended a mainstream secondary school, and as the approaches discussed appeared relevant to a wide range of students with ASC, including those with HFA/AS, the article has been explored further.

Bevan-Brown et al. (2008) utilised questionnaires and activities with the parents and school staff to identify the specific situations in which the students experienced anxiety and displayed anxiety responsive behaviours. Reflective journals were kept by the teachers involved, reports were considered from other practitioners such as speech and language and music therapists, and observations of the students took place by the research mentors. A continued process of data collection, analysis, planning, intervention and reflection took
place, alongside professional development activities (Bevan-Brown et al., 2008). The outcomes of the observations and questionnaires were utilised in designing appropriate strategies and interventions to target the identified stressors. The direct views of the students were not sought as part of the research process, although worksheets were utilised with students to explore their ability to interpret feelings relating to specific situations.

Research regarding the needs of student with ASC at school in general, or in relation to inclusion, exists (e.g. Carrington & Graham, 2001; Humphrey & Lewis, 2008a; Humphrey & Symes, 2011; Osborne & Reed, 2011; Tobias, 2009), but anxiety is raised as one factor amongst many and given limited specific consideration. In a study describing practice regarding inclusion for students with ASC within one mainstream secondary school, Morewood, Humphrey, and Symes (2011) highlighted anxiety as an area of need and proposed that a ‘whole school saturation model’ is required to address their needs. However, they reported that inclusion of pupils with autism is still complex and poorly understood, and that these students are at an increased risk of negative outcomes.

### 2.7.1 Presentation of anxiety in students with Autism Spectrum Conditions.

In a study of the views and experiences of students with ASC within several mainstream secondary schools, Humphrey and Lewis (2008b) identified anxiety and stress within school as a theme. They found that, due to this, students experienced difficulties in concentration and coping with noise and disruptions within class and so often sought refuge. A similar study considering inclusion for such pupils suggests that anxiety creates a barrier to inclusion for students with ASC (Morewood et al., 2011). Greig and MacKay (2005) also stated that the complexity of self regulation in children with AS can render them particularly at risk in mainstream settings.

Anxiety in children can affect them across environments and have a considerable effect upon their involvement at school as well as in the home and community. It can impact upon their social interaction, peer relationships, family relationships, school performance, and engagement in out of school activities (Reaven et al., 2011; Reaven, 2009). Anxiety-related behaviour can be particularly exacerbated in students with ASC, also intensifying many of the characteristic difficulties associated with ASC (Greig & MacKay, 2005; Reaven, 2009).

Studies focusing upon the perceptions of students with ASC, their parents and school practitioners, have found that a variety of signs can be exhibited in terms of the day-to-day presentation of anxiety in children with ASC. In a focus group study of parent and child perspectives on the nature of anxiety in children with ASC, Oszivadjian et al. (2012) found that common themes in the presentation of anxiety for the children included increased arousal, an increase in avoidance and escape behaviours, withdrawal, and challenging behaviour. Oszivadjian et al. (2012) consider that anxiety in children with ASC may be
expressed primarily through behaviour. The intensity, persistence and pervasiveness of anxiety in the children with ASC was found to be a key concern for parents. However, although school was mentioned in the research, the authors did not explore this environment specifically, and focused expressly upon the presentation and triggers of anxiety. They did not investigate the means by which these were addressed by the participants in terms of strategies and supports. Additionally, they appeared to give limited focus to the findings from the four student participants involved, instead concentrating upon the parental perspectives.

Students with AS have identified that they experience stress in managing the social expectations of peers and in completing school work (Carrington & Graham, 2001). Mothers of such students, however, have highlighted that this stress was often hidden during their time at school and would instead present in overt emotional expression at home. Carrington & Graham (2001) referred to this as ‘masquerading’, and recommended that teachers needed to be more aware of the signs and changes in behaviour which may indicate stress for the students. They suggested that signs of stress included inattentive and disorganised behaviour, isolation, fatigue, crying and ‘suicidal remarks’. This research used a case study approach to explore perceptions of school of just two teenage boys with AS and their mothers (Carrington & Graham, 2001), but was not specific to anxiety and did not explore teacher perspectives.

Anxiety can also present in those with ASC with less obvious behaviours, such as physical signs, and verbal and non-verbal clues. In one study, parents commented on increased activity levels such as ‘jumping about’, nervous behaviour such as biting nails, making noises such as humming, and signs such as ‘becoming edgy’ and continuous movements of the eyes when their children were anxious. They also reported an increase in complaints from the children of sickness, stomach aches and unusual feelings in their stomachs, alongside changes in the skin such as redness, bumps and boils, clamminess and darkness around the eyes (Ozsivadjian et al., 2012). It is unclear whether these signs were noted within school too as teachers' perceptions were not sought regarding this. The students, though, were able to recognise some signs themselves such as their heart racing, sweating, changes in their breathing, ‘butterflies’, wobbly legs, and feeling sick.

In a study considering perceived stress and coping in adolescents with ASC due to leave school in the near future, compared to those without ASC, Browning et al. (2009) found similarities between how the two groups of students felt when stressed or anxious. Physiological and visible signs of discomfort were reported, such as complaints of feeling sick and being uptight and tense. Signs of stress were reported to manifest more as internal cognitive discomfort than in external signs. It is therefore likely, especially in teachers who are less experienced in working with students with ASC and/or anxiety, that signs will be easily missed.
Specific thinking styles may be found in many individuals with AS/HFA such as rigid, negative, polarised and fatalistic thinking, biased perceptions, ‘all or nothing thinking’, and inaccurate attributions (Greig & MacKay, 2005; Hare, 2004). These are consistent with cognitive behavioural theories relating to anxiety (e.g. Beck, 1991). Parents of students with ASC have reported such cognitive manifestations of their anxiety, for instance, thinking errors, cognitive distortions, catastrophising, and ‘all or nothing thinking’ leading to increased anxiety. These tended to be regarding areas such as school performance, peer reactions, future predictions and showing low self-worth (Ozsivadjian et al., 2012). The students themselves also expressed such cognitions, e.g. ‘thoughts racing out of control’ (Ozsivadjian et al., 2012, p.115), within their focus group, but struggled to link these to their anxiety.

Parents of children with ASC have also reported that their child engaged in increased externalised behaviours such as obsessional and repetitive behaviour at times of anxiety. Repetitive play, repeating questions and intense focus on specific subjects were all reported to increase when the child was anxious, along with sensory behaviours such as chewing clothes and twisting things with their hands (Ozsivadjian et al., 2012).

2.7.2 Factors contributing to anxiety in students with Autism Spectrum Conditions in mainstream secondary schools.

The specific profile of ASC indicates why these children may be at risk of heightened stress and anxiety. The social, communication, cognitive and sensory perceptual differences, along with difficulties with empathy and social reasoning, may account for the increased rates of affective conditions within those with AS/HFA (Attwood, 2004). However, the aforementioned argument regarding whether anxiety is inherent in ASC, or is an additional co-existing condition in some, merits further exploration of contributing factors.

Research exploring the experiences of children with ASC and their parents through focus groups has reported themes including social worries, perceived expectations of others, changes in routine, and sensory sensitivity as leading to anxiety (Ozsivadjian et al., 2012). These issues were not explored specifically in relation to the school environment nor were the views of school practitioners gained, and therefore it would be difficult to validly assume that these would automatically relate, or transfer to, the school environment.

A study investigating the views of students with ASC in mainstream secondary schools regarding their inclusion, suggested that the school environment led to anxiety (Humphrey & Lewis, 2008a). Students expressed that they found maintaining a sense of order, and predicting situations in what they found to be a chaotic environment, was stressful. The noise and typical ‘hustle and bustle’ of the secondary school environment led to feelings of being overwhelmed by anxiety or stress (Humphrey & Lewis, 2008a).
The ‘Autism Standards for Schools’ (Jones, Baker, English, & Lyn-Cook, 2012) have also raised this concern, and note that sensory differences in students with ASC can lead to anxiety and difficulties for students with attention and focusing on the relevant information. They advise that students with ASC may be hypo- or hyper-sensitive to particular auditory, visual, or olfactory stimuli which within the school environment can be over-stimulating. However, although these standards have been based upon a review of good practice within education for students with ASC, it is unclear whether information underpinning their development came from the perceptions of teachers, students or parents, or from other referred-to literature. However, participants in the Ozsivadjian et al. (2012) research indicated that sensory factors such as loud noises, teachers shouting, multiple voices, and certain smells at school, could all trigger anxiety.

In addition to the ‘bustle’ of school creating stress for students with ASC, they have reported that organisational factors within the busy secondary school environment, such as getting to the right lessons at the right time and having the necessary equipment, can be problematic and cause anxiety (Connor, 2000).

Students and parents have perceived that change or changes in routines could also trigger anxiety, which was specifically highlighted by the students themselves. At school, aspects such as being taught by a supply teacher, the act of changing clothes for Physical Education (PE) lessons, sports days, school holidays and, unsurprisingly, changing schools, have all been reported to create anxiety (Ozsivadjian et al., 2012).

Unstructured times, such as lunch times, have also been observed or reported to be difficult for students with ASC. In a study by Connor (2000), students reported that they sought out activities to manage during long unstructured periods, and they were perceived by SENCos to appear isolated and unoccupied during lunch and break times (Connor, 2000).

Changes of school, especially transition to secondary school from primary school, and onwards from school at age 16, are deemed to cause particular anxiety for students with ASC (Browning et al., 2009; Jones et al., 2008). It is suggested that life events such as transitions can be an initial trigger for patterns of anxiety or depression in individuals with ASC (Ghaziuddin, Alessi, & Greden, 1995; Ghaziuddin & Greden, 1998; Tantam, 2000).

It is probable that school transitions can cause anxiety for students with ASC due to the changes in routine and social skills required during these periods, which are characteristically areas of difficulty for those with ASC (Ashburner, Ziviani, & Rodger, 2010; Browning et al., 2009; Jindal-Snape, Douglas, Topping, Kerr, & Smith, 2006; Tobias, 2009). Managing the new and busy environment of secondary school, new routines, peers and teachers can be particularly stressful for students with ASC due to their difficulties with these aspects.
A study of students nearing transition from school at age 16 found that students with ASC tended to worry about losing contact with friends, whereas students without ASC tended to be concerned more about their future education and employment opportunities (Browning et al., 2009).

Difficulty in social skills and building social relationships with peers has been strongly linked to the development of anxiety in children with ASC. Feelings of isolation, trying to ‘fit in’, limited social acceptance, and poor social confidence have all been reported by parents and practitioners to lead to anxiety and worry in children with ASC (Browning et al., 2009; Connor, 2000; Morewood et al., 2011; Ozsivadjian et al., 2012). The students themselves have particularly expressed social worry regarding interaction with peers outside of classes, isolation, not knowing what to say, being self conscious in social situations, others’ perceptions of them, interpreting social situations, being the centre of attention, and being ridiculed. In relation to the last point, students in some studies have shown some awareness and anxiety regarding their social differences, and parents and school staff have reported that their idiosyncratic style, difficulty understanding social subtleties, perceived social naivety, and eagerness to seek friends could make them targets for negative attention from other students (Browning et al., 2009; Connor, 2000; Humphrey & Lewis, 2008a; Ozsivadjian et al., 2012).

It is hypothesised that peer rejection, and negative social experiences where students experience perceived ‘failure’, can cause anxiety regarding future social encounters (Attwood, 2007; Bellini, 2006). Additionally, evidence from examples given by students and parents suggests that many social worries may be related to difficulties in ‘Theory of Mind’ experienced by children with ASC, for instance a lack of understanding of social rules and expectations (Ozsivadjian et al., 2012). Despite these understandable links being made, there is limited quantitative evidence directly linking anxiety to social difficulties in ASC, although research findings of personal experiences of individual students’ realities need to be considered as having validity. In essence, social functioning and peer relationships are suggested as being either a barrier to inclusion (when these are lacking), or a support when inclusion is successful (Humphrey, 2008).

Several studies have linked bullying to anxiety and social worries in children with ASC (Browning et al., 2009; Humphrey & Symes, 2010a, 2010b; Morewood et al., 2011; Ozsivadjian et al., 2012). Social difficulties, as previously discussed, and an inherent emotional vulnerability, may increase the likelihood of bullying and social isolation (Humphrey & Lewis, 2008b), which can result in increased anxiety, particularly in relation to anxiety regarding possible physical injury (Sofronoff et al., 2005). The latter study was, however, based only upon parent-reported measures, with no control group, and did not consider the experiences of the students themselves. The authors suggested that bullying of children with ASC might stem from their ‘Theory of Mind’ difficulties, and low ‘social intelligence’. Both of these issues place the emphasis upon within-child factors and fail to
consider the child’s perspective regarding bullying; nor do they explore the part of those carrying out the bullying in any depth. The authors did, though, briefly acknowledge a willingness of the peers to see the child with ASC as an easy target or to take advantage of their vulnerability. Students with ASC themselves have specified their ‘label’ of ASC, peers ‘going against them’, and peers not getting on with them as factors (Humphrey & Symes, 2011; Humphrey, 2008). Examples of physical harm, such as being punched or scratched, have been raised by students who were anxious regarding this (Browning et al., 2009).

Students with ASC and their parents have also indicated that difficulty in externally expressing their feelings and worries, particularly through verbal means, impacts further upon their anxiety (Browning et al., 2009; Ozsivadjian et al., 2012). For instance, students may keep feelings to themselves and instead show their anxiety through externalised behaviours (as discussed later in section 2.7.3).

The majority of reports regarding difficulties in expressing feelings have come from parents (e.g. Ozsivadjian et al., 2012). Older students have been shown to recognise that they had difficulty in managing stress, yet in Browning et al.’s study (2009) they were not able to attribute this to anything in particular. In some studies students themselves had difficulty in explaining how they felt anxious, with some even saying that they felt ‘nothing’ (Browning et al., 2009; Ozsivadjian et al., 2012). Due to the aforementioned debate regarding whether students are able to accurately self-report, it is difficult to say whether this would be an accurate self-perception, as parental reports have strongly indicated that the students show obvious signs of feeling anxious (Carrington & Graham, 2001; Ozsivadjian et al., 2012).

Although many children have difficulty in expressing their emotions and worries, this has been reported to be specifically difficult for students with ASC, which is perhaps unsurprising given that pragmatic language and communication difficulties are a core diagnostic criterion of ASC (Ozsivadjian et al., 2012).

Cognitive functioning differences associated with ASC, such as differences in ‘Theory of Mind’, ‘Central Coherence’, and ‘Executive Functioning’, are also considered to contribute to anxiety in children with ASC. For instance, differences in ‘Theory of Mind’ in children with ASC have been suggested to cause specific cognitive thinking patterns (as mentioned in section 2.7.1). Issues such as distorted perceptions of others’ actions and intentions, due to inherent difficulties in identifying, anticipating and contemplating others’ thoughts and feelings and their own responses to these, are thought to be linked to anxiety in children with ASC (Attwood, 2004; Ozsivadjian & Knott, 2011). In terms of ‘Central Coherence’, associated organisational difficulties may make everyday situations feel threatening, such as orientating around the school and piecing together information to make coherent sense of the whole school context. ‘Executive Functioning’ differences can result in difficulties with planning and executing alternate self management and thinking strategies, disinhibited behaviour, and impulsivity (Attwood, 2004; Ozsivadjian & Knott, 2011). However, the impact
of these factors upon anxiety for students with ASC is purely speculative as the
aforementioned authors reporting these did not specifically explore these concepts as part of
their data collection.

Increasing self-awareness of students with ASC, particularly as they get older, has also been
reported to impact upon the presence of anxiety (Tantam, 2000). Increasing insight into their
own difficulties, especially social, trying to mask their areas of need, increased insight into
their unique presentation and interests, and reports of feeling ‘different’ to peers, have all
been linked to worries for these students (Carrington & Graham, 2001; Connor, 2000). It is
suggested that trying to hide these differences can lead to anxiety (Carrington & Graham,
2001).

### 2.7.3 The impact of anxiety for students with Autism Spectrum Conditions.

Anxiety in students with ASC is thought to result in a variety of secondary needs including:

- lowered self esteem (Greig & MacKay, 2005; Wilkerson & Wilkerson, 2004);
- effects upon academic performance at school (Greig & MacKay, 2005; Rotheram-Fuller & MacMullen, 2011);
- impact upon relationships with teachers (White, Oswald, et al., 2009; Wilkerson & Wilkerson, 2004); and
- school exclusion (Wilkerson & Wilkerson, 2004).

Indeed, the impact of anxiety has often been reported by parents to be more of a concern
than the effects of ASC (Ozsivadjian et al., 2012).

As discussed previously in section 2.7.2, it has been suggested that social difficulties can
lead to anxiety for students with ASC. The impact of this can be that the student may further
withdraw socially and avoid social situations. Parents have reported incidences of students
hiding to avoid interaction at school (Ozsivadjian et al., 2012) and due to their experiences of
bullying, some students have expressed a level of worry that led them to try to avoid any
direct contact with peers (Humphrey & Symes, 2010a).

Several qualitative studies have identified that students with ASC tend to report a reliance
upon themselves to manage their worries and emotions, and that these anxieties were
typically internalised (Browning et al., 2009; Carrington & Graham, 2001; Ozsivadjian et al.,
2012). In a qualitative study by Carrington & Graham (2001), students were deemed by
adults to actively try to hide their anxiety and, worryingly, to self-harm. Parents also reported
that the child would often have difficulty in sleeping when anxious, which might have been a
result of the internalisation of their anxieties (Carrington & Graham, 2001).
It has been hypothesised that this internalisation of worry and self reliance can lead to further stress and anxiety, as students with ASC may appear to present with limited resources or strategies to manage this themselves (Browning et al., 2009; Carrington & Graham, 2001; Ozsivadjian et al., 2012). This might result in the students appearing, to adults, to suddenly ‘explode’, when in fact they had actually been internalising their feelings for some time. In a review of ASC within education, such outbursts of behaviour were sometimes perceived to be ‘aggressive’ by adults, such as teachers (Jones et al., 2008). However, it is thought that through this behaviour, the student is in fact responding to anxiety and attempting to communicate their emotions (Jones et al., 2008). Behaviours resulting from anxiety have been reported by parents to be ‘challenging’, and verbally and physically ‘aggressive’ (Ozsivadjian et al., 2012). Carrington and Graham (2001) suggested that the unpredictability of events and social environments could lead to overwhelming stress and, in turn, externalised behavioural expression.

It is possible that the issue of unpredictable, ‘challenging’ behaviour may account for the larger number of children with ASC being excluded from school than those without SEN (Morewood et al., 2011); however, it is difficult to say whether behaviours leading to exclusion would be due to anxiety or some other factor.

Anxiety has also been linked to under-achievement or poor academic performance at school (Greig & MacKay, 2005; Rotheram-Fuller & MacMullen, 2011). Reaven (2009) reported a case of a student whose attendance at school and completion of school assignments was significantly affected due to his anxiety about making mistakes. Based on this alone, it is difficult to attribute academic under-achievement specifically to anxiety, and further exploration of this, and of students’ own experiences, would appear to be relevant.

Some researchers have also raised the perceived possible future impact of anxiety for students with ASC. Browning et al. (2009) highlighted students’ perceptions that they would worry in the future, particularly with respect to their relationships with others; participating students also indicated a lack of belief in their ability to manage these possible future worries (Browning et al., 2009).

Williams and Hanke (2007) gained the views of students with ASC with a personal construct psychology based approach using the concept of ‘Drawing the Ideal Self’ (Moran, 2001), whereby students were asked to draw their ideal school and non-ideal school. Some of the participants provided specific detail regarding the impact that the non-ideal school might have upon them, such as not wanting to go to school, being sad and unhappy, being bullied, being lonely, and wanting to leave. It could be suggested that such thoughts reflect anxieties of the students about what could occur, or may be related to past experiences, but the authors did not explore this theme further.
**2.7.4 Strategies, support and approaches for students with Autism Spectrum Conditions and anxiety.**

Better outcomes may be expected for children when individuals in their naturalistic setting are involved in providing interventions (Greig, 2007). However, despite anxiety often being linked to difficulties within the educational setting for students with ASC, there are limited researched interventions or support strategies that are designed to address this and which are utilised within the educational context. Osborne and Reed (2011, p. 1255) state that “the analysis of the school-based factors that impact on children with ASD at a more fine-grained level than previously attempted, appears essential to a further understanding of this area”. It could be argued that this approach would allow more grounded, relevant results that reflect what matters to the participants concerned.

Reaven (2009) recommended that within the school context, as the signs of anxiety present, appropriate strategies and mechanisms for managing these should be simultaneously developed. Connor (2000) advocated a shift away from a tendency to focus upon changes in the student and their behaviour, toward adapting the school environment, expectations and/or situations. Specific strategies, though, would have a requirement to be cognisant of the age, stage and functioning of the individual child and the setting in which the student is educated (Humphrey & Symes, 2011). This supports the chosen focus of this section of literature which reports interventions, strategies and approaches at a specific stage (secondary education), functioning (HFA/AS), and setting (mainstream secondary schools).

Tobias (2009) considered the perspectives of students with ASC and their parents regarding support at secondary school and found that good secondary school support for these pupils was perceived to be dependent upon a balance of two key elements: reducing and managing the causes of stress within the school environment to enable more effective learning for the pupils, and helping students to develop self-support strategies to enable them to become more independent within the real world (Tobias, 2009). This study was not, however, focused specifically upon anxiety; instead, the focus was upon types of general support that were perceived to be effective and what further support would be beneficial. The five students recruited to the study attended the same school, had a variety of diagnoses of ASC, and all were linked to a specialist support centre at the school. Therefore the transference of their experiences and realities to other students with ASC could be argued to be limited.

Another study identified in the literature explored school factors associated with progress for students with ASC in mainstream secondary schools and considered what supports enabled students to improve their functioning and performance at school over the course of a year Osborne and Reed (2011). Improvements in social behaviours were noted for students with AS and it was considered that access to typically developing mainstream peers supported this, as results were in contrast with those attending specialist provisions. The study
explored the views of over 100 students with ASC and their parents, from 91 schools across the UK and, although the recruited students were from across the autism spectrum, the authors considered findings in relation to diagnostic groups of AS and autism. The authors concluded that with appropriate support, students with ASC in mainstream schools could make progress in emotional and behavioural functioning (Osborne & Reed, 2011). However, findings were based upon postal responses to standardised measures of functioning and did not take into account the experiential realities of the students, nor the views of teachers. Additionally, the LAs were asked to select students to participate, and although it was requested that this be randomised, there was a significant potential for selection bias.

It has been suggested by researchers and practitioners carrying out exploratory research in this area that balancing the needs of the student with ASC, along with considering the school environment, and planning for their needs can enable more inclusive practice (Humphrey, 2008; Tobias, 2009). Whether or not this is true for supporting the needs of those students with anxiety remains to be seen, and this will be considered in the following sections of this literature review.

2.7.4.1 Environmental and sensory adaptations and supports.

In Jones et al.’s review of educational provision for students with ASC, environmental modifications are recommended to be the initial strategy in attempting to reduce and manage anxiety (Jones et al., 2008). Providing clear structure, communication and a controlled environment are advised, although this is not specific to mainstream environments, secondary education nor students with HFA/AS (Jones et al., 2008). However, such strategies are also suggested based upon the exploration of views of students with ASC in mainstream secondary schools and their parents. For instance, use of individual workstations, visual timetables, and personalised schedules and routines prepared in advance have all been reported as successful approaches to help manage change and the complexities of the school environment (Bevan-Brown et al., 2008; Humphrey, 2008; Tobias, 2009).

As previously mentioned in section 2.7.2, students with ASC can experience sensory differences that may lead to anxiety within the school environment (Jones et al., 2012). Many students, parents and school practitioners have reported that having a ‘safe space’ i.e. a quiet calm area where the student can take refuge when anxious or at busy times such as lunch times, was helpful and enabled the student to become calmer (Bevan-Brown et al., 2008; Connor, 2000; Humphrey & Lewis, 2008a; Tobias, 2009).

2.7.4.2 Support with transitions.

Providing appropriate support and planning at times of transition has been reported to be effective and to reduce anxiety and stress (Humphrey & Lewis, 2008a; Tobias, 2009).
Students and parents have described aspects which they perceive to be effective, such as providing detailed information about the new school to the student, providing information about the student to staff, and discussing problem solving strategies for possible situations with the student (Tobias, 2009).

### 2.7.4.3 Social support.

Humphrey (2008) reported a perception, primarily of school practitioners and parents, that the teaching of specific social skills may be beneficial to students with ASC within the school setting. Specific elements of social skills, especially non-verbal communication (e.g. body language) may be more difficult for students with ASC to grasp due to their underlying difficulties in social interaction and communication, for instance, keeping personal space when talking, talking at an appropriate volume and knowing when touch is appropriate (Humphrey, 2008).

It has been suggested that school practitioners who carry out structured and targeted social skills support should involve approaches such as role play and ‘Social Stories’; the teaching of specific skills or social behaviour through a structured specially written story (Gray, 1998). These methods can all be facilitated to support students with AS within the school setting (Bevan-Brown et al., 2008; Connor, 2000; Humphrey, 2008) and have been identified as useful in helping to manage anxieties around specific social situations and fears (Bevan-Brown et al., 2008).

Wilkerson and Wilkerson (2004) described how social skills were added to the daily curriculum for students with ASC, whereby teachers supported the students to identify problematic social situations, consider the options and explore the best solutions using approaches such as role play. Situations such as how to manage teasing from peers were addressed. Observations by the authors suggested that as a result of this intervention, students displayed increased awareness of their social environment, ability to self-monitor within these situations, better understanding of others’ perspectives, more effectiveness in managing negative attention from peers, and more likelihood of seeking support from adults when becoming upset or ‘aggressive’ (Wilkerson & Wilkerson, 2004). This paper was based upon a case study within one North American middle school of 10 students with AS, and the method by which the analysis was conducted was poorly defined; seemingly the authors carried out analysis solely through observations with no methods of triangulation or verification being mentioned. Therefore the validity and reliability of the findings could be questioned.

Studies using quantitative methods have reported some improvements in the social skills and socially adaptive behaviours of students with ASC, but these have not demonstrated any definite links to the reduction of anxiety (Elder, Caterino, Chao, Shakensai, & De Simone, 2006; Koenig, De Los Reyes, Cicchetti, Scall, & Klin, 2009; Konstantareas, 2006; White,
However, as relationships between social skills difficulties and increased anxiety have been made regarding students with ASC, this could be presumed (Bellini, 2004, 2006; Russell & Sofronoff, 2005). There remains some question over the long term impact of such approaches though, as it has been suggested that benefits may not be maintained nor generalised from the classroom to the wider student environment (Cappadocia & Weiss, 2011; Ghaziuddin, 2005)

### 2.7.4.4 The development of peer awareness, understanding and support.

Connor (2000) considered the need to raise peer awareness and understanding, to limit bullying, stereotyping, manipulation, and peer rejection. He proposed that mentoring, the ‘Circle of Friends’ approach (as described by Gus, 2000) and lunchtime clubs as mediation for this, with the suggestion that this may reduce social pressures upon the student with ASC (Connor, 2000). The ‘Circle of Friends’ approach is based upon building a network of peers around the ASC student who are taught to understand their needs, and who can develop friendships and supportive relationships with the student. The need for peers to develop an understanding of the behaviours and characteristics of the student with ASC has been highlighted (Humphrey & Symes, 2010b), although no specific evidence has been found discussing the links between the benefits of raising peer awareness and reduction in anxiety for students with ASC. However, Humphrey (2008) cited the perceptions of students with ASC themselves regarding how positive support from peers was beneficial to them, and linked this to their resiliency to mental health difficulties. This paper however, was not specifically related to anxiety and the evidence for this link was not made explicit.

### 2.7.4.5 The development of improved self-awareness.

It has been proposed that supporting students with ASC to understand their diagnosis and the effects of this, and their own needs and ways of interacting, can increase resiliency, self-confidence and self-esteem (Morewood et al., 2011; Tobias, 2009). This has been found to be a strong theme from parents and practitioners, as well as students themselves, who perceived their diagnosis to help them understand themselves (Tobias, 2009). Research regarding this specific area has indicated that having a greater understanding of their ASC can help students to improve self-confidence and self-acceptance, and limit the likelihood of anxiety (Cann, 2007).

### 2.7.4.6 Use of specific interests and preferred activities.

The use of preferred or ‘special’ interests is often discussed in popular literature regarding strategies for students with ASC (Attwood, 2007; Hesmondhalgh & Breakey, 2001). Characteristically, students with ASC tend to present with specific restricted interests or ‘obsessions’, which is reflected in the diagnostic criteria (American Psychiatric Association, 2000; World Health Organization, 1992). Research has indicated that special interests
which fit with everyday popular activities, such as use of computers or sport, could be used proactively to support students (Carrington & Graham, 2001; Connor, 2000). Bevan-Brown et al. (2008) described use of preferred activities in alleviating stress, for instance using a mini trampoline. However, use of special interests, skills or talents seems to be an area that is mentioned very little in other literature exploring the support of students with ASC in mainstream secondary schools (Humphrey & Lewis, 2008b; Oszivadjian et al., 2012; Tobias, 2009), particularly in relation to alleviation of anxiety.

2.7.4.7 The development of stress management.

Ensuring that opportunities and support exist for the students to express their emotions and anxieties in appropriate ways and to learn to manage these has been raised as important in supporting ASC students within school (Carrington & Graham, 2001; Connor, 2000). It has been suggested that students should be proactively taught how to manage their emotional reactions and work on how to prevent the negative recurrence of these. Strategies such as relaxation and use of pleasurable activities are recommended (Carrington & Graham, 2001; Jones et al., 2008). Students with ASC themselves have reported how activities such as listening to music helped calm them (Carrington & Graham, 2001) and strategies such as having cue cards with pictures of calming activities that could be accessed have been considered to have been used successfully by school practitioners (Bevan-Brown et al., 2008).

2.7.4.8 Cognitive behavioural support.

One means of supporting such emotional expression and management that is becoming increasingly prevalent is the use of Cognitive Behavioural Therapy (CBT) for students with ASC and anxiety. Rotheram-Fuller and MacMullen, (2011) conducted a review of literature regarding CBT for children with ASC, focusing upon its applications for educational practice within schools, specifically in relation to anxiety. They suggested that although the use of CBT for children with ASC has been increasing in recent years within literature, this had not been well considered from an educational perspective regarding its use within the school environment. Several case studies were identified which indicated reduced anxiety in children with ASC through use of CBT, although the difficulty in generalising such findings due to small sample sizes is a limiting factor. The potential for using CBT approaches within the school environment was indicated, but specific adaptations of CBT for children with ASC had yet to be fully considered (Rotheram-Fuller & MacMullen, 2011). However, a criticism of this review is that it did not specify search criteria, nor how the specific articles that were reviewed were identified.

Rotheram-Fuller and MacMullen (2011) also suggested that educational practitioners such as EPs, teachers and school counsellors may be suited to implementing such focused intervention, but that their responsibilities may inhibit this. The authors fail to address the
training, financial and time commitments that this could incur for lengthy therapeutic work. However, with the appropriate training and support, many of the recommendations that the authors make could potentially be utilised within day-to-day practice in schools by educational practitioners using principles derived from CBT, rather than implementation of a comprehensive and individualised CBT programme. Examples of the recommendations include the use of hands-on activities and visual aids to identify anxious feelings; focusing more specifically upon the students’ strengths; and involving parents so that new coping skills can be transferred from home to school. Few of the studies included in the review considered the students’ perspectives in their evaluations though, and those that did tended to do so from self-report instruments and did not consider the wider experience of the students.

Greig and MacKay (2005), both EPs, described a case study of a modified CBT approach utilised within a secondary school with a student with AS. The approach was not focused specifically on anxiety, but the student was deemed not to be reaching his potential and experienced difficulties with organisation, concentration, attention, disruptive behaviour and non-verbal communication as well as anxiety. Evaluation consisted of rating scales, observations and teacher feedback, although this was a small-scale case study from which findings would not be wholly generalisable. However, the authors highlighted the potential for use of such approaches with this group of students (Greig & MacKay, 2005).

2.7.4.9 Support from school practitioners.

Support from adults such as teachers and TAs within the school setting has been considered as a supportive factor for students with ASC. Students have reported this as helping to alleviate their anxiety (Humphrey & Lewis, 2008a), but also noted that the presence of additional support staff in class could be detrimental as it can highlight their difference from other students. Evidence of adult support being provided by more subtle means was observed by Humphrey and Lewis (2008a). In some schools, for instance, practitioners were available within the classroom, but were not in direct proximity to the student. Both positive and negative aspects of TA support have been reported, for students with ASC; appropriate support may bring about an improvement in emotional and behavioural difficulties, however, it may also result in increasing reliance upon the adult rather than developing independent social skills (Osborne & Reed, 2011). Given the potential associations between social skills and anxiety (as mentioned in section 2.7.2) it could be argued that this is something of a dilemma.

The relationship between students with ASC and school practitioners is seen as essential to their success at school. The importance of building trusting relationships with the student when they first attend the school has been reported as being especially critical to addressing the student’s needs (Bevan-Brown et al., 2008).
2.7.4.10 School practitioner training and development.

One of the most prevalent areas discussed within the literature regarding support of students with ASC within mainstream school is that of school practitioner training, development, knowledge and understanding. Parents of ASC students in particular have reported views that teachers should access more ASC training (Jindal-Snape, Douglas, Topping, Kerr, & Smith, 2005; Jones et al., 2008) and it has been suggested that many staff within mainstream schools have limited or no ASC training (Jones et al., 2008).

McGregor and Campbell (2001) reported that mainstream teachers who had experience and training in ASC displayed more confidence in working with students with ASC (McGregor & Campbell, 2001). Practitioners who had greater understanding were found to be less likely to label the students as ‘aggressive’ or ‘disruptive’, and instead recognised their anxious and vulnerable states (Jones et al., 2008).

Teachers have reported that ASC students ‘displaying inappropriate emotions’ is one of the most difficult areas for them to manage and it has been suggested that training should be focused upon this area (Humphrey & Symes, 2011). Additionally, it has been proposed that practitioners need to have greater awareness of ASC to limit them placing unreasonable expectations upon students, and to enable them to adapt language and instructions appropriately for the students (Connor, 2000). It has been identified that awareness and training could support practitioners in the increased use of adapted teaching approaches to take account of the specific patterns of strength and need in students with ASC which is deemed to support their inclusion. For instance, using modified language and interactions such as consistency in the use of direct and unambiguous instructions from practitioners has been highlighted as a need (Connor, 2000; Humphrey, 2008).

The study also concluded that practitioners should be given time to share their thoughts and reflect upon practice; as participating teachers reported that weekly sessions that allowed this were highly beneficial in enabling them to support the students effectively (Bevan-Brown et al., 2008).

2.7.4.11 Whole school approaches.

It is also important to consider the whole school context and the impact of this upon the student, as mentioned in section 2.7.2.

The value of inclusionary approaches within the mainstream school for students with ASC has been emphasised, and it is suggested that changes in organisation and expectations are required, along with a modified curriculum, to ensure that such students’ needs are addressed (Connor, 2000). Whole school inclusion and support requires involvement from
practitioners across the school and a core value system that respects and supports the students’ diversity (Humphrey & Symes, 2011; Humphrey, 2008).

A case study of inclusion for students with ASC in mainstream schools (Humphrey & Lewis, 2008b), using a variety of qualitative methods such as interviews with students, practitioners and parents, observations, student diaries, and school documentary evidence, found four key themes for successful inclusion of students with ASC:

- school ethos and commitment to inclusion;
- communication and inclusive practices;
- acknowledgement of the distinct needs of students with ASC in mainstream schools; and
- responsibility for students’ learning and the role of the TA.

A positive school ethos has also been highlighted as important by parents and students in other studies (Tobias, 2009; Williams & Hanke, 2007). A change in attitude by TAs to supporting students with SEN was identified in one study (Bevan-Brown et al., 2008). A shift was observed in participating staff from concentrating on student deficits, and attempting to change the student, to considering changes that could be made to their own practice and the environment to reduce stress and support the ASC student.

Getting to know students with ASC, taking on board information about them and the nature of ASC, making adaptations and building effective relationships all require dedicated time over a sustained period (Bevan-Brown et al., 2008). The whole school approach and a supportive environment were considered to afford this on an ongoing basis (Bevan-Brown et al., 2008).

It is unclear within the identified studies investigating whole school approaches, though, how these factors support the remediation of worries and anxiety for students with ASC.

### 2.7.4.12 Collaborative working.

The importance of a collaborative process, with support from school management, has been emphasised in supporting students with ASC in the mainstream school environment. A focus upon identifying the specific needs of the student, sharing information, and planning interventions across settings, has been reported to be essential (Bevan-Brown et al., 2008).

Understanding of the needs of students with ASC should be based upon good liaison and planning with health professionals to identify risks and needs in relation to anxiety (Jones et al., 2008). Espoused good practice has featured liaison with a range of professionals from different disciplines, such as social workers, counsellors, community nurses and particularly Child and Adolescent Mental Health Services (CAMHS). A collaborative approach has been
reported as being supportive for well-being and the prevention of anxiety in students with ASC (Charman et al., 2011).

However, within schools, collaboration has not necessarily been seen to be as positive; difficulties have been raised regarding knowledge and strategies for the students being passed from SENCos and senior managers to class teachers (Humphrey & Symes, 2011). Examples of breakdowns in communication have been noted within some schools. In one school, failure of the teachers and management to read and disseminate information was perceived to result in students being excluded due to lack of understanding of the presentation of their autistic responses to anxiety (Humphrey & Lewis, 2008b). The impact of this upon students’ anxiety is not clear, but it could be argued that the links between lack of teacher knowledge and understanding of student anxiety and the processes in which such information is shared by senior staff are intrinsically linked.

2.7.4.13 Parent-school collaboration.

Good quality and regular communication between school practitioners and parents impacts upon the support provided to students at school. For instance, schools deemed by parents to be successful in supporting the students had robust policies and procedures in place for communication with parents and dedicated time to listening to concerns and talking to parents; parents reported that they had a good rapport with practitioners (Connor, 2000; Tobias, 2009). This liaison is considered to be important so that events concerning or preoccupying students at home, which may potentially lead to anxiety or stress, are raised at school for staff to address, and vice versa (Connor, 2000; Tobias, 2009).

2.7.4.14 Medical intervention.

A review of educational provision for children with autism has recommended that students who become highly anxious may require medical treatment and intervention (Jones et al., 2008). Recommendations include that schools should refer students to CAMHS at an appropriate juncture; before the presentation of the anxiety and before the student’s functioning becomes seriously affected. Schools and health services should collaborate to identify contributing factors within the school environment, and support the implementation of strategies where appropriate (Jones et al., 2008).

It has been suggested that the use of psychotropic medication can support the reduction of anxiety in students with ASC (e.g. White, Oswald, et al., 2009); but also that such medication can have adverse effects upon children such as slower thinking and cognitive skills (Attwood, 2004). Evaluation of the use of medication in students with ASC is outside the scope of this thesis and so the literature regarding this has not been explored further.
2.7.5 Access to anxiety support for students with Autism Spectrum Conditions.

A recent report highlighted the lack of access to CAMHS for children with ASC across England. This found that 44% of parents perceived it to be difficult to get a first referral to CAMHS for their child with ASC (Madders, 2010). One quarter waited over four months for a first appointment, whilst some were turned away altogether because no suitable service existed for them in their area. Only 10% of CAMHS teams reported that they provided targeted support for children with ASC. This is supported by anecdotal reports within the LA in which the author of this thesis works, which suggest that students with ASC and anxiety can struggle to access support from CAMHS.

A large scale survey of children’s mental health found that 89% of parents of children with ASC, compared to 27% of parents of children without ASC, had sought guidance regarding the child’s mental health needs within the last year. The professionals who had been accessed most for support and advice by parents of children with ASC were teachers (69%), specialist educational services (51%) and mental health specialists (43%) (Green et al., 2005).

The CAMHS tiered model (NHS Health Advisory Service, 1995) was developed to include four tiers of service delivery. This included the following: tier 1, primary care services; tier 2, interventions by individual specialist professionals (e.g. community paediatricians, EPs, and specialist teachers); tier 3, interventions provided by teams of specialist staff to children experiencing severe, complex and persistent mental health conditions; and tier 4, very specialist interventions and care.

It is envisaged that identification of need and examples of good practice from the research within this thesis could enable the early support of students with ASC who present with signs of anxiety prior to tier 2, by promoting the use of appropriate approaches within the school setting.

The National Strategies’ ‘waves of intervention’ model highlighted the importance of targeted and universal interventions and support for pupils related to ‘Social and Emotional Aspects of Learning’ (SEAL) (Department for Education and Skills, 2007). The ‘waves of support’ are consistent with the graduated approach to meeting children’s needs previously set out in the SENCoP (Department for Education and Skills, 2001). EPs are well placed to aid the development of support for students in relation to this at the School Action Plus level (Department for Education and Skills, 2001). However, this system is due to change circa 2014, with the advent of new SEN legislation based upon the draft SEN and disability green paper ‘Support and Aspiration’ (Department for Education, 2011a) and the implications of this for students with ASC are not yet known.
2.7.6 The role of the Educational Psychologist.

In their review of ASC and anxiety in children, White, Oswald, et al., (2009) advocated for school consultation and instruction from external practitioners in order that recommendations for adaptations to the school environment and social support can be provided.

Waite and Woods (1999) determined that EPs occupied a unique position to identify appropriate practices and provision for students with ASC. Greenway (2000) also reported a view that EPs are in a good position to implement research, support initiatives, and work in a multi-professional way for the benefit of students with ASC within educational settings.

The growing number of students with ASC within schools means that EPs are increasingly required to support schools in facilitating effective supports and interventions (Ali & Frederickson, 2006). It is considered that EPs play an important role in the education of children and young people with ASC. Providing direct support and therapeutic intervention, giving effective advice, supporting teachers and parents to successfully improve the students’ educational experience, and facilitating access to a variety of effective interventions are all seen as part of the role (Greig & MacKay, 2005).

A report of the Targeted Mental Health in Schools programme (TaMHS) highlighted the role of the EP within the provision of specialist support for students with emotional needs (Department for Education, 2011b). The report suggested that EPs are an important contact for schools, and can act as a link between schools and CAMHS in enabling effective multi-disciplinary support for students with mental health needs. The report stated that, “Educational psychologists may be a key group to work with in relation to mental health provision in schools and their potential role in aiding links between schools and specialist CAMHS could be important.” (Department for Education, 2011, p.55). Schools have expressed a desire for further support from EPs, outside of statutory processes, to support planning for learning and behaviour (Charman et al., 2011).

Current guidance for psychologists working with children and young people with ASC (The British Psychological Society, 2006) recommends that psychologists should be included within multi-disciplinary teams and have a role in the assessment of mental health issues, protective factors, and environmental conditions for learning, amongst other areas. The guidance advises that psychologists are in a position to take account of the views of children and young people, carry out research, translate theory into practice, facilitate processes to enable practitioners to change their working practices, offer training relevant to local need and provide supervision to practitioners directly involved with the children with ASC (The British Psychological Society, 2006). The same publication recommends that psychologists should have a role in considering the questions arising from ASC-related research and service development initiatives, as well as utilising this knowledge in exploring ‘what works for whom’ (The British Psychological Society, 2006, p.4).
The notion of the modern ‘Scientist-Practitioner’ (Lane & Corrie, 2006) is considered to be important to the role of the EP in reflecting upon and constructing real world problems to which existing psychological evidence-bases can be applied. They are in a position to hypothesis-test and inform problem explanations where no specific set of universally accepted research findings can be applied, thus utilising the ‘what works’ approach. This is where knowledge of reliable support and interventions for specific individual problems is considered through a complementary research-based approach to practice, and a practice-based approach to research (Miller & Frederickson, 2006).

It could therefore be argued that EPs are in an ideal position to explore the needs of this group of students and to guide educational practitioners in identifying effective practice to aid the development of support and intervention for students with ASC and signs of anxiety in the educational context.

**2.7.7 Summary of the literature review.**

The findings of the literature search highlighted two main issues: the first that the majority of published work focused upon clinical interventions or supports. Secondly, the majority of articles focused upon quantitative methods of data collection and did not actively seek the views of participants outside of the use of standardised measures.

Signs of anxiety in children with ASC are reported to be higher than the general population (Muris, Steerneman, et al., 1998; Ozsivadjian et al., 2012) and are said to be particularly prevalent in those with AS/HFA, especially during adolescence (Attwood, 2004; Gillott et al., 2001; Reaven, 2011), the time when children attend secondary school (Humphrey & Lewis, 2008a). It is suggested that mainstream schools have difficulty in meeting the needs of such students effectively, due to a lack of evidence based research in the area and the effective transfer of this into practice (Humphrey & Lewis, 2008a).

Children with ASC exhibit physical and behavioural characteristics by nature, so it can be difficult to determine whether these are related to the ASC itself or to anxiety (Reaven, 2009; White, Oswald, et al., 2009). Signs of anxiety can present differently in children with ASC, especially through specific sensory, emotional and processing differences which add to the complexity of recognising these needs (Muris, Steerneman, et al., 1998; Tantam, 2000; White, Oswald, et al., 2009). The children themselves may also struggle to recognise and self report their feelings appropriately (Reaven, 2009; Smith Myles, 2003; White, Oswald, et al., 2009). The methods used to explore this, though, have been limited, with standardised measures that are not necessarily relevant to children with ASC often being relied upon (Ozsivadjian et al., 2012). Studies have tended to rely heavily upon the reports of parents, who, it has been suggested, may be more reliable yet over-report their child’s needs, and
often have different views to those of the child (Brown et al., 2010; Mazefsky et al., 2011; Russell & Sofronoff, 2005).

Other studies have considered the views of teachers and students (Humphrey & Lewis, 2008a; Morewood et al., 2011), but not specifically in relation to anxiety. It has been suggested that reports from multiple respondents would be pertinent within this area (MacNeil et al., 2009).

A variety of manifestations of anxiety and difficulties associated with this can be shown in children with ASC. These include increased difficulty with social interaction and peer relationships, unhelpful rumination of thoughts, somatic complaints, sleeping and eating problems, difficulty with attention and concentration, increased repetitive behaviours, sensory behaviours, self injury, and/or disruptive, ‘aggressive’, attention seeking or oppositional behaviour (Carrington & Graham, 2001; Greig & MacKay, 2005; Reaven et al., 2011; Rotheram-Fuller & MacMullen, 2011; Sofronoff et al., 2005; Tobias, 2009; White, Oswald, et al., 2009; Wilkerson & Wilkerson, 2004).

This may result in needs, such as lowered self esteem, difficulties in family functioning, effects upon academic performance at school, increased withdrawal, impact upon relationships with teachers, and school exclusion (Greig & MacKay, 2005; Humphrey & Lewis, 2008a; Oszivadjian et al., 2012; Reaven, 2009; Rotheram-Fuller & MacMullen, 2011; White, Oswald, et al., 2009; Wilkerson & Wilkerson, 2004; World Health Organization, 1992).

Many potential contributing factors are suggested for heightened anxiety in children with ASC, particularly the social, communication, cognitive and sensory perceptual differences characteristic of these children. Environment, changing routines, academic and social expectations, increased self awareness, and the physical, emotional and social changes that adolescence brings, are all said to contribute to the development of anxiety in children with ASC (Carrington & Graham, 2001; Connor, 2000; Oszivadjian et al., 2012; White, Oswald, et al., 2009). Social problem solving and understanding, and social and emotional vulnerability (Bellini, 2006; Humphrey & Lewis, 2008a), can also contribute to this.

A wide range of possible approaches and factors has been suggested in relation to supporting students with ASC within mainstream secondary education, but many of these have not been specifically considered in relation to anxiety. Factors that have been explored include: adapted environments (Bevan-Brown et al., 2008; Tobias, 2009); considering sensory sensitivities (Connor, 2000; Jones et al., 2012); carefully planned transitions (Tobias, 2009), targeted social skills support (Bevan-Brown et al., 2008; Wilkerson & Wilkerson, 2004); peer support and peer awareness raising (Connor, 2000; Humphrey & Symes, 2010a); stress management techniques (Carrington & Graham, 2001; Connor, 2000); increased pastoral support (Browning et al., 2009; Tobias, 2009); improved understanding within staff and better training to facilitate this (Connor, 2000; Jones et al.,
positive whole school ethos and approach (Humphrey & Lewis, 2008b; Tobias, 2009); and improved collaboration within school and with parents (Bevan-Brown et al., 2008; Humphrey & Symes, 2011; Tobias, 2009).

Studies which have considered intervention for children with ASC and symptoms of anxiety, are typically from a clinical perspective (Attwood, 2004; Blakeley-Smith et al., 2012; Sofronoff et al., 2005; White, Ollendick, et al., 2009). In the UK, these interventions are usually carried out by specialist professionals (e.g. Clinical or sometimes EPs) at tier 2 of the CAMHS tiered model (NHS Health Advisory Service, 1995). There is a lack of non-pharmacological evidence-based accounts regarding the support of children with ASC and anxiety in schools, despite the impact upon the child within the educational environment being illustrated (Rotheram-Fuller & MacMullen, 2011).

Quantitative methodologies with standardised measures may have limited the research to date, and a more fine-grained approach which provides triangulated data would provide more relevant knowledge along with further exploration of the specific triggers, manifestations and impact of anxiety upon children with ASC, using a variety of approaches. It is suggested that, “how children with ASD and their families experience, think and talk about anxiety, could inform the development and implementation of autism-specific interventions for anxiety for this population.” (Ozsivadjian et al., 2012, p.109).

Exploring perceived need, rather than solely outcomes of interventions, can allow process factors to be examined, and also enables policy-makers and service-providers to consider relevant resources and provisions that are responsive to need (Brown et al., 2010).

Very few articles were found to focus specifically upon anxiety within the educational environment for children with ASC, especially HFA/AS. One of these focused upon CBT (Rotheram-Fuller & MacMullen, 2011), one upon the views of students within comprehensive schools (Connor, 2000), one upon stress in students with ASC due to leave school, and one participatory action research study regarding support of students with ASC and signs of anxiety within a mainstream secondary school (Bevan-Brown et al., 2008). Those that did had methodological limitations and presented challenges as to why they did not fit with the specific remit of the literature review, as described in section 2.7. A further qualitative study by Ozsivadjian et al. (2012) gained the views of students and parents regarding anxiety using focus groups, but was not focused upon these needs within school and did not gain the views of school practitioners. Furthermore it did not explore what supports and approaches were perceived to be of value to the students.

To date, few studies have actually examined the perceptions of students with ASC of their needs in relation to anxiety and what they feel works to support them. The focus of research into anxiety has been upon treatment rather than preventative strategies; those which are implemented before clinical onset of a condition to prevent it becoming so are required
Additionally, it has been found that programmes and interventions carried out in clinical settings are not necessarily generalised by children with ASC to other settings such as school (Wood et al., 2009). Exploring and implementing coping strategies within school has been raised as an area for further research, particularly for students in adolescence (Browning et al., 2009).

Many of the anxieties of children with ASC have been found to be linked to school (Ozsivadjian & Knott, 2011). However, limited literature was found researching what school practitioners (such as Learning Mentors, SENCos, TAs, Teachers etc), could practically implement to support students with ASC and signs of anxiety within schools.

Research evidence currently exists regarding anxious children with ASC (e.g. Gillott et al., 2001; Lang, Mahoney, El Zein, Delaune, & Amidon, 2011; Ozsivadjian & Knott, 2011; Reaven, 2009; Russell & Sofronoff, 2005; White, Oswald, et al., 2009; Wood & Gadow, 2010); however, there is a dearth of research regarding practical support within an educational setting that can be implemented by schools on a needs basis.

There is a need to explore what is taking place in practice (Tobias, 2009), and it seems therefore, that there is a gap in the literature regarding interventions in this area carried out by educational practitioners. There is a need to focus upon adding to the quality of the existing research with a richer picture of the needs of, and support for, students with ASC in mainstream secondary schools, specific to anxiety, from multiple informant perspectives.

### 2.8 Research Aims and Expected Contribution to Knowledge

The author has identified a gap in the literature and proposes to research the needs and difficulties of students with ASC displaying signs of anxiety within the mainstream secondary school setting and explore perceived effective practice in supporting such students therein.

The overall aim of research will be to extend knowledge of how to effectively support students with ASC who show signs of anxiety within the mainstream secondary school setting.

The research will aim to contribute knowledge as follows:

- Identifying the specific needs and difficulties of students with ASC and signs of anxiety within mainstream secondary schools, and;
- Exploring what is perceived to be effective in supporting students with ASC and signs of anxiety within the naturalistic school setting.
An additional aim will be to elicit preliminary theory that can contribute toward analytic generalisation, but not statistical generalisation, which could potentially be tested in further research using replication logic (Yin, 2009).

The study will not seek to produce generalisations regarding this population of students with ASC in other mainstream schools and other LAs, but simply to describe a situation in a local context and provide a rich picture of the experiences of those involved. The phenomenon under investigation (the experiences of students with ASC and anxiety) is being examined in order to inform local practice. The relevance of the students’ specific circumstances and contexts on influencing their constructs will be recognised within the critical realist approach adopted by the researcher.

Although results may not be generalised more widely to other schools and young people at this stage, the study intends to provide some understanding of the experiences and support needs of these particular students, and how schools can promote management of their anxiety and enable inhibition of further anxiety. Given the limited previous research specific to this area, the study will attempt to provide theory for future research in the area to consider further. The study will also explore practice within mainstream secondary schools that is perceived to be successful in the participants’ eyes for promoting the well-being of the students with ASC and anxiety. It is hoped that the research will extend knowledge of ASC and anxiety within the mainstream secondary school setting, and that identified good practice can be shared.

Furthermore, how EPs can support the transfer of research into professional practice with those working in educational contexts through a ‘scientist practitioner’ stance will be considered in relation to the findings.

### 2.9 Research Questions

The following research questions are proposed (Figure 2.2):

---

**Research Question 1**

- What are the perceived difficulties and needs of students with ASC who show signs of anxiety in the mainstream secondary school setting?

**Research Question 2**

- What is perceived to be effective practice in supporting students with ASC who show signs of anxiety in the mainstream secondary school setting?

---

*Figure 2.2: Research Questions*
3 Methodology

3.1 Chapter Introduction

This chapter begins by presenting the rationale for the study followed by the research questions that the study explores. Philosophical approaches underpinning the methodological decisions will then be introduced, specifically exploring the author’s epistemological, ontological and axiological positions and considering the role of the researcher. The research design will then be reported, critically reviewing the multiple case study method, participant recruitment and selection. Data collection and analysis will be discussed considering the advantages and disadvantages of the chosen techniques, followed by an exploration of factors affecting reliability and validity. Finally, ethical considerations will be discussed before presenting details of the researcher’s time-line, time-budget and risk analysis.

3.2 Rationale

The study described in this thesis was developed due to the author’s prior interest and experience, and a presentation of need in their role as a TEP within a North West of England LA. A lack of evidence-based literature that specifically addressed the subjectively-reported needs of students with AS/HFA, included within mainstream secondary schools, who exhibit signs of anxiety emphasised the need for further exploration of this topic.

Research question one considers:

What are the perceived difficulties and needs of students with ASC who show signs of anxiety in the mainstream secondary school setting?

And research question two considers:

What is perceived to be effective practice in supporting students with ASC who show signs of anxiety in the mainstream secondary school setting?

3.3 Ontological and Epistemological Position

There is no uniform way of conceptualising and carrying out qualitative research, due to the dynamic nature of the participants, researchers and social contexts being explored. However, specific approaches may be based upon certain philosophical beliefs regarding what can be known and how psychological knowledge can be produced (Lyons, 2007). The methodology used within psychological research is influenced by the epistemological stance (Langdridge & Hagger-Johnson, 2009). Epistemology is philosophically concerned with the questions that are asked about knowledge of phenomena, and the range and validity of such
knowledge of the world (Langdridge & Hagger-Johnson, 2009). It involves how knowledge of the world is acquired and constructed (Coolican, 2009) and affects what a researcher considers to be ‘good, defensible, reasonable knowledge’ (Sullivan, 2010, p.18). Recognising this enables researchers to make clear their views regarding values, reality, power and political beliefs, and reflect upon the possible implications of these (Burman & Whelan, 2011).

The methodological position is also influenced by ontology: the philosophical conceptual system concerned with the organisation and nature of reality that underlies a knowledge base, and defines and catalogues what exists (Guarino & Giaretta, 1995; Sullivan, 2010). Features that are common to humankind (Guarino & Giaretta, 1995) are contemplated, and the existence of phenomena in the world are questioned (Sullivan, 2010). Within the research described in this thesis a subjectivist approach has been taken, whereby the knowledge gained is the reality for students with ASC and anxiety, their parents, and practitioners within the mainstream secondary school setting.

### 3.3.1 Positivism, Relativism and Social Constructionism.

Traditionally, positivism, based upon the collection of quantitative data to test hypotheses and determine relationships between events and variables, was the primary approach within psychology. However, positivist approaches are criticised as they do not account for the perspectives and individual attributes of the participants and the researcher. Striving for objectivity does not permit researchers to engage fully in the research, and they do not consider the influence of their own attitudes, motives and involvement (Coolican, 2009; Robson, 2002). Additionally, participants are treated as equal units of analysis and detached from their social contexts (Coolican, 2009; Robson, 2002). It is suggested that this allows for gathering of only superficial, simplistic data that does not gain a broad knowledge of human experience. It is also argued that such restricted approaches should not be used to establish generalised laws regarding behaviour (Coolican, 2009). As the author of this thesis acknowledges the uniqueness of all participants and the importance of the school context within the current research, it was felt that this approach would be in contrast to the researcher's beliefs.

The dominance of positivism has begun to wane in recent years with the development of qualitative approaches (Langdridge & Hagger-Johnson, 2009; Sullivan, 2010). Relativists, for example, typically utilise qualitative methods to develop working hypotheses rather than focusing upon the establishment of facts (Robson, 2002); they assume a subjectivist view that knowledge is unique to individuals and is influenced by their social constructions. Relativists assert that there are many possible realities depending upon the view and social constructions of the individual participant (Coolican, 2009), depending upon experience in context in the construction of individual representations of the world (Robson, 2002).
Alternatively, constructionist approaches to qualitative research reflect upon the many possible social constructions of meaning and knowledge with which participants construct their reality (Robson, 2002). The constructionist assumption is that these realities are uniquely constructed for each individual, dependent upon social and historical factors, cannot just be measured, and require to be understood within context (Langridge & Hagger-Johnson, 2009). However, it is argued that the focus on personal constructs of the self are so context-specific that this limits the usefulness of findings to a wider demographic (Coolican, 2009).

### 3.3.2 Realism.

Realism holds an epistemological position between positivism and relativism, which incorporates both subjectivist and objectivist approaches. Participants’ beliefs and constructs of the world are explored, as influenced by personal and societal mechanisms (Sayer, 2000). This approach is viewed as being particularly relevant for practice-based research and for professions which place considerable emphasis upon values, and it can involve key elements of emancipatory methods such as actively seeking participants’ perspectives (Robson, 2002). Realists assert that one reality can exist in relation to human experience, which can be discovered and agreed upon through utilisation of suitable research methods (Coolican, 2009; Crossley, 2007). From this perspective, the research described in this thesis sought to understand the current reality of the students, and for the parents and school practitioners involved in their experience, by attempting to discover an agreed reality through careful use of triangulated research methods.

#### 3.3.2.1 Critical Realism.

Realism has more recently evolved into various factions, of which critical realism is one, and is becoming more widely used in social research. Critical realism involves taking a critical view of the social practices being researched to identify the reality of a situation and the processes therein, in order to effect change (Robson, 2002).

With this approach, questions derived from theory are used to guide the design and implementation of the research. The mechanisms which inhibit or facilitate processes within specific real world situations may have been well considered by the researcher prior to carrying out the research. The research questions are used to explore whether such relationships exist in reality, and through the process, new theories regarding apparent relationships may be developed (Robson, 2002). Within this thesis the literature regarding the needs and difficulties of the students has been considered and has guided the research propositions (see section 3.5.2.2, below). A valid search for knowledge has been at the core of the research, as opposed to starting with an a priori view of the area as perhaps positivist research might.
Critical realism does not attempt to provide a totally comprehensive understanding of specific phenomena or establish a causal link, but to conceptualise the reality of a given situation in a given context and time, incorporating the perspectives of the participants (Danermark, Ekstrom, Jakobsen, & Karlsson, 2002; Robson, 2002). The approach fits with the researcher's beliefs that the perspectives of participants should be considered as a priority within real world research, but that various external factors can impact upon these. This led to the researcher exploring the perspectives of participants regarding their experiences, through qualitative approaches such as semi-structured interviews and thematic analysis, rather than, perhaps, using discourse analysis as a social constructionist might.

Critical realism theory allows for research of specific phenomena to be subject to change, and thus to be fallible, but its aim is to consider the ‘hows’ and ‘whys’ of the relationships between experiences, actions and systems (Danermark et al., 2002). In essence realists are said to be asking, ‘what works best, for whom, and under what circumstances?’ (Robson, 2002). This position is consistent with the aims of the research described in this thesis.

A critical realist position was adopted to enable a methodological approach that examines the fit between theoretical knowledge, the fieldwork research, and analysis of the empirical findings in the given area. As such, the present research aims to explore not a definitive reality of what constitutes positive support for students with ASC and anxiety, but to propose what mechanisms may facilitate their progress based upon how this is perceived by those involved, dependent upon their social constructs and experiences.

The methodology does not aim to assert full control over all possible external factors influencing the participants and contexts. Therefore outcomes of the research can only be viewed as probabilities or tendencies rather than generalisable facts, as might be claimed if a positivist approach to controlling all variables to establish cause and effect perhaps would. Alternatively, the research within this thesis aims to seek evidence for the existence of constructs and the circumstances by which positive outcomes are gained rather than cause and effect relationships. However, it is also acknowledged that the present researcher’s own beliefs, experiences and interactions may influence their understanding of the social world and of reality. As such, an absolute truth cannot be established from this research.

3.4 Axiology

Axiology is the application of a branch of philosophy regarding inquiry into values, which contributes to other branches of science and philosophy, including epistemology (Bahm, 1993). Values have considerable practical implications for modern psychology, and the study of the phenomena of values is critical to this field (Pomeroy, 2005). Values result in the evolution of beliefs and human characteristics and are therefore central to the applied psychology (Pomeroy, 2005).
Values hold an important position in conducting, analysing and interpreting real world research, and thus the research process is unavoidably affected by the values of researchers (Robson, 2002). For instance, the choice of subject matter, research project, research questions, and subsequent recommendations all include value judgements (Robson, 2002). Research and researchers are unable to be value free within a socially constructed world and will assume their own values in carrying out research which should be clearly specified within the research process and reporting (Banister, 2011). Although it will not minimise their potential impact, researchers’ values should be clearly acknowledged (Banister, 2011). As a researcher's knowledge and values will influence the conduct of interviews, it is important for a researcher to be aware of and, where appropriate, to disclose their values, knowledge and beliefs to participants (Runswick-Cole, 2011). With respect to the research described in this thesis, the author has extensive experience of working with children, and in particular, children with ASC, their families and educational practitioners. It is acknowledged that this prior involvement will have influenced the author’s beliefs. Figure 3.1 (over) provides a summary of the author’s beliefs and values which may be relevant to the methodology outlined in this chapter.

Points 1 and 4 relate to the author’s belief that exploration of ‘what works?’ should involve the views of the students themselves and those closest to them. Many previous studies in this area have explored parental views or students’ views only, through use of standardised measures and rating scales. This does not provide sufficient quality detail regarding the views of the students, who are essentially the most important people in the research process, nor allow for their voices to be fully heard. Therefore the author of this has undertaken to ensure that the views of students with ASC are able to be expressed and heard, in line with article 12 of the United Nations Convention on the Rights of the Child (The United Nations, 1989).

Points 2, 3 and 5 relate to the author’s belief in early intervention for students with ASC and signs of anxiety, and belief that supporting the needs of these students can be addressed within the naturalistic environment. In the qualitative methodology presented in this thesis, these beliefs have influenced the exploration of perspectives regarding presentation of anxiety and how signs of this condition can be identified within the naturalistic context of school. Additionally, the author’s beliefs have prompted an exploration of the interventions which are perceived to work within this environment. Had the author of this thesis not held this view, a focus upon diagnostic criteria to evaluate participants’ anxiety pre and post clinical intervention may have been taken.

In relation to points 3 and 6, the belief of the author is that school practitioners should be empowered to support students with ASC with these needs within the naturalistic setting, and it is hoped that seeking their perspectives within the research will encourage them and other practitioners to take note of the outcomes and to utilise these within their practice.
Researchers holding alternate views may have considered evaluating the impact of interventions by practitioners outside the school environment, such as that provided by CAMHS within the clinical setting.

Points 7, 8 and 9, regarding the EP role in exploring the views of students, parents and practitioners and supporting research into practice, are considered in this thesis. A case study approach in a real world context, the author's direct role in the data collection and face-to-face interviews are described in the methodology. These beliefs also influence the aims and epistemology of the research in considering how practice-based research can be used to further inform understanding and knowledge of practitioners and families. Alternate beliefs may have led the author to evaluate and report outcomes from an intervention chosen through reference to quantitative research, rather than to consider what those involved perceive to work for them through evidence from their experiences and realities.

<table>
<thead>
<tr>
<th>Researcher Beliefs and Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. That gaining the perspectives of students is essential to fully understanding their needs, and that their views and ideas should be heard, valued and represented in a way that considers their individuality;</td>
</tr>
<tr>
<td>2. That effective, proactive support and intervention provided early, when signs of anxiety are identified, can assist students with ASC in managing their anxiety effectively and in limiting potential negative and ongoing effects of this;</td>
</tr>
<tr>
<td>3. That educational, therapeutic, environmental and social supports should be considered for students with ASC and signs of anxiety as an alternative to long term pharmacological intervention;</td>
</tr>
<tr>
<td>4. That supporting individuals with ASC should not be about changing them and the nature of their autism to fit the world around them, but that thinking, approaches and environments should be changed to accommodate their alternative functioning;</td>
</tr>
<tr>
<td>5. That mental health needs, such as anxiety, can be managed outside of the clinical setting, and that interventions may be most effective within the naturalistic setting;</td>
</tr>
<tr>
<td>6. That practitioners working within schools and educational settings are well placed to provide support to students with ASC and anxiety;</td>
</tr>
<tr>
<td>7. That EPs are well placed to gain the views of students, especially those with special educational needs, and to support schools and parents in both understanding and acting upon these;</td>
</tr>
<tr>
<td>8. That EPs are in an ideal position to share knowledge with, and support the professional development and skills of, school practitioners regarding the support of students with ASC and anxiety within schools;</td>
</tr>
<tr>
<td>9. That real world research can be beneficial to the development of evidence-based practice.</td>
</tr>
</tbody>
</table>

Figure 3.1: Researcher Beliefs and Values
3.5 Design

3.5.1 Qualitative approach.

For the purposes of this research, a qualitative approach has been taken to explore the research questions outlined in section 3.2, above.

As previously discussed, the extent of a researcher’s positivist or relativist thinking can influence their use of certain design and methodological elements. Similarly objectivist versus subjectivist approaches, and use of quantitative versus qualitative methods, are also typically influenced by such thinking. Quantitative research, which is linked to positivist paradigms, focuses upon testing hypothesis through gaining numerical data whereas qualitative data, linked to relativist paradigms, focuses upon the analysis and quality of non-numerical data gathered (Coyle, 2007).

Research considering pre- and post-intervention measures may have provided inferential statistics which may have been considered more generalisable to the wider population. However, a qualitative case study design is most appropriate when in-depth descriptors of human behaviour and circumstances in context are the primary phenomena being studied (Yin, 2009).

A qualitative approach fits more readily with the axiological position of the author. Qualitative research is involved with determining the qualities, not quantification, of phenomena and exploring processes as opposed to predicting outcomes. The descriptions of phenomena and experiences of participants are prioritised rather than measuring behaviour and seeking causal relationships. The research focus is to explore the needs and perspectives of participants in their naturalistic setting, in order to gain a rich picture of them within context. The control of extraneous variables is not considered as necessary as it is for quantitative research (Langridge & Hagger-Johnson, 2009).

Qualitative methods emphasise the importance of gaining the unique individual perspectives of participants and of the researcher’s own influence and perspectives upon the relationship with participants and the final interpretation of the data. Emphasis lies upon the meanings constructed from the data and the social context within which the research takes place (Coolican, 2009).

3.5.2 Case study design.

A qualitative design has been utilised to explore the research described within this thesis, taking the form of a multiple case study analysis, which is deemed to be an effective means for research in a real-life context (Yin, 2009). This will allow consideration of specific
contextual, environmental and organisational factors and the uniqueness of the identified participants, allowing active collaboration with them throughout the process.

A case study is defined by Yin (2009, p.18) as, “an empirical enquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident”. In comparison, experimental designs focus upon specific variables of phenomena outside of the real world context, and surveys consider phenomena in context but are limited with the amount of variables that can be explored (Yin, 2009).

Case study research is deemed to offer a means of providing a detailed descriptive picture of the experiences of participants within context (Cohen, Manion, & Morrison, 2007). It allows for the researcher to explore the individual’s distinctive representations of the interactions between phenomena and their context and provides an illustration of the dynamics therein (Cohen et al., 2007; Yin, 2009). Case study methodology typically focuses upon interviews and observation of real life occurrences over which a researcher has limited control. Case studies are able to provide more detail and depth of data than other approaches and allow the researcher to explore the relationships between real life phenomena (Yin, 2009).

Five elements of research methodology, particularly pertinent to case study design are: the research questions; the propositions, if any; the units of analysis; the linking of data and propositions; and the criteria used for interpretation of the findings (Yin, 2009). These will be discussed in the forthcoming sections 3.5.2.2, 3.5.2.3, and 3.7.

3.5.2.1 Theoretical framework.

Yin argues that a multiple case study design should begin with a rich theoretical framework which specifies when phenomena might occur and when they are unlikely to occur. The theoretical framework is generalised across cases, but can be modified and developed further if cases do not show what was predicted (Yin, 2009). However, Yin also states that for research areas where there is a poor existing knowledge base this may not be possible, but that what is being explored, the purpose of the exploration and how the exploration will be deemed successful should be stated (Yin, 2009). Table 3.2 (over) presents a statement of theoretical framework factors for the research described within this thesis, based upon Yin (2009).
Table 3.1: Statement of Theoretical Framework Factors

<table>
<thead>
<tr>
<th>Nature of Exploration</th>
</tr>
</thead>
<tbody>
<tr>
<td>To explore the perceived difficulties and needs of students with ASC who show signs of anxiety in the mainstream secondary school setting and identify what is perceived to be effective practice in supporting them.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Purpose of Exploration</th>
</tr>
</thead>
<tbody>
<tr>
<td>To develop a proposed evidence base for what support can be effective in schools in supporting students with ASC and signs of anxiety</td>
</tr>
<tr>
<td>To extend knowledge of how to effectively support students with ASC who show signs of anxiety within the mainstream secondary school setting, and of how provision can be further developed to best meet this need</td>
</tr>
<tr>
<td>To gain information which can subsequently help to inform and develop practice to support the needs of students with ASC and anxiety in mainstream secondary schools</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Success Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>That information is gained regarding perceptions of ‘what works?’ which shows some reflection of the research propositions</td>
</tr>
<tr>
<td>That new information regarding perceptions of ‘what works?’ is gained which can be shown across participants, cases or sources</td>
</tr>
<tr>
<td>That stated actions to increase reliability and validity are met within this process</td>
</tr>
</tbody>
</table>

### 3.5.2.2 Theoretical propositions and rival explanations.

Theoretical propositions are abstract statements that state relationships about the phenomena being researched. They are based upon the relevant literature and developed from the theoretical framework for a study (Cozby, 2009; Udo-Akang, 2012; Yin, 2009).

Theoretical propositions guide the factors that should be investigated within the research and help to indicate where to gain the relevant evidence and analytic strategies. They aid the organisation of the whole case study and support the identification of relevant information to be collected about the case. This can help a researcher to keep within feasible limits and narrow the focus of the data, preventing them from being inclined to collect vast amounts of data and report all that was said or seen. However, exploratory studies may have a legitimate reason for not having propositions, but instead should state a clear purpose and how the exploration will be considered to be successful (Yin, 2009).

The propositions in this study relate to the experiences of students with ASC and anxiety within mainstream secondary school, and factors that are perceived to support them. The full details of the propositions are shown in Appendix D.

Case study approaches should also involve the consideration of rival explanations as well as propositions (Yin, 2009). Rival explanations are the other possible influences or explanations that may account for relationships within the data. Exploring this allows greater confidence in, and transparency of, results. However, as the research was an exploratory
design, rather than being explanatory (looking for causal relationships), the rival explanations within the interviews conducted for this study were kept to a minimum to allow manageability of data; however questions allowing the rival explanations to be explored were incorporated within the interviews (Yin, 2009) and the author was vigilant for the possibility of rival explanations within data analysis. The rival explanations are presented in Appendix E.

3.5.2.3 Multiple case study design.

There are a variety of definitions and classifications within case study research (Stake, 2003), whereby a case study can comprise a single case study or multiple case studies, and can be described as exploratory, explanatory or descriptive (Yin, 2009). Exploratory case studies focus upon testing hypotheses derived from theory and defining further hypotheses for future research. They can also be used to explore the utility of the research process and procedures. Explanatory case studies are utilised to describe cause and effect relationships, or to consider findings from existing research. Descriptive case studies allow for a rich illustration of phenomena within specific contexts (Yin, 2009). For the purpose of the research described in this thesis, a multiple case study design with an exploratory focus was chosen.

This particular case study design was considered to be appropriate as Yin (2009) recommends that the research questions should lead the methodological design that is utilised. It is suggested that ‘how?’ and ‘why?’ research questions link to explanatory design as they consider interrelated factors that require to be followed through time (Yin, 2009). ‘What?’ questions are either exploratory or asked in regard to prevalence. The latter questions are best investigated using surveys, yet the former can use any exploratory methods. However, exploratory ‘what?’ questions, which are described in the methodology of this thesis, have the aim of developing relevant hypotheses and propositions for further enquiry which fit well with case study methodology (Yin, 2009).

A single case experimental design, which is being increasingly utilised within educational and psychological research (Cohen et al., 2007), could have been used. Single case designs, not to be confused with single case studies, do not automatically have only one participant (Langridge & Hagger-Johnson, 2009) and consist of a baseline condition (e.g. the behaviour being studied) and a ‘treatment condition’ (e.g. the intervention being employed) (Langridge & Hagger-Johnson, 2009). Measures of the same participant or participants, typically before, during and after an intervention (Barlow, Hayes, & Nelson, 1984), are repeated to identify whether the intervention has impacted upon the behaviour or baseline condition (Langridge & Hagger-Johnson, 2009).

Such a methodology is flexible, considered to have particular value for real world research (Robson, 2002), and has particular utility in evaluating interventions for individual participants (Cohen et al., 2007). However, the method has been criticised for a lack of validity and
weakness of design (Robson, 2002), as natural changes over time (Langdridge & Hagger-Johnson, 2009), and history of the participants, may have impacted upon the baseline condition (Robson, 2002). In addition, A-B-A designs, where the intervention is then removed to observe whether it is the factor which has effected change, can be considered unethical due to the withdrawal of a potentially effective intervention (Robson, 2002). Multiple baseline single case designs can address these difficulties through the intervention being carried out with baseline conditions, settings and participants, and at different times (Robson, 2002).

However, Yin (2009) suggests that single case designs should be employed where an existing well-formulated theory is being tested. The study described in this thesis did not meet this criterion, as well-formulated theories pertaining to interventions in the school setting were not prevalent, thus strengthening the argument for use of a case study design.

Use of a multiple case study design is thought to provide more compelling and robust information than single case study designs, and allows more possibility for analytic generalisability of findings (Yin, 2009). Single case study designs are most appropriate to cases that are extreme or unique, are longitudinal and/or are typically representative (Yin, 2009), and the research did conform to this.

A ‘case’ is not necessarily one participant, or entity, as might be expected; for example, one ‘case’ could include situations, individuals, groups, organisations or partnerships (Robson, 2002; Yin, 2009). Each ‘case’ links to a ‘unit of analysis’ and should be specified clearly by the researcher. Determining what constitutes a case is led by the research questions, which should help to define the necessary elements of the units of analysis. Thomas (2011) suggests that a ‘case’ is a defined set of circumstances.

Within this thesis, the cases were defined as the anxiety episodes for students with ASC within the mainstream school setting. The units of analysis were: 1) key features and elements of the experience of the anxiety episode from the perspective of the participants, and 2) the participants’ perceptions of effective support during these anxiety episodes within school.

The research methodology used embedded multiple units of analysis as the data set, rather than holistic, with each embedded unit of analysis being part of the main unit of analysis (Yin, 2009). Embedded designs can be used to effectively compare and contrast different examples among the cases (Thomas, 2011). The embedded multiple case study design incorporating the units of analysis is illustrated in Figure 3.2:
3.5.2.4 Critique of the design.

Case study research has been criticised for its limitations, such as low generalisability and replicability, potential researcher bias, being open to selectiveness and subjectivity, and a lack of systematic organisation of data (Cohen et al., 2007; Robson, 2002; Willig, 2008; Yin, 2009). Case studies have been deemed to have high levels of unreliability due to a lack of external control over variables, as cases cannot be matched, and as they can be dependent upon participant memory which may be inaccurate. They are limited by a purported lack of generalisability outside of the immediate study and its very specific context. They are considered to be affected by researcher involvement, as will be discussed in section 3.8, and it is suggested that researchers could be selective in what is reported, which may potentially omit information that contradicts the theoretical propositions (Cohen et al., 2007; Coolican, 2009). Multiple case studies can be time consuming, and it can be problematic defining the boundaries of a case. They can also generate large amounts of data which can cause overload and difficulty in determining the most relevant details (Yin, 2009).
However, these limitations can be mitigated (as discussed in sections 3.8 and 3.9) and, within more relativist paradigms, many of these considerations are not given the same weight as positivist critics might give. Case study approaches are seen to provide certain strengths that may outweigh the argued weaknesses: they can be carried out by a single researcher; have the scope to access the complexity of social phenomena; can provide detailed in depth knowledge of cases; and allow the study of meaning in context (Cohen et al., 2007; Robson, 2002; Yin, 2009). Furthermore, multiple case studies allow for the collection of a greater breadth of data (Yin, 2009).

Richness of the data that can be accessed is seen as a primary strength of case study approaches, which can allow greater appreciation of a situation, cause changes in thought or increased empathy, and can improve psychological knowledge and understanding. Additionally, reliability is high due to the complexity and genuineness of the experiences being studied (Coolican, 2009). They are said to be able to produce findings which can allow quick and practical application of theory into practice, and are more accessible to those outside the research world within real world and practice based settings (Cohen et al., 2007).

Cohen et al., (2007) argue that case studies can allow for theoretical generalisation (Cohen et al., 2007), and Yin (2009) suggests that case studies are designed to generalise to theoretical propositions rather than the wider population. Analytic generalisation describes a process whereby researchers aim to generalise findings to theory, rather than to the whole population; this enables the further development of these theories. Additionally, Coolican (2009) asserts that reliability within case studies can be gained by comparing information from different sources, such as within embedded designs and multiple case studies (see section 3.8 for more on this).

The methodological design described in this chapter was arrived at following careful consideration of the participant group and their unique and specific needs (see section 3.6.1, 3.6.1.1 and 3.6.3.1), alongside reference to relevant literature. The strengths of exploratory case study research were thought to support the epistemological and axiological position of the author and the study aims (sections 2.8 and 3.3), for instance the importance of examining phenomena in real life situations, the potential practical application of theoretical findings to further research, and consideration of application to practice.

Use of an embedded multiple case study approach enables perceptions within and across cases to be compared and contrasted, thus permitting collection of comprehensive data and allowing for more compelling and robust findings (Yin, 2009). The nature of the design also enabled an insight into the conditions where the predicted theoretical factors may exist and conditions where they are unlikely. The exploratory nature of the design enables the experiences of the students with ASC and anxiety to be explored and to create new insights into ‘what works’ in their support, which can be considered in relation to existing literature.
(Robson, 2002). Alternative methods, such as surveys, or solely quantitative methods, may not have afforded as rich and wide a picture of the specific elements that participants considered to be effective in supporting them (Yin, 2009).

3.5.3 Participant sampling.

When developing a sampling strategy and identifying participants, a researcher should consider four main points: the size of the sample, access to the sample, the sampling strategy and the representativeness and parameters of the sample (Cohen et al., 2007).

The multiple case study described within this thesis took place in a large North West of England LA. This area was chosen as it was the one in which the author of the thesis was employed as a TEP. Within this LA, the proportion of pupils identified as having SEN (18.2%) was slightly lower than the national figures (19.7%) (Department for Education, 2012d). As previously mentioned in section 2.4.4 of this thesis, 9.7% of students at School Action Plus or with a Statement of SEN attending non-specialist state-funded secondary schools in this LA had a diagnosis of ASC (Department for Education, 2012b).

3.5.3.1 Sample size.

Sample size for qualitative research is dependent upon the area of research, design and approaches used, and there are no specific criteria for the number of cases or participants that should be included within a case study (Yin, 2009). As statistical analysis of the data collected as part of the qualitative study was not taking place, a statistically significant number of participants were not required. It was therefore decided that four cases would be sought, which would allow enough evidence for or against the theoretical propositions, but would also maintain a manageable amount of data.

Each case comprised a student with ASC, their parent/carer and an educational practitioner. The primary participants were considered to be the students given that the other participants, the parent and school practitioner, were identified through the students’ involvement. This enabled the views of the students with ASC regarding their experiences of anxiety to be given greater weight than previous studies (e.g. Ozsivadjian et al., 2012).

3.5.3.2 Sampling criteria.

Purposive sampling criteria were planned to enable the identification of the student participants and were utilised in a staged approach to recruitment, as outlined in section 3.5.3.3. Student participant inclusion criteria were developed in order to identify four appropriate cases. A purposive sampling strategy was developed, with the primary criterion for participation being a mainstream secondary school student with a diagnosis of ASD who
had shown signs of anxiety during their time at secondary school. The full criterion, however, are detailed in Appendix F.

It was decided that the first four eligible participants to agree to take part in the research would be automatically included. However, in order to increase the breadth of the case studies, exclusion criteria were applied to ensure that each case study series provided a reasonable degree of population representativeness, in terms of age and key stage, specific diagnosis, area of residence, ethnicity, cultural and social background, and gender. For example, some students were not included if they were from the same area, were the same age, and had the same diagnosis as previously identified participants. Some of these factors were possible to meet, for instance the 4:1 ratio of male to females currently reported (The National Autistic Society, n.d.). However, to some degree, opportunity sampling became a factor due to the limited amount of potential student participants that were identified, and due to time constraints; a wide spread was therefore not available for certain aspects, such as age. An overview of the student participant details are shown in Table 3.2 (over). Details of the schools that the students attended are included in Appendix G.

In addition to the children with ASC and anxiety, parent and school practitioner participants were also sought for each case. This was to elicit the perspectives of those closest to the child within the home and school environments, in order to be able to compare and contrast the different sources of data to gain a richer picture of the students' needs prior to and after support for their anxiety had been implemented. Representativeness was not necessarily required amongst these participants as they were identified through the participation of the student, as the student was the primary area of study. In some instances participants were unable to decide who should carry out the interview and therefore both participants were included (for instance, both parents). Details of the school practitioner and parent participants are presented in Table 3.3 (over).
Table 3.2: Summary of Participant Details

<table>
<thead>
<tr>
<th>Student Number and Pseudonym</th>
<th>Age (Years: Months) &amp; School Year at Interview</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>Area of Residence</th>
<th>Diagnosis / Age at diagnosis</th>
<th>SEN Details</th>
<th>Previous EP input?</th>
<th>Free school meals?</th>
<th>Other Relevant Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1: Ali</td>
<td>Age 13 Year 8</td>
<td>Male</td>
<td>Iraqi / British</td>
<td>Semi-rural small town with high levels of deprivation</td>
<td>Diagnosis of Autism Spectrum Disorder at age 5 in 2004 (Reception Year)</td>
<td>Statement first given at age 5</td>
<td>Yes</td>
<td>No</td>
<td>Bilingual in Arabic and English (English used at school and at home)</td>
</tr>
<tr>
<td>Student 2: Matthew</td>
<td>Age 15 Year 11</td>
<td>Male</td>
<td>White British</td>
<td>Small rural village with low levels of deprivation</td>
<td>Diagnosis of Autism Spectrum Disorder in 2009 age 12 (Year 8)</td>
<td>Statement first given at age 10</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Student 3: Ryan</td>
<td>Age 16 Year 11</td>
<td>Male</td>
<td>White British</td>
<td>Medium size industrial town with medium levels of deprivation</td>
<td>Diagnosis of Asperger's Syndrome at age 15 in 2012 (Year 10)</td>
<td>At School Action Plus since age 11</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Student 4: Megan</td>
<td>Age 12 Year 7</td>
<td>Female</td>
<td>White British</td>
<td>Small agricultural village with low levels of deprivation</td>
<td>Diagnosis of Asperger’s syndrome at age 4/5 in 2005 (Reception Year)</td>
<td>Statement first given at age 4</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>
Table 3.3: Details of all Participants

<table>
<thead>
<tr>
<th>Student Number and Pseudonym</th>
<th>School Practitioner Participant</th>
<th>Parent Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1: Ali</td>
<td>SENCo and TA</td>
<td>Father</td>
</tr>
<tr>
<td>Student 2: Matthew</td>
<td>SENCo</td>
<td>Mother</td>
</tr>
<tr>
<td>Student 3: Ryan</td>
<td>Specialist Teacher</td>
<td>Mother and Stepfather</td>
</tr>
<tr>
<td>Student 4: Megan</td>
<td>SENCo</td>
<td>Mother</td>
</tr>
</tbody>
</table>

3.5.3.3 Participant recruitment and identification.

A checklist was devised (see Appendix F) regarding the presentation of anxiety in students with ASC, to enable identification of suitable participants. This was based upon key criteria for Generalized Anxiety Disorder (American Psychiatric Association, 2000) and Generalized Anxiety Disorder of Childhood (World Health Organization, 1992) and literature from research regarding ASC and anxiety (e.g. Greig & MacKay, 2005; Russell & Sofronoff, 2005; Smith Myles, 2003; Wood & Gadow, 2010).

The original participant recruitment and selection process from the thesis plan is outlined in Appendix H, which centred around EPs working within the LA helping to identify potential participants and contact their parents to pass on further information and to gain consent. However, difficulties arose during this process, with EP colleagues being unable to identify suitable participants as it appeared that the majority of mainstream secondary school students with ASC and signs of anxiety they could identify continued to experience current difficulties with anxiety, which was an exclusionary criterion for ethical reasons.

Due to difficulties in the identification of suitable student participants for inclusion in this study, the recruitment process was modified after discussion with the author’s university work placement supervisors. Additional relevant professionals, including Specialist Teachers (STs) and Inclusion Advisory Service Teachers were asked to identify participants who matched the inclusion criteria. This change resulted in more potential participants being identified; however, the number was deemed insufficient to meet the aims of the study. The EPs involved in recruitment suggested SENCos of mainstream schools involved in the education of students with ASC might be able to assist in the identification of suitable participants. Schools were contacted by email; Appendices I and J present sample letters of contact.

Due to this, other aspects of the recruitment process required modification as the study progressed; for instance, some SENCos contacted parents regarding consent. The revised process of participant selection is detailed in Figure 3.2 (over). All decisions regarding changes were discussed with the university supervisor.
The Revised Participant Recruitment Process

1. EPs, STs, Inclusion Advisory Service Teachers, and School SENCoS were asked to identify ASC students (not by name at that stage) attending mainstream secondary schools who broadly met the inclusion criteria for the study (see Appendix F). A letter (see Appendices I and J) via email was sent to these colleagues in order to seek their support in identifying potential participants.

2. The researcher offered to meet in person with any of the staff members who wanted to discuss this in person and in response to this made visits to three SENCoS. Telephone discussions took place with all other professionals who suggested students for possible inclusion in the research.

3. Once potential participants had been identified, the SENCo, EP or ST phoned the student’s parent to ask if further discussion could take place to identify whether their child might meet the requirements for the research, and to advise them that a letter (see Appendix K) would be sent to this effect. The letter sought permission from the parents to gain further information about their child to see if they met the participant criteria. It also explained what was meant by ‘anxiety’ in this instance, to help alleviate any concerns about a ‘label’ being given (e.g. linking it to the behaviours and concerns that were previously reported, so it was not seen as a ‘new’ concern). The SENCo, EP or ST were asked to reassure the parent that no new concerns had been raised and that further assessment and re-evaluation would not be taking place, but that it was previous needs that were of interest, and how their child and the school had managed these.

4. Once permission was gained from the parents, discussion took place with the school to identify whether they met the sampling criteria. EP files and school records regarding the students and their cognitive and attainment levels were considered for this purpose.

5. Parents whose children did not meet the criteria were informed.

6. If the student was deemed to meet the criteria, a further letter and information were sent to their parents (see Appendix L), along with information for the students (see Appendices M and N). Informed written consent was obtained from the parents of suitable participants, and assent was obtained from the students themselves.

7. The parent was also invited to take part in the research and informed consent was sought from them to participate in a semi-structured interview.

8. Concurrently, a phone call from the researcher was made to all parents to discuss the research in further detail and to answer any questions they had. The researcher offered to visit any of the parents or students who wanted to meet her or discuss this in person, but all declined.

9. Identification of an educational practitioner who worked with the student and who was also able to participate (as seen in criteria in Appendix O) also took place in discussion with the SENCo of the school that the student attended. The SENCo was asked to identify a staff member who knew the students well and who was willing to participate; in some instances this was the SENCo themselves. Information and informed consent was gained from practitioners via letter (see Appendix P) and through telephone discussion by the researcher.

Figure 3.2: The Revised Participant Recruitment Process
3.5.3.4 Critique of the sample.

The sample size and nature of the sample (e.g. age, diagnosis, and school of participants) may have had a significant influence upon the interpretation of the data gained, affecting both the validity and generalisability of conclusions. The participants could be seen as merely a sub-sample of a bigger and more diverse population, and thus such case study design can be criticised for its lack of generalisability to the larger population. In particular, the small number of participants used in studies such as this can have implications for the external validity of the findings (Gray, 2004). It is acknowledged that a larger sample size would perhaps have been advantageous. However, time implications, particularly in recruiting participants, carrying out interviews, and data analysis, did not practically allow for a larger sample size. Additionally, the generalisability of findings is not an essential feature of case studies, and focusing on finding common factors may detract from the rich detail of each case (Stake, 2003). The reported experiences of participants have been described and compared in order to facilitate the understanding of the experiences of this group of students and those supporting them, rather than making generalisations about the needs of all similar students. However, the rigor of the approach can provide a clear framework on which to build possible explanations, through identifying relationships between concepts (Bryant & Charmaz, 2010). For further discussion regarding validity and generalisability see section 3.8.2.

Criticisms of the sampling strategies employed are that opportunity sampling can be subject to ‘unspecifiable biases’ (Robson, 2002, p.265), and purposive sampling may be seen as selective and unrepresentative of the wider population (Cohen et al., 2007). However, opportunity sampling can be used appropriately in exploratory studies where an initial picture of a little known area is being sought (Robson, 2002). Additionally, a random sample may be of little use due to the lack of knowledge of participants regarding the subject matter. Had random sampling been applied in this study, this may have applied to the school practitioner participants, who were required to have knowledge of ASC and the student in order to be able to provide insight into their needs. Moreover, the nature of the research and epistemological position was to gain in depth data from those most appropriate to provide this rather than to make generalisations to the larger population, which is why the specific methods were chosen.

The school practitioner participants may have been selected by the school to provide the most positive responses regarding their work with the student, which could lead to response bias. However, criteria for practitioner involvement were used (Appendix O) which specified that the school practitioner participant should be the staff member who knew the student best. Discussion took place to verify this prior to interview, and care was taken by the author researcher to ensure this did, in fact, happen.
3.6 Data Collection

A qualitative design allowed active collaboration with participants throughout the recruitment, data collection and analysis process (Yin, 2009). Evidence from multiple sources of data were collected; these being semi-structured interviews, educational files for the students, and the researcher’s own research diary. The hybrid nature of the research design ensured that the research questions were addressed, and that the needs of the different stakeholder groups were met (Robson, 2002).

Table 3.4 summarises the methods of data collection in relation to each research question.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Proposed data collection methods</th>
</tr>
</thead>
</table>
| Research Question 1: What are the perceived difficulties and needs of students with ASC who show signs of anxiety in the mainstream secondary school setting? | ● Documentary analysis of information from within the participants’ educational files  
● Semi structured interviews with the selected student participants, their parents and educational practitioners  
● Researcher research diary |
| Research Question 2: What is perceived to be effective practice in supporting students with ASC who show signs of anxiety in the mainstream secondary school setting? | ● Documentary analysis of information from within the participants’ educational files  
● Semi structured interviews with the selected student participants, their parents and educational practitioner  
● Researcher research diary |

3.6.1 Semi-structured interviews.

The main source of data within this study was interviews, which are deemed to be one of the principal sources of case study data as they allow insights into participants’ experiences as well as gaining their views (Yin, 2009).

Semi-structured interviews, which are considered to be appropriate for exploratory research designs, enabled the collection of rich data from each participant without being restrictive (Yin, 2009). The less structured nature of the interviews allowed more opportunity for participants to be open about their experiences and realities and for conversation to take place naturally; the structured element, however, enabled the researcher to ensure that all factors from the research propositions were covered and that there was consistency of approach. Use of semi-structured interviews allowed for changes in wording of questions according to the varied ages and needs of participants. An element of interview structure was, however, required to reflect the student participants’ specific ASC-related needs. Therefore pre-determined ‘card sort’ exercises were used throughout the interviews to provide some structure and cues (see section 3.6.2).
3.6.1.1 Interview questions.

The semi-structured interview questions for all participants were developed around the research propositions (see section 3.5.2.2 and Appendix D) to enable examination of these, and some questions that allowed exploration of rival explanations were also included. The question scripts for each participant group (e.g. student, parent or practitioner) are included in Appendices Q, R and S. The questions for each were framed in similar ways, yet tailored to the particular participant group. However, the questions were not set and were intended as a guide, as is the premise for semi-structured interviews.

Whilst pre-determined questions were developed (appendices Q to S), these were for interviewer guidance rather than being a rigid format; the order, specific presentation and prompting of responses was modified so that this was appropriate for different circumstances, or participants (Robson, 2002). The questions were used as a prompt for the researcher rather than as set questions and a set structure. If participants discussed information relating to other questions out of order in the course of discussion, the researcher adapted the order and content of further questions accordingly.

Students with ASC tend to respond better to closed ended questions or fixed questions (Batten & Rosenblatt, 2006; Preece, 2002), despite research suggesting that open-ended questions elicit the richest qualitative data (Coolican, 2009). Therefore, a compromise between these factors was reached; due to the characteristics of the student participants, the interview schedules, questions and prompts for the students may look slightly different to that which may typically be seen in educational or psychological research.

3.6.2 Card sort exercises.

As mentioned in section 3.6.1.1 above, ‘card sort’ exercises were also utilised within the interviews. This is perhaps typically unconventional within semi-structured interviews, but was decided upon due to the needs of the student participants. Individuals with ASC are known to respond effectively to verbal questions when visual or written information is also provided (see for example; Beresford, Tozer, Rabiee, & Sloper, 2004; Jones et al., 2008; Preece & Jordan, 2009). Therefore open-ended questions were asked in a semi-structured format, followed by a card sort activity presenting statements related to the research propositions. Rival explanations were not included for every proposition due to manageability of the interviews and research process. Also due to the needs of participants with ASC, questions that might be considered to be ‘off topic’, vague, or irrelevant, or which were worded negatively (e.g. negating or the opposite of what is expected), could be difficult to comprehend and cause confusion to them. Other means of considering the rival explanations were used, such as referring to these within the thematic analysis process (see section 3.7.1.1).
Each card sort exercise comprised a set of cards with statements derived from the prior semi-structured questions and propositions, for instance presentation of options of possible effects of anxiety upon the student and whether or not they are present; and presentation of possible strategies to consider whether they worked for the student or not. A mat with ‘yes’ and ‘no’ at the top was provided to sort the cards under the appropriate columns depending upon whether the statements were relevant to the participant or not. Any statements that they were unsure about were placed in the middle. This process was loosely based upon the ‘Talking Mats’ methods, to enable individuals with ASC, communication and learning difficulties to have a ‘voice’ and to give their views (e.g., Cameron & Murphy, 2002; Murphy & Cameron, 2008). The Talking Mats approach typically uses pictures or symbols to provide a structure to interaction for staff or researchers to gain the views of individuals with learning and communication needs.

The approach is deemed to help provide an easily recorded means of acquiring data, and the small chunks of information are said to give the individual time to think, recall information and make comprehension easier, all of which are difficulties that individuals with ASC may typically experience (e.g., Attwood, 2007; Happe, 1994; Preece & Jordan, 2009). The approach has also been found to help with the difficulties with face to face interaction that individuals with communication needs may experience. Research regarding Talking Mats found that participants expressed opinions that were not previously known to those caring for them, were more motivated to interact and engage in communication, and have found the approach a meaningful and tangible way to express their views (Cameron & Murphy, 2002; Murphy & Cameron, 2008).

In this instance the author used short written statements rather than pictures; due to the complexity of some of the concepts, it was not possible to find representative pictures. The high level of functioning of the young people meant that words were felt to be more appropriate. The cards were presented in random order at the bottom of the mat to allow the participants to take control over the order in which they wanted to explore the statements.

The card sort exercises were also included in the interviews with the other participants (e.g. the parents and school practitioners) for consistency. An example of a completed card sort mat and the card sort questions are included in Appendices T and U. A description of the process of use of the card sort exercise is shown in Appendix V.

A balance was sought between providing the structure that would enable participants with ASC to access the interviews most effectively, and carrying out a genuinely exploratory evaluation. The card sort exercises were presented after the open-ended questions, so as not to influence the participants’ initial responses to these. Students were able to continue
discussion openly as the card sort exercise took place. Participants were encouraged to expand upon the choices in their own words to explore these further, which often led to other factors being raised by them. Participants were all able to place statements under the ‘no’ column and therefore it could be argued that they did not feel pressure to respond positively to these prompts. The statements were not intended as quantitative data which would be statistically analysed, but as prompts for discussion. For that reason, responses were only analysed as part of the final data if the participant gave further information about the factor mentioned on the card and evidenced this with examples.

The interviews from the initial case were treated as a pilot and, as only minor changes were required, which can happen in any semi-structured interview due to the nature of the process, these data were included within the research data.

3.6.3 Interview process and details.

The students were asked to take part in individual semi-structured interviews of between 30 and 60 minutes. More than one interview was allowed (on different days), as it was felt that individuals with communication and processing difficulties may require longer to express their views, take time to build rapport and experience slower processing. Up to three interviews were considered to be appropriate for each participant, depending upon how much information they wished to share. For instance, a student participant who had a smaller amount to say might only have one 30 minute interview, whereas one with more to say might take part in three thirty minute interviews. It was agreed that shortly before the 30 minute time had been reached, the researcher wouldforewarn the participant of the time and ask them whether they would rather continue today or at another time. No longer than 60 minutes was allowed for any one interview, and ideally these lasted a maximum of 45 minutes where possible. Interview details for student participants are shown in Appendix W.

The educational practitioners and parents/carers took part in individual semi-structured interviews planned to last approximately one hour. However, as two interviews had two participants each, these took slightly longer. At the turn of the hour, participants were asked whether they wished to continue or to stop; both chose to continue and finish the questions during that interview. Practitioner interviews all took place at school, and student and parent participants were given the option of interviews taking place at home or at school. For those which took place at home, University guidance for conducting interviews off was adhered to (The University of Manchester School of Education, 2009). Parent and practitioner interview details are shown in Appendix X.
The processes carried out at the start of the interviews to clarify participants’ informed consent and understanding are outlined prior to the interview questions in Appendices Q and S.

### 3.6.3.1 Adaptations to the interview process for individuals with ASC.

Children with ASC may have difficulty in understanding narratives, which can affect their participation in interviews and their ability to talk about past events and their experiences. They can also have difficulty in personal recall of events, ability to reflect upon their emotions, social anxiety with strangers, lack of personal insight, and concrete thought processes (Beresford et al., 2004; Preece & Jordan, 2009). These factors influenced the methods used to gain their views; careful planning was required in order to ensure that questions were unambiguous, understandable, and would elicit the most pertinent responses. Additionally, it was important that events being referred to could be recalled, and that stress upon the individual was minimised. Given the nature of ASC, a potential issue was precipitation of anxiety caused by meeting with a stranger during an interview. However, individuals with ASC (especially AS) may be eager to express their views, sometimes candidly, without any evidence of distress being caused (Humphrey & Lewis, 2008a).

Literature that considers ethical and effective methods of gaining the views of children and young people with ASC was referred to (e.g. Beresford et al., 2004; Humphrey & Lewis, 2008; Preece, 2002; Preece & Jordan, 2009), and the approaches to data collection are described in sections 3.6.1 to 3.6.3. A draft of proposed questions and interview structure (see Appendices Q to S) was devised, and was guided by the information provided in the prior interviews by parents and practitioners and by the pilot interview.

Where necessary, an introductory meeting took place between the author (the interviewer) and the student (with their parent), in a ‘safe’, informal setting such as the student’s home; as per the methods described by Preece and Jordan (2009). This enabled them to be fully briefed regarding their involvement in the study and to meet the interviewer.

Times for the interview were pre-arranged, and outlines of the interview schedule were provided to the student participants in advance, to allow them to recall events that would aid them with providing their views and to think about the questions for consideration.

More open-ended and literal questions were used in the initial stages of the interviews to allow for open and unbiased exploration of the research questions in hand. This was followed by closed questions using the card sort exercises, as literature suggests that individuals with ASC may have more difficulty with answering open-ended questions (Capps, Kehres, & Sigman, 1998; Schmidt & Hey Byrne, 2004).
During the interview, visual materials, such as pictures of the human form (see Appendix Y), were used alongside the questions as required, for the student to indicate or draw physical feelings on. Cartoon faces depicting emotions and feelings (see Appendix Z), were used to help prompt the student and aid them to recall events, express their feelings more completely, and improve understanding and ability to participate where required (Preece & Jordan, 2009; Preece, 2002). Additionally, basing an interview around an activity, such as looking at pictures, meant that less face-to-face interaction and eye contact was required, which is known to precipitate anxiety in ASC students (Beresford et al., 2004).

As per approaches reported by Preece and Jordan (2009), students were provided with an indication of when the interview process was coming to an end. Cards enabling the student to indicate if they wanted to stop the interview were also provided (see Appendix AA).

### 3.6.4 Documents.

Data was collected from a variety of sources to provide a richer picture, help when discrepancies occurred, and provide a means of triangulation, for instance, to enable construct validity (Yin, 2009). In addition to the interviews, documentary analysis included analysing records within the students’ school and educational psychology files. Records used within documentary methods of data collection can include: time sheets, technical documents, examples of students work, memos and emails, reports and statistics, correspondence, plans, and notes (Cohen et al., 2007). These were the first pieces of data that were considered in each case.

A list of those used within this research is provided in Figure 3.3. Not all of these documents were analysed for each participant; this was dependent upon their existence and availability. Consent was gained from all participants to access these.

<table>
<thead>
<tr>
<th>Documents Accessed During Documentary Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>The following were accessed during the documentary data collection:</td>
</tr>
<tr>
<td>• Statements of Special Educational Needs and revised statements</td>
</tr>
<tr>
<td>• Individual Education Plans (IEPs)</td>
</tr>
<tr>
<td>• Review meeting minutes and reports</td>
</tr>
<tr>
<td>• Teacher, SENCo, EP and ST Reports</td>
</tr>
<tr>
<td>• Liaison notes between school staff and STs</td>
</tr>
<tr>
<td>• School reports</td>
</tr>
<tr>
<td>• Student and parents reports for reviews</td>
</tr>
<tr>
<td>• Transitions plans</td>
</tr>
<tr>
<td>• School 'pen portraits', 'communication passports' or 'pen pictures' of the student</td>
</tr>
<tr>
<td>• Referral forms for external educational services such as Educational psychology</td>
</tr>
<tr>
<td>• Letters to and from practitioners and parents</td>
</tr>
</tbody>
</table>

Figure 3.3: Documents Accessed During Documentary Data Collection
Consistent with good practice, a research diary was kept throughout the research process, which was used as an additional source of data (Robson, 2002). This enabled the author to track the research activities, make notes on the design, conduction and analysis of the research, and record observations and reflections.

The student, parent and practitioner interviews were audio recorded (with permission) using a small digital recording device. Following recording, data was transferred immediately to an encrypted USB drive and deleted from the recording device.

Ideally, all written data remained in their place of origin (e.g. the school or EPS office) and were viewed on site, for reasons of confidentiality and security. However due to the use of constant comparative methods of data analysis (see section 3.9.2.4) this was not always possible due to the need to constantly refer to it throughout the analysis process if required. Therefore, electronic documents were recorded anonymously using pseudonyms, with all identifying details changed, on an encrypted laptop. Paper documents were copied with all identifying factors blocked out. These were kept in a secure locked case during transportation, then a locked cabinet when not in use.

The research diary was kept in a small notebook and on an encrypted USB drive. A template of the format used (based upon Altrichter & Holly, 2005), as recommended by the university teaching team, is shown in Appendix BB. Both of these sources of data were kept in a locked case for transportation and a locked cabinet when not in use.

To ensure consistency of analysing the data within and across cases (see section 3.7 for more details), the order of data collection occurred as shown in Figure 3.4 (over).
Use of student completed journals were considered as a possible method due to the substantial data that can be gained with minimal researcher effort (Robson, 2002). They can provide an insight into situations which the researcher may not normally be able to, or have time to, access (Robson, 2002). However, these were discounted as they place great responsibility upon the participant (Robson, 2002).
Focus groups were also considered as a method of data collection as the views of many participants can be ascertained in a relatively short space of time (Coolican, 1999; Robson, 2002) and discussions can be stimulated and enriched (Robson, 2002); however they may miss more informative data than interviews (Coolican, 1999). Interpersonal factors can specifically influence the findings of focus groups (Coolican, 1999; Robson, 2002), which is already known to be an area of difficulty for this group of students. Another reason for disregarding focus groups as a data collection method was that these social/group situations were likely to be more anxiety-provoking for individuals with ASC (Sofronoff, Dark, & Stone, 2011). Additionally, for all participants, there was the possibility of desired responses being given (Coolican, 1999) and ‘group think’ being higher (Robson, 2002). Confidentiality between participants could not be guaranteed using this method (Robson, 2002) and therefore participants may not have been willing to share sensitive information.

### 3.6.5.1 Interviews.

Semi-structured interviews have been criticised as being less reliable and generalisable than structured interview methods due to questions being asked in different ways and orders, potential difficulty in organising and analysing the data, important topics of information being missed, and interviewers needing to be highly skilled. Structured interviews, in contrast are considered to be quicker, easier to analyse and replicate, more reliable, and the results more generalisable. However, these can be considered to be artificial, produce a limited range and quality of detail, constrain participants, not gain a picture of the complexities of the experiences, and be perceived as impersonal (Coolican, 1999, 2009).

Despite it being time consuming to conduct semi-structured interviews for many participants and to analyse these (Robson, 2002), it was considered the most appropriate format for this research. Semi-structured interviews can elicit rich data (Barbour, 2008; Litosseliti, 2003) for which the questioning and approach can be modified in line with the participants’ needs; this was especially important for the student participants. Using interviews is considered to be most suitable for students with ASC as they can have difficulty exploring the reality of the connections between situations and their anxiety (White, Oswald, et al., 2009), and therefore may require verbal questioning to elicit fully considered views rather than their perceived immediate view of the situation.

### 3.6.5.2 Documentary data.

Documentary data collection is sometimes considered to be biased and selective, and may be misunderstood out of context (Cohen et al., 2007). Documents included in analyses are not written especially for the research purposes, are based upon the experiences and observations of others, and may provide inadequate information. Therefore, the data can be based upon people’s interpretations rather than accounts of experiences, and can be open
to inference and misinterpretation without contextual information. However, they can provide useful information about past events, show how situations have moved forward, and are widely available in educational worlds (Cohen et al., 2007). As the source of data was a secondary source, it was considered that many of the disadvantages could be overcome through gaining multiple sources of data and comparing and contrasting these. In light of this, it was felt to be a useful additional tool in addressing the research questions and propositions, and might provide useful background data.

3.7 Data Analysis

A qualitative approach was used to evaluate the research that allowed consideration of specific contextual, environmental and organisational factors and the uniqueness of the identified participants, allowing active collaboration with them throughout the process.

A decision was made to transcribe the data personally to improve familiarity with the data. Recordings were listened to several times to ensure accuracy and understanding.

The student, parent and practitioner interviews were transcribed and analysed for main themes in relation to the research questions using Braun and Clarke's (2006) six phase model of thematic analysis. In addition, data from the documents and researcher's own research diary were analysed, and cross-checked with the data from the interviews.

3.7.1 Thematic analysis.

Data reduction and analysis was required to clarify the main findings of the research and carry out the process of ‘subsuming particulars into the general’ (Miles & Huberman, 1994, p. 225). Thematic analysis (Braun & Clarke, 2006) was used to usefully summarise the key themes of a large amount of data whilst retaining richness of detail and highlighting similarities and differences across the data. Similar research with students with ASC (Humphrey & Symes, 2010a; Ozsvadjan et al., 2012; Symes & Humphrey, 2011) has used this approach to data analysis.

Thematic analysis can be used with a range of epistemologies and methodological approaches (Braun & Clarke, 2006) and can be utilised to test hypotheses as an alternative to significance testing (Coolican, 2009). However, within a critical realist approach, the method allows straightforward theorising around experiences, and the active role of the researcher within the process (Braun & Clarke, 2006). It was felt that this would be an appropriate approach in order to explore the data and identify themes relating to previous research and the propositions; and also to illustrate possible emerging themes that have not previously been identified.
Braun and Clarke (2006) distinguish between inductive and deductive approaches to thematic analysis, which can be used to identify themes and patterns from data. Inductive approaches identify themes that are strongly linked to the data, and drawn from the data. Deductive thematic analysis is driven by theoretical information (e.g. linking to themes that have arisen in theory and clarifying their presence or absence in the data with pertinent examples).

A deductive approach to analysis might involve deciding the framework for analysis in advance, and can provide a strong link to theory and a way to manage large amounts of qualitative data (Hayes, 1997). However, this means that new material not linked to the predetermined themes would not be included in the analysis, and important insights and themes might be missed. As the research was guided by theoretical propositions, the analysis was primarily deductive in this aspect; themes relating to the propositions were considered and sought out from the data during analysis as the initial framework for identifying the themes. However, such an approach alone was not thought to be sufficiently inclusive for this research, as themes emerging directly from the data were also felt to be of importance. Therefore, inductive approaches were also used, as some additional themes not present in the theoretical propositions were identified and drawn from the data.

In the first instance, as part of the deductive process, the propositions were utilised as a framework for possible themes, with those being present in the data being formed into emerging themes and those not present being discarded. The names of the propositions that were identified as emerging themes were refined to reflect the content of the data rather than the proposition; however in some cases these were very similar. On analysing and re-analysing the data as part of the constant comparative process (see section 3.7.1.1 below), some further themes that were not present in the theory or propositions were derived from the data inductively. For instance, several themes became apparent that were not present in the theory or propositions, which emerged directly from prominent evidence across the data. These were included within the coding process (see section 3.7.1.1 for more detail). In this sense, the theoretical propositions were used as a framework for the identification of themes, but were not the sole source of them, as the data themselves were explored for additional emerging themes that were not present in the propositions.

Themes can also be identified at either a semantic or latent level, with semantic focusing upon surface level meanings of the data, and latent upon interpreting underlying or hidden conceptualisations from the data (Boyatzis, 1998; Braun & Clarke, 2006). The study described in this thesis was conducted at the semantic level, which is appropriate for the critical realist approach being taken.
3.7.1.1 Process of carrying out thematic analysis.

Table 3.5 (over) presents the process used for thematic analysis and the actions carried out within this research, based upon the phases suggested by Braun and Clarke (2006, p.87). Within analysis, a focus upon data that provided evidence for the research questions was taken and evidence for possible rival explanations to the propositions were considered.

As suggested by Braun and Clarke (2006), it was decided that themes should be present in most or all of the data cases or, if present in only a minority of cases, have had particular emotional or factual emphasis. The relevance of codes or themes, and capture of key concepts pertinent to research aims were important considerations; as the number of instances of a particular code or theme do not necessarily predict their importance (Braun & Clarke, 2006). An overview of emergent themes was sent to all participants by both email and letter, to seek their feedback to ensure that these reliably reflected their views. An individualised form was provided to each participant for them to provide feedback. This was followed up by a telephone call to participants by the researcher to check that they had received the information and to enquire whether any changes were required.

Qualitative analytic methods often rely upon a ‘constant comparative analysis’ approach, originally developed for use in grounded theory by Glaser and Strauss (1967). This involves considering elements of data (such as one interview, statement, or theme) and comparing them with all others in order to develop conceptualisations of the possible relations between various pieces of data. This process continues with the comparison of each new interview until all have been compared with each other. Thematic analysis is a method that utilises a constant comparative approach in order to develop ways of understanding human phenomena within the context in which they are experienced (Braun & Clarke, 2006).

The codes for all cases were reviewed/revisited as additional codes were identified in each case. Within the present research, this process was carried out by reviewing the codes for each case as further codes were derived from each new case.

Each code, theme and item of quoted data was colour coded and labelled to indicate whether it related to a student, parent or practitioner, and the case to which it belonged. This process enabled a wider view to be taken across the data, and emergent themes relating to individual cases, students or schools could be more easily identified. Tabulation of data allowed comparisons and the identification of patterns and meanings. Comparison of the data across case studies in this manner assisted the recognition of particular codes that emerged as themes (Miles & Huberman, 1994).
Table 3.5: Phases and Process of Thematic Analysis within the Research

<table>
<thead>
<tr>
<th>Phase</th>
<th>Processes Undertaken within the Research</th>
</tr>
</thead>
</table>
| 1. Familiarising yourself with the data | • Data from the semi-structured interviews were transcribed  
• Data were read and re-read  
• Initial ideas for possible themes were noted using the theoretical propositions as a basic framework. |
| 2. Generating initial codes | • Individual documents/transcripts were analysed for themes relating to or refuting the propositions; codes were assigned to relevant extracts using Microsoft Word comment boxes to highlight relevant data/quotes for each code (see Appendix CC for samples)  
• In addition, themes not reflected by the propositions, but emerging from the data, were noted and included in the coding  
• Possible rival explanations were considered within the data. |
| 3. Searching for themes | • Codes were collated into tables from each document or transcript using the Word ‘cut and paste’ function for each case  
• Codes were grouped into possible global themes based around the research questions  
• Emergent themes were attributed to the particular data source by noting this in parentheses (see Appendix DD for a sample). |
| 4. Reviewing themes | • Themes were grouped into possible organising and basic themes  
• The potential themes from the codes were refined by cross-referencing with the sources of data for each case with possible themes checked for relevance and consistency by referring back to the highlighted sections  
• Data/quotes for the themes were collated in tables from the highlighted sections of the text, again using the ‘cut and paste’ function (see sample in Appendix EE)  
• The research questions were revisited to ensure relevance of the themes and data extracts. |
| 5. Defining and naming themes | • A final list of themes was identified for each case with global themes, organising themes, and sub themes being identified and refined (see sample in Appendix FF)  
• Visual templates of the thematic networks for each case were used to help refine the final themes using an online programme called Text2MindMap (see Appendix GG for a sample of visual templates)  
• The draft lists of themes were sent to the participants for feedback, by letter and email, then followed up by a phone call from the researcher. Changes were made as requested by participants  
• Themes were then compared, identified and refined across cases  
• Tables were used to compare and contrast the data more easily (see Appendix HH) in order to identify cross case themes.  
• Each case was assigned a different colour text to allow easy identification of excerpts and themes to each case  
• Cross case themes were cross-referenced with the finalised excerpts for each case and collated into one table (Appendix II)  
• Further cross-checking and refinement of themes took place  
• Visual templates of the thematic networks for cross case themes were created as per those in Appendix GG  
• Clear final names and definitions were assigned to each theme. |
| 6. Producing the report | • Final thematic networks were created for the definitive cross case themes (see section 4)  
• Themes are written into the thesis results section with illustrative examples/quotes from the documents and transcriptions from a cross section of sources  
• Themes are related back to the research questions within the thesis results and discussion sections. |
Findings from each case, encompassing all the units of analysis within that case, were considered within the data analysis individually before cross case analysis took place. Initial codes were derived from the documentary analysis, followed by the semi-structured interviews (in order of delivery) and then the researcher diary. This took place for each case in turn, for example, case one, followed by case two, case three and finally, case four. The codes were then checked and verified within the cases before comparing and contrasting them across cases. Any differences between the cases were also considered and provided foci for further analysis and discussion.

3.7.2 Thematic networks.

The analysis used ‘thematic networks’ which are a means of structuring, classifying and presenting thematic analysis. These networks were used to provide a visual illustration of the levels of theme, the salient themes and the relationships between these (Attride-Stirling, 2001). Due to the amount of data and the aim of intending to use the findings to support work in schools, visual representation in this manner facilitated the organisation of the themes and a more understandable presentation of these by readers. Three levels of themes were utilised, as described in figure 3.5; based upon a description by Attride-Stirling (2001, p.338-339).

<table>
<thead>
<tr>
<th>Level of Theme</th>
<th>Description of Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Theme (lowest-order theme)</td>
<td>• Derived from the textual data</td>
</tr>
<tr>
<td></td>
<td>• Statements of belief</td>
</tr>
<tr>
<td></td>
<td>• Established around a central idea which contributes toward the identification of the super-ordinate theme</td>
</tr>
<tr>
<td></td>
<td>• A simple premise that is characteristic of the data</td>
</tr>
<tr>
<td></td>
<td>• On its own it may say little about the text as a whole</td>
</tr>
<tr>
<td></td>
<td>• Needs to be read with other Basic Themes to make most sense</td>
</tr>
<tr>
<td></td>
<td>• Together, Basic Themes represent an Organising Theme</td>
</tr>
<tr>
<td>Organising Theme (middle-order theme)</td>
<td>• Organises the Basic Themes into clusters of similar issues</td>
</tr>
<tr>
<td></td>
<td>• They are clusters of significant meaning that summarise the main assumptions of a group of Basic Themes</td>
</tr>
<tr>
<td></td>
<td>• They are more abstract and revealing of what is shown in the texts</td>
</tr>
<tr>
<td></td>
<td>• Their role is to enhance the meaning and significance of a broader theme that brings together several Organising Themes</td>
</tr>
<tr>
<td></td>
<td>• They are the principles on which a super-ordinate claim is based</td>
</tr>
<tr>
<td></td>
<td>• They simultaneously group the main ideas proposed by several Basic Themes</td>
</tr>
<tr>
<td></td>
<td>• They structure the main assumptions underlying a broader theme that is especially significant in the text as a whole</td>
</tr>
<tr>
<td></td>
<td>• A group of Organising Themes constitute a Global Theme</td>
</tr>
</tbody>
</table>
Global Theme (super-ordinate theme)

- They are a summary of the main themes
- They provide a revealing interpretation of the texts
- They sum up the main metaphors in the data as a whole
- They are concluding or final beliefs or positions
- They group sets of Organising Themes together that present an argument, position or assertion about a given reality
- They are macro themes that summarise and make sense of lower-order themes derived from and supported by the data
- They tell the researcher/reader what the texts as a whole are about within the context of a given analysis
- An analysis may generate more than one Global Theme, depending upon the complexity of the data and the analytic aims
- They will be much fewer in number than the Organising and Basic Themes
- Each Global Theme is the core of a thematic network

Figure 3.5: Description of Thematic Networks

3.7.3 Critique of data analysis.

Thematic analysis organises data from the researcher’s perception of its interconnectivity rather than exploring the lived inter-relationships of themes that the participant actually experiences within their mind or world (Joffe & Yardley, 2003). It may result in obvious and mundane findings that may not intrinsically lead onto the development of theory (Coolican, 2009). However, the aim of thematic analysis is to identify meanings common to participants rather than in-depth analysis of individual meanings and narratives (Joffe & Yardley, 2003). Thematic analysis can provide meaningful and useful findings if data are analysed in a methodological manner (Attride-Stirling, 2001), and if themes are expanded to relate back to theory and prior research (Coolican, 2009). Thus the analysis of data collected within this study attempted to relate the findings to relevant literature, where appropriate; and to identify emerging themes. The process of data analysis (described in section 3.7.1.1) was clearly defined and followed the same structure for each case/data source.

Phenomenological approaches to analysis, such as Interpretive Phenomenological Analysis, place an emphasis upon exploring participants’ experiences from their perspective and interpreting the meaning of the words they use to develop themes (Willig, 2008). Approaches such as this rely heavily upon the interpretation of language; these were not appropriate for this study given that language and communication, in particular emotional self-expression, are known to be areas of difficulty for ‘high functioning’ individuals with ASC (Bauminger, 2002; Ozsivadjian et al., 2012).

The approach described in section 3.7.1, which focused upon surface meanings, was more appropriate for the study population. For similar reasons, discourse analysis was not considered to be a viable option. Moreover, as the research was not focused solely upon
developing new theory, grounded theory was an unsuitable method of analysis. In addition, this is derived from a positivist approach and has limited capacity for reflexivity (Willig, 2008). Thematic analysis fitted most appropriately with the phenomenological position and aims of this study.

3.8 Reliability and Validity

Reliability and validity are terms used to consider the quality of research (Yin, 2009); however, they link closely to epistemological viewpoints and are said to be rejected by some qualitative researchers (Cohen et al., 2007; Robson, 2002). This has led to the development of alternative terminology such as ‘dependability’ (Lincoln & Guba, 1985) and ‘trustworthiness’ (Glaser & Strauss, 1967) as alternatives to reliability, ‘transferability’ as an alternative to generalisability, and ‘credibility’ as an alternative to validity (Lincoln & Guba, 1985). However, more recently, authors have questioned the usefulness of this, with Yin (2009) suggesting that it could be detrimental to the standing of qualitative research as an equal to quantitative research. Robson (2002), having referred to the aforementioned differentiated terms in an earlier edition of his text, reverted to the terms reliability and validity for a similar argument. For this reason, the terms reliability and validity have been primarily used within the current research, but the terms may be used interchangeably depending upon literature sources.

The risks to validity and reliability within qualitative research are not able to be completely eradicated, but can be weakened if due attention is given to these (Cohen et al., 2007). The measures that were taken to address reliability and validity of the study, and alternate methods that were discounted, are discussed below.

3.8.1 Reliability.

Reliability can have many meanings dependent upon the paradigm of the research. Within quantitative research it generally refers to the ability of the study to be replicated with similar results and the precision and accuracy with which it is carried out (Cohen et al., 2007). Increased precision can minimise bias and error; however, this may not be relevant and meaningful within the qualitative paradigm (Willig, 2008). Criteria have been adapted for application to qualitative study, and Yin (2009) argues that the concept of reliability in qualitative research can be used to determine whether the same conclusions would be drawn by another researcher who followed the same procedures and conducted the same case study. Within qualitative research, reliability can be treated as an evaluative criterion for considering the transparency and trustworthiness of the research (Frost, 2011).
A criticism of case study research is that poor documentation and transparency of procedures can impact upon its reliability (Robson, 2002; Yin, 2009). Documenting procedures, making operational actions clear, use of a case study protocol, and establishing an ‘audit trail’ of evidence are therefore advisable (Robson, 2002; Yin, 2009).

A discrete case study protocol, as discussed by Yin (2009), was not developed for this study as within the research community in which the study has been supported, it is not conventional to do so. Additionally, it was felt that this might be repetitive as the appropriate details suggested by Yin (2009) were included within the research proposal, the research plan, and the Research, Risk and Ethics Assessment and Ethical Approval Application Form completed as part of the ethics process prior to the research taking place (as discussed in the forthcoming section 3.10). Explicit details of the research process, including the systematic literature review, research design, research propositions, participant recruitment process, data collection procedures, and description of the data analysis are all included in the text and appendices of this thesis.

The approaches used to address reliability in this study are presented in Table 3.6 (below).

### Table 3.6: Overview of Actions Taken to Address Reliability

<table>
<thead>
<tr>
<th>Action to Address Reliability</th>
<th>Details</th>
</tr>
</thead>
</table>
| Clarity of information regarding the participant sample and sampling methods | • Provision of detailed information regarding the sampling approaches and criteria used  
• Provision of anonymised details about the participants and their representation of the target population |
| Thorough documentation of procedures | • Comprehensive description of the research procedures within the methodology section and appendices of this thesis.  
• Detailed records of actions kept within the research diary |
| Consistency of approach within interviews | • Use of scripts and written prompts within interviews to ensure consistency of researcher approach |
| Clear recording of participant responses | • Collection of photographic evidence of the card sort responses and the visual materials from student interviews and examples are appended (see Appendices T, Y and Z) |
| Clearly demarcated process of data analysis | • Clear description of the process of data analysis within the methodology section of this thesis (see worked examples in Appendix CC to II) |
| Evidence for the development of themes | • Presentation of illustrative quotes from the data alongside the themes |
| Audit trail evidenced | • Availability of all raw data and research tools (e.g. card sort exercises) for reference (currently stored securely)  
• Provision of anonymised examples of raw data where appropriate |
Psychology is concerned with what 'good' or 'quality' research constitutes, especially within qualitative research where these factors can be questioned by traditional positivists (Robson, 2002; Willig, 2008; Yin, 2009).

Validity is considered to be the “the extent to which research measures or reflects what it claims to.” (Frost, 2011, p.195). In quantitative research, validity can be demonstrated through appropriate sampling, use of instrumentation, and statistical evaluation of the data. However, it is not only relevant to quantitative studies, and it is argued that the concept of validity is a standard for all types of research, and that research can become invalid without striving for this (Cohen et al., 2007). Validity is not an “absolute state” (Cohen et al., 2007, p.133), nor tied to any paradigm, and the pursuit of validity should allow the research to be true to its beliefs (Cohen et al., 2007). The evaluation of validity should consider the ‘credibility’ or ‘trustworthiness’ of the research (Robson, 2002).

Lack of researcher objectivity and subjectivity of participants, impacting upon their opinions, attitudes and perspectives, can create bias (Cohen et al., 2007). The presence of a researcher can cause changes to how participants respond, such as providing responses they feel the researcher may want, or holding back information. Researcher bias may impact upon a study; for instance, the researcher’s expectations and suppositions can impact upon participant selection, the interview process, questions asked, selection of data, and/or analysis or reporting (Lincoln & Guba, 1985).

Additionally, inaccurate or incomplete data, use of inappropriate meanings or frameworks, and not considering rival explanations, can all impact upon the validity of the research (Robson, 2002).

Within qualitative research, validity can be demonstrated through honest, deep and rich data, the scope of the data, through participant sampling, and triangulation of the data (Cohen et al., 2007). Methods such as checking the appropriateness of frameworks, encouraging alternate lines of discussion, and seeking rival explanations to the theory and propositions, can all serve to increase validity (Robson, 2002; Yin, 2009).

A criticism of case study methodology has been the lack of satisfactory operational measures (Yin, 2009). This can be ameliorated through means such as: using appropriate operational methods for the research phenomena, using multiple sources of data, audio taping interviews, triangulation, and describing how any possible methodological weaknesses may not bias the research (Robson, 2002; Yin, 2009).
It could be argued that this study has good ecological validity, as the subject matter (being a young person with ASC who has experienced anxiety) is a credible real life situation. This implies that the results may be analytically generalisable to other populations with similar circumstances. Despite potential limitations, high ecological validity can be gained as it occurs when a researcher examines a real-life situation in its natural context, without isolating or changing variables, in order to gain an accurate depiction of participants' realities (Cohen et al., 2007). An overview of approaches used in the present research are shown in Table 3.7 (over).

A valuable means of addressing validity is that of triangulation, which involves gaining data from multiple sources in order to improve the rigor of the research (Robson, 2002). Additionally, considering the research from more than one position can illustrate more effectively the rich and complex nature of the phenomena (Cohen et al., 2007). Triangulation can also bring to light contradictions and discrepancies from the data (Robson, 2002).

This can be achieved through triangulation of analysis, theory, data sources and methods (Denzin, 2001). Documentary analysis, coding of data by more than one individual, and respondent validation are all indicated as useful methods of triangulation (Cohen et al., 2007; Joffe & Yardley, 2003; Robson, 2002). Therefore, within this research, multiple data sources regarding the phenomena, multiple case studies, and triangulation of analysis through respondent validation, and peer rating of codes were utilised. The use of multiple cases and sources of data is previously described in sections 3.5 and 3.6, and respondent validation is discussed later this section.

Additionally, an EP colleague with experience of doctoral research within the last two years was asked to code a sample document and transcript to compare and contrast coding approaches. On the initial coding of documents 41 out of 57 codes showed agreement, with this being an inter-coder reliability of 68% or a coefficient of 0.68. It is suggested that on initial inter-rater coding, reliability of more than 70% is unlikely and that following clarification further coding should aim for 80-90% reliability (Miles & Huberman, 1994). Therefore the rationale for coding was discussed to aid the researcher in identifying any differences in consistency and possible codes that may not yet have been considered. Disagreement was most evident where two potential codes might have been allocated or where a coding opportunity had been missed by one of the coders. A transcript was then coded which resulted in agreement on 55 out of 68 codes leading to an inter-coder reliability rate of 82% or coefficient of 0.82.
Table 3.7: Overview of Actions Taken to Address Validity

<table>
<thead>
<tr>
<th>Action taken to Address Validity</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of the researcher’s philosophical position, beliefs and values</td>
<td>Clear explanation of the researcher’s position, beliefs and values within the methodology section of the thesis</td>
</tr>
<tr>
<td>to allow transparency</td>
<td></td>
</tr>
<tr>
<td>Using multiple sources of the evidence sought</td>
<td>Interviews with three different participants per case whose views could be compared and contrasted, along with documentary evidence from a variety of sources</td>
</tr>
<tr>
<td>Audio taping of interviews</td>
<td>Interviews were audio taped to allow accurate recording of the data</td>
</tr>
<tr>
<td>Revisiting interviews to check content and understanding</td>
<td>Interviews were listened to several times, and again after a week from transcribing, to give time to reflect</td>
</tr>
<tr>
<td>Being mindful of individual views during the coding process</td>
<td>Case excerpts were colour coded so that the individuality of cases could be retained, as well as attributing quotes within the text to the relevant participants to retain individuality of their views</td>
</tr>
<tr>
<td>Making the process of data analysis explicit</td>
<td>A clear description of the process was provided and findings made accessible through use of thematic network illustrations</td>
</tr>
<tr>
<td>Use of a process of analysis that allowed reflection</td>
<td>Methods were used that could be clearly visually recorded (see examples in Appendices CC to II) during the coding and data analysis process, to aid the researcher’s recall of the process and allow further reflection as required</td>
</tr>
<tr>
<td>Being alert to possible alternative explanations for the findings</td>
<td>The researcher was vigilant for the possibility of rival explanations when analysing the data</td>
</tr>
<tr>
<td>Inter-coder reliability was sought, to allow triangulation of findings</td>
<td>An EP colleague analysed a sample of documents/transcripts and discussed outcomes with the researcher (see below/over for more detail)</td>
</tr>
<tr>
<td>Participant validation was sought, to allow triangulation of findings</td>
<td>Participants were sent a summary of emergent themes by letter and email and given the opportunity to provide feedback regarding any that they felt did not accurately reflect their views, via an individualised form. The researcher also telephoned participants to ensure that this had been received and to check whether any changes were required.</td>
</tr>
<tr>
<td>Attempted to remain true to the data provided by all participants</td>
<td>A process of reflection (using the research diary, supervision and constant comparative approaches), respondent validation processes and use of quotes from the data were utilised to support this</td>
</tr>
<tr>
<td>Attempted to acknowledge bias that may have occurred within the research</td>
<td>Possible biases were acknowledged within the methodology and results sections, e.g. being open about researcher beliefs and values, use of card sort exercises being carefully carried out to allow open discussion by participants, and documentary analysis being used amongst other means of data collection</td>
</tr>
<tr>
<td>Reflective practice to show transparency in conducting and analysing the research</td>
<td>Use of a research diary and reflection during supervision with university and placement supervisors were used to consider practice</td>
</tr>
</tbody>
</table>

Respondent validation, or ‘member checking’, involves consulting with participants after the researcher has compiled findings to check that their interpretations of the participant’s experiences are valid (Coolican, 2009). Within this study, all participants were asked to provide feedback on the codes and themes established by the researcher. Participants were asked whether they wished this to be in person or in writing, and all opted to receive this in
writing. An individualised summary of codes/themes from their individual interview was sent to the participant on a form and they were asked to provide feedback on any content that did not accurately portray their views. Parents and school staff were asked to support the students with this as required. As no responses were received, participants were contacted personally by the author by telephone to ensure that the information had been received, and to check whether any changes were required and if they were satisfied with the interpretations provided, and all indicated that they were.

### 3.8.3 Reflexivity.

Reflexivity refers to a researcher considering their own involvement within the research and acknowledging their prior assumptions and biases in conducting and analysing the research. As a result of this, it is not possible to remain entirely objective within this process, so steps should be taken to reflect upon how the construction of the findings may have been influenced by decisions such as epistemological and analytical approaches (Coolican, 2009; Willig, 2008). The impact of personal feelings, preconceptions, background and identity upon the research should be considered (Crotty, 1998); the contribution of these to the constructions of meaning and influence upon process and findings should be reflected upon (Willig, 2008).

A research diary was kept throughout the study in which the author recorded observations and reflections of the process used. Personal values and beliefs were explored along with the perceived impact of these upon research decisions, actions and interpretations within the research. Dates and details were also noted regarding all actions such as telephone calls, letters sent, and supervisory discussions. Written records were made directly after each action within the research, such as an interview, period of analysis or phone call. Keeping a research diary is deemed to be good practice (Robson, 2002), along with providing an ‘audit trail’ of the research process (Robson, 2002).

Regular meetings with University and placement supervisors provided the opportunity for reflection upon the research processes and upon personal assumptions. Frequent informal discussions with EP colleagues also supported these processes of critical self-reflection.

### 3.9 Analytic Generalisability

As mentioned in the previous section, the ability to gain consistent results if a study is replicated is still possible within qualitative research, and can allow the application of analytic generalisability rather than external generalisability (Robson, 2002). Qualitative research, and case studies especially, have been criticised for not being able to demonstrate that a study’s results are generalisable outside of a specific case. However, within case studies
this can be shown through analytic generalisibility, where the researcher takes the place of standardised instruments used in quantitative research (Robson, 2002; Yin, 2009).

Qualitative researchers can endeavour to establish reliability through thorough generation, refinement, comparison and validation of constructs from within the research data (Cohen et al., 2007). A critical realist would aim to clarify the structures and mechanisms of the research to enable this, but would not consider that reliability allows certain clarification or refutation of findings (Robson, 2002).

For the purpose of analytic generalisability, all processes and structures utilised within the research have been carefully described within the methodology section of this thesis, and examples of documentation of these are provided in the appendices.

### 3.10 Ethical Considerations

The proposed research was planned and carried out with regard to ethical considerations, in accordance with the British Psychological Society (BPS) ‘Code of Ethics and Conduct’ (2009), the Health and Care Professions Council’s (HCPC) ‘Standards of Conduct, Performance and Ethics’ (2008) and the School of Education’s ‘Ethical Practice Policy and Guidance’ (The University of Manchester, 2011).

A thorough process to consider ethical considerations in relation to the present research took place prior to the research being carried out. The researcher presented a research proposal to the University of Manchester’s School of Education Thesis Panel on 20th February 2012. Recommendations by the panel were discussed with the researcher’s supervisor and addressed accordingly. A subsequent application was made to The University of Manchester’s Committee on the Ethics of Research on Human Beings, and confirmation that ethical approval was granted was received on 8th March 2012 (see Appendix JJ).

The ‘Ethical Good Practice Statement’ for this research is presented in Appendix KK. However, the main considerations, with headings taken from the Ethical Practice Policy and Guidance (The University of Manchester, 2011), are as follows:

#### 3.10.1 Respect for human dignity.

The qualitative study was specifically designed to be sensitive to the different interests and needs of the participants involved. Particular attention was paid to the needs of the students regarding their diagnoses of ASC and experiences of anxiety, as outlined in the research methodology and below.
Additionally, due regard was given to factors such as age, gender, race, religion, sexual orientation, political beliefs, and lifestyle, without prejudice. Alternative formats of letters were provided to students of different ages to ensure these were age-appropriate and understandable; timings of interviews were considered taking into account parental responsibilities of those with small children; and religious observances or practices were accounted for in the timings of interviews, and the attire and actions of the researcher.

3.10.2 Integrity and quality.

Care was taken to ensure that the research design was of a high quality and appropriate to the identified aims; decisions regarding the methodology and study conduct were discussed with University supervisors, and recommendations from the University research panel and ethics committee were acted upon.

The research was carried out in a competent and responsible manner, in accordance with the BPS ‘Code of Ethics and Conduct’ (2009), BPS ‘Professional Practice Guidelines’ (2002) from the Division of Educational and Child Psychology, and HCPC ‘Standards of Conduct, Performance and Ethics’ (Health and Care Professions Council, 2012a).

For instance, the most appropriate methods of data collection for the participants with ASC and tailoring written information to their needs were considered. Drafts of letters and information for all participants were proof read by several colleagues, and research processes carried out in a thorough and organised manner through use of schedules and prompts for the researcher (see Appendix Q and S).

The research is all the author’s own work, and care has been taken to reference sources in all instances.

Participants were provided with a summary following the initial analysis of the data. Further feedback will be offered once the thesis is fully completed and approved.

3.10.3 Respect for free and informed consent.

The University School of Education ‘Policy on Informed Consent’ (The University of Manchester, 2009) was referred to, in order to develop an ethically sound and suitable informed consent process. Comprehensive information (see Appendices K to N and P) was provided to all participants prior to agreeing to take part in the research, and was further discussed in person or by telephone to ensure that consent was informed. Language was kept as simple as possible and an individual who was neither a psychologist nor an educational practitioner was asked to read the information to provide feedback on
appropriateness of language and clarity. A student with ASC, who was not involved in the research, read the student letter and provided feedback regarding its clarity. The student letter used visual representations of the information presented, to aid understanding and to be more accessible for their needs.

3.10.4 Respect for vulnerable persons.

The student participants were a potentially vulnerable group of individuals, and so due regard was given to ensure that they were emotionally and developmentally able to assent and participate (see the criteria in Appendix F and full ethical good practice statement in Appendix KK). The participants were established service users of the educational provisions engaged in the research, and the experienced views of the practitioners who worked with them, and where appropriate EP colleagues, were considered in establishing their emotional ability to participate.

Care was taken to develop processes and information that would meet the needs of the students, but also not to be patronising.

In case students became distressed, interviews were carried out with familiar adults nearby, either at school in a room with preferred/familiar staff nearby or at home with parents in another room. The familiar adults were asked to be available to the student following the interviews in case there was a need for discussion or debriefing. Informal debriefing took place after the research interviews, whereby the researcher checked upon the participants’ emotional wellbeing and was available for any questions from the participants if required. All participants were encouraged to contact the researcher by telephone or email if they wished to reflect upon their responses or discuss any concerns.

3.10.5 Respect for privacy and confidentiality.

Participants were given assurance that all information provided would remain confidential and that no names, personal details or identifying factors would be attached to the data. All names and identifying factors from the data, written recordings and audio recordings were anonymised. The data were stored securely, with paper records being deposited in locked cabinets, and electronic data being stored on an encrypted USB drive. In accordance with the requirement of the University ethics committee, data will continued to be kept this way until it is destroyed 5 years after the end date of the study.

Although a right to confidentiality was asserted, all participants were advised that this was with a caveat that any information disclosed that raised concern about possible harm to the participants (or others) would need to be discussed with the appropriate parties, such as the
researcher’s supervisor and/or local authority or health professionals. This occurred when instances of bullying and potentially serious mental health needs were referred to in several of the interviews regarding the students. In these instances, details were checked with participants, and associated school and health care professionals to ensure that issues had been managed appropriately so that the participant was not at risk of harm. The participants concerned were informed of this at the time and were in agreement with this process.

3.10.6 Voluntary participation.

There was a possibility that potential participants may have perceived a power imbalance between them and the researcher and thus felt obliged to participate. All efforts possible were taken to ensure that participants were treated as of equal status and that this possible perception was not manipulated in gaining appropriate, informed consent (and assent in the case of the ASC students), co-operation and continued participation in the research.

For instance, letters to parents and students were kept as informal as possible (within the required processes), and participants were given choices, such as where they wished the interview to take place. Consent was sought for all participants in a manner suitable to their levels of understanding and functioning, and every effort was made to ensure that participation was voluntary.

Participants were advised that they had the right to withdraw at any stage without detriment to the services they receive, and in this instance all information collected so far would be removed from research records. This was reinforced throughout the process.

3.10.7 Procedures should avoid harm.

All due consideration was given to taking account of participants’ needs and to preventing possible emotional distress. The researcher was alert to the signs of possible distress, which had previously been discussed with the parents and school practitioner, and presented options to the students during the interview processes that allowed them to stop if they appeared emotionally distressed or to be having difficulty with the process (see Appendix AA). This was not required, however. The experience and professional knowledge of the researcher in working with this group of young people was utilised to full effect in ensuring that approaches were employed that managed the risk of possible emotional destabilisation.

As the nature of the research touched on sensitive issues, consideration was taken regarding these factors throughout the process; discussion was not pressed and would have been stopped if necessary. For instance, on one occasion student two mentioned a past
experience of ‘bullying’. The participant was asked if he would be willing to discuss this further, but shook his head; he received reassurance that this was acceptable, the researcher confirmed his wellbeing at that time, and he was asked if he wished to continue with the interview. The participant indicated that his parent and teacher were aware of this issue and so he was advised that this would be raised with them to ensure that he was safe from harm. Further discussions with the participant’s parent and teacher took place to ensure that the episode of bullying had been addressed appropriately, and that the student was not ‘at risk’.

As parents may have experienced emotionally upsetting times with their child, this was also taken into account in discussing past events, and care was taken to avoid distress and to ensure that parents knew they could stop the discussion if they needed.

3.11 Time-line and Time Budget.

A proposed time-line for the research was developed which is attached in Appendix LL. This changed during the course of the research due to various factors such as researcher illness, work placement commitments, and delays in elements of the research such as recruitment of participants. Changes to the originally-proposed time line are highlighted in the far right column.

An overview of the research budget is shown in Appendix MM.

3.12 Operational Risk Analysis

During the planning stage of the research, possible operational risks were assessed and a table of these is presented in Appendix NN.

3.13 Summary of Methodology

This chapter of the thesis has described the research methodology and ontological and epistemological position. A critical realist approach was taken to this qualitative study using a multiple case study design with embedded multiple units of analysis. Theoretical propositions and rival explanations were considered and purposive participant sampling methods utilised. Use of semi-structured interviews along with card sort prompts, documentary evidence from student records, and the researcher diary comprised the data collection. A six-phased model of thematic analysis was used to analyse the data, and thematic networks used to collate and illustrate the themes. Reliability was considered through elements such as clearly described processes and an audit trail, and validity through processes such as using multiple sources of evidence, participant validation and
triangulation through EP colleagues. Ethical factors were considered such as voluntary participation, informed consent, avoiding harm and respect for privacy, vulnerability and confidentiality.
4 Results

4.1 Chapter Introduction

This chapter provides a description of the research findings in relation to each research question. A brief background to each case study is provided followed by findings from the thematic analysis presented as thematic networks, as described in chapter three. Each thematic network will be described in detail and supported with illustrative excerpts from the research data. Discussion regarding the presented themes will take place in chapter five.

4.2 Presentation of results

The previous chapter described the lengthy process of data analysis, coding, and development of themes. Reduction of these led to a core set of themes pertinent to the research questions being subsumed into thematic networks for each case. Data from multiple case studies may typically be presented case by case, followed by a cross-case synthesis. However, Yin (2009) suggests that in multiple-case studies the entire reporting of results may be given to the cross-case analysis with none to individual cases.

In this study, a large amount of detailed data was collected; presentation of these within the confines of the thesis word count proved challenging. Discussions were held between the author and the University supervisory team regarding the management of this; it was felt that further reduction of themes needed to present all cases within the results would compromise the cogency of the data and the aims of the research. It was agreed that reducing the data further would not allow the detail required to enable these aims to be met, and would not provide sufficient clarity and fine-grained detail to add to the existing knowledge base. For instance, literature suggests that factors such as change, routine, transition and social skills difficulties contribute to difficulties for students with ASC. However, it is the specific detail regarding these factors that will set this research apart and provide additional knowledge in terms of considering the specific needs and strategies for students with ASC and anxiety. Reducing the data further would lose this level of detail.

Another option considered was to reduce the number of cases presented in order to be able to report all findings from the individual cases. However, it was felt that this would be neither ethical nor desirable in terms of fairness to the participants who had contributed their time, and the spread of data from across the four cases. Each case brought its own unique elements to the findings, although there was a good degree of commonality across the four cases, which would have led to repetition in the presentation of the findings.
Therefore, for the purpose of reporting results in this thesis, a decision was made to present the cross-case thematic networks only within the main text, along with illustrative examples and detail of any exceptions and differences from within the four cases.

Thematic networks for each case are presented within Appendices OO to RR of this thesis and a full breakdown of the process of analysis showing how themes were arrived at, using one case as an example, is presented in Appendices CC and GG. The process of cross-case synthesis is presented in Appendices HH and II.

The thematic networks were created by linking the global themes to the research questions with organising themes being used to arrange the basic themes into clusters of similar features.

A colour shading system was utilised to illustrate the levels of theme, with global themes being the darkest shade and basic themes being the lightest. The illustrative examples were attributed to each participant by case, using P for parent, S for student, SP for school practitioner and R for extracts from the research diary regarding specific students. For instance, P1 represents the parent from case one, S2 represents the student from case two, SP3 represents the school practitioner from case three, and R4 would be extracts from the research diary regarding student four. For interviews with more than one participant a postfix e.g. ‘a’ or ‘b’ has been used.

4.3 Vignettes for cases

4.3.1 Vignette for case one.

At the time the research took place, Ali was age 13 and a Year Eight student at a medium sized LA-maintained Roman Catholic secondary school. Ali was diagnosed with ASD during year one at primary school. He gained a statement of SEN prior to his diagnosis (which has been maintained since), and received teaching assistant support at primary school. During his time at primary school Ali presented with worries which gradually increased with age. This was recognised prior to him starting secondary school education and support was put in place to aid his transition. Ali’s anxiety was seen to be particularly prevalent during the first year of secondary school, but gradually decreased during the course of the year and was considered to be more manageable in Year Eight. At secondary school Ali had access to a range of SEN supports from one-to-one support in lessons to weekly pastoral support from a ST outside of lessons. It was not possible to identify any one main type of specific intervention provided to Ali at school, but a range of ecological and environmental supports were provided.
4.3.2 Vignette for case two.

At the time of the interviews Matthew (also known as Matt) was a 15 year old Year 11 student at a medium-sized voluntary aided Church of England secondary school. He received a diagnosis of ASD during year eight of secondary school when he was age 12, but concerns regarding his social, communication and behavioural presentation existed since pre-school and he received additional support at primary school. Matthew had a statement of SEN which was given during 2006 when he was at primary school. Matthew had a history of anxiety since primary school, which became particularly prevalent during his late primary school and early high school years, during which time he received support from CAMHS services. Matthew and school staff reported that since towards the end of year eight, Matthew’s anxiety began to gradually decrease and be more effectively managed, and at the time the study was conducted was far less of a concern. Within the last two years preceding the commencement of the study, Matthew was perceived to have been less anxious at school and has developed increased self-esteem. One specific type of intervention was not discernible within the support provided to Matthew at secondary school. However, a variety of one-to-one, small group and social skills support had been provided based upon his individual needs.

4.3.3 Vignette for case three.

Ryan was age 16 and in year 11 of a medium-sized all-boys voluntary aided Church of England secondary school at the time of the research. He had only received a diagnosis of Asperger’s syndrome in Year 10, at age 15. Ryan was at the School Action Plus stage of the SENCOP and did not have a statement of SEN. He did not receive specific additional support at primary school and has moved schools during his primary and secondary education several times due to family circumstances. Ryan presented with a history of difficulties with social interaction, communication and behavioural needs since primary school, along with anxiety and mental health needs such as depression. Ryan’s anxieties began during primary school, but became more pronounced during his later primary and early secondary school years when he accessed some support from CAMHS regarding this. His anxiety had continued throughout secondary school, but was considered by his parents and school to have become very slowly more manageable. During the last year a decrease in his worries and increase in confidence were reported as being more apparent by Ryan, his parents and school staff. No one particular intervention was identified in the exploration of effective support for Ryan, although a range of small group and pastoral support were perceived to be effective in his support at his current secondary school.
4.3.4 Vignette for case four.

Megan was age 12 at the time of interview and was attending Year 7 of a small to medium-sized all girls LA maintained secondary school. She was diagnosed with Asperger’s syndrome in Reception year of primary school at age four. She received a statement of SEN in Reception year of primary school which had been maintained since and she received some TA support at primary school. Megan had experienced anxiety since pre-school and was diagnosed with an anxiety disorder in reception year of primary school; her anxiety had continued since and she received ongoing support from CAMHS. She also presented with worries regarding her transition to secondary school. At the time the study was conducted, her anxiety was said by her parents to be well managed, and both they and her school SENCo reported that her worries had decreased during the last year. It was not possible to identify one specific intervention within secondary school that was used to support Megan, although CBT approaches were deemed to be effective in supporting Megan outside of school. Megan received one-to-one TA support since attending secondary school, and accessed a variety of additional social skills and pastoral support outside of lessons.

4.4 Thematic networks linking to research question one

Research question one considered ‘What are the perceived difficulties and needs of students with ASC who show signs of anxiety in the mainstream secondary school setting?’ Two cross case thematic networks were used to answer this question, as presented below.

4.4.1 Global theme: recognising factors contributing to anxiety.

Figure 4.1 (over) presents the first thematic network which illustrates a global theme of ‘recognising factors contributing to anxiety’. This network has nine organising themes and 34 basic themes, and depicts how various factors within school were perceived to impact upon the anxiety experienced by the students. It was considered that identifying these would enable the needs of the students to be more effectively met.

4.4.1.1 Organising theme: managing change.

The organising theme of ‘managing change’ was represented by the basic themes of:

- Transition to secondary school;
- Daily transitions;
- Change or disruption to routine;
- Change in classes/rooms;
- New or changed staff; and
- New and unfamiliar experiences.
Figure 4.1: Cross Case Thematic Network 1: Recognising factors contributing to anxiety
All participants and documentary evidence very strongly identified change as a significant factor contributing to the anxiety of the students within school.

‘Transition to secondary school’ was highlighted as a theme; for instance Ali’s school practitioner stated, “he stressed about coming to the school” (SP1b). Matthew described how “The whole experience of actually moving to high school was quite traumatising to me” (S2); and he explained that,

It was a new area so first I didn’t know where everything was so it was kind of confusing and a bit embarrassing to ask people where things were. There wasn’t really a map anywhere except for in some areas of the school… and it was just new people (S2).

‘Daily transitions’ within school, such as from class to class, were also highlighted as a theme; for instance, when asked what was anxiety-provoking for Megan, her parent said, “Transitions. That can be the transition from primary to high school, that can be transitions between lessons, transitions between lessons and lunchtime” (P4).

‘Change or disruptions to routine’ was also seen to cause anxiety for the students, for example: “anything that’s different to the normal routine” (SP1b); and “anything that’s slightly outside routine throws him” (P3b). Ryan gave an example of this as exam time, saying,

The main thing that is a problem is when things I’m used to change. Like the way exam time was a little bit worrying because I came off from going to school, it was on the odd day that I was going back in which was a little bit worrying because I thought I wouldn’t wake up by the right time and things like that and miss the exam (S3).

Particular elements of change at school that caused anxiety were specified across all cases, such as ‘change in classes/rooms’ and ‘new or changed staff’. These could be one-off daily changes or changes from year to year, for example: “Changes and sort of moving from year group to the next group, the transitions, changing a teacher, who was going to be his form teacher” (SP3). Parents’ comments regarding this issue, included:

She will worry about little…not knowing which room she might be in if there’s a room change or if there’s a supply teacher, not knowing them. Yeah, if it’s a new teacher or if it’s a change last minute or any changes to her routine (P4).

Supply teachers were particularly mentioned by several participants in all cases and Ryan specified, “Well it’s usually mainly teachers that are supply teachers that they don’t understand I prefer to be left alone rather than tend to be pulled into the group” (S3).
‘New and unfamiliar experiences’ were also perceived as a cause of anxiety for all the students. For example Megan specifically identified that “Trying, like, new things when I’m not sure of them” (S4) was a cause of worry; and Matthew’s parent said that,

…) something new in English or doing something new in IT, anything to do with something new he would get stressed on, something he’s not known or done before. Like venturing into the unknown really he don’t (sic) like. He likes to know stuff beforehand but anything that he’s taught, if anything is given new and even if it’s taught he will still worry, say ‘Oh, oh’ because he would have his own fixation on what is and what isn’t (P2).

4.4.1.2 Organising theme: unstructured time.

The organising theme of unstructured time was raised as a contribution to anxiety for all students except Matthew; however, structuring his time was seen as being of benefit to him (see section 4.5.1.2, to follow), so it might be assumed that unstructured time was an area of difficulty for him too, although perhaps not a specific worry.

The basic theme of ‘unstructured time and lessons’ was identified, as both unstructured time during school in general (e.g. lunch and break times), and unstructured lessons, were deemed to be worrisome. The latter was mentioned specifically in regard to Ryan, whose practitioner commented that anxiety was caused by “unstructured times such as if you had an unstructured lesson, so the music lessons he found particularly difficult where they had to work in groups and design their own band and make their own music” (SP3). Practitioners working with Ali stated that, “His issues are often not – I think we might have already said this – but not around class time, it’s downtime” (P1a); and documents for Megan specified, “Due to the severity of her difficulties she continues to require a high level of support during structured and unstructured times to help her access the curriculum and reduce anxiety in school” (EP report for S4).

4.4.1.3 Organising theme: environmental and sensory factors.

The following basic themes represent the identified organising theme of ‘environmental and sensory factors’ being perceived to contribute to anxiety for the students:

- Crowded, noisy and busy places;
- Noise sensitivity;
- Sensitivity to smells; and
- Being bumped into.
These were identified as contributing factors for anxiety in all students except Matthew. ‘Crowded, noisy and busy places’ were a source of anxiety for the other students; for instance, for Ryan, “Queuing up and going through the crowded corridors at school was quite difficult” (P3a); and for Ali, “again unstructured times so it can be a problem…because of the hustle and bustle and everyone doing the way (sic)” (P1).

The theme of ‘noise sensitivity’ was highlighted as a factor which led to anxiety. For Ali, “The fire alarm is very, very distracting and distressing for him” (SP1a); and for Ryan as follows:

Practitioner 3: …the buzzing of the computers, which I couldn’t hear, that there was computers in the room that we used to use, I couldn’t hear them but he would some days say that he didn’t like being in the room because of the noise of it.

Researcher: Did that seem to be more when he was anxious or did it seem to be the same?

Practitioner 3: No when he’s not stressed he could cope with it but when he was stressed it would become deafening to him.

’Sensitivity to smells’ was also identified as a contributing factor to anxiety in school for Megan and Ali, with Ali’s practitioner giving an example as follows:

When he first started we were told that he was sensitive to smells and it would have an impact on his behaviour. Well food technology rooms are just here so they’re cooking, if the door’s open you would smell it easily and he was quite agitated I think when they were doing something with apples (P1a).

Megan had a particular anxiety regarding toilets, of which sensitivity to smells was one factor:

Parent 4: Toilets are a big worry for her as well.
Researcher: In what way?
Parent 4: She won’t use toilets unless she’s prompted but school have been very good with that and she has got a designated toilet – a staff toilet – that she can use on her own.
Researcher: Right. Is it because of who’s in the toilets, what they’re like, or cleanliness or…?
Parent 4: It’s the smell, it’s whether or not they’ve been flushed, it’s selecting which toilet to use, it’s if somebody else is in there as well. There’s lots of factors for toileting.
‘Being bumped into’ or being touched or knocked, even by accident, was a concern for the three students, with Ali’s behaviour and anxiety often being attributed to busy times, “because he got bumped in the corridor” (P1a). Megan’s practitioner stated, “She doesn’t like to be touched. If somebody is brushing past her, if it’s a busy place, she doesn’t like that” (P4).

Ryan was also sensitive to other stimuli, for instance, “if the room was too hot or too stuffy or the lighting was faint and the more anxious he was the less he could tolerate all those sort of things as well.” Additionally, “The lack of tolerance of maybe the lights or the heat, the warmth in a room...” (P3). However, these triggers were not identified for other students specifically and therefore have not been included as a specific theme.

### 4.4.1.4 Organising theme: academic pressures and expectations.

An organising theme of ‘academic pressures and expectations’ arose from the sub themes below:

- Completing homework;
- Own and others’ academic expectations; and
- Exams.

‘Completing homework’ appeared to raise anxiety for all the students; for example Megan would, “become anxious about work, in school and homework” (P4 report for an annual review); and for Ali, “task (sic) and homework, this is a big issue so he worries and gets frustrated” (P1).

General academic expectations of the students, and from others such as parents and teachers, was raised as a factor contributing to the students’ anxiety. For instance, “There’s a lot of talk in school about their target levels and reaching your target levels and Megan gets very anxious if she thinks she’s not reaching her target levels” (SP4). Matthew in particular had difficulty with his own expectations:

I don’t think he wanted the other boys to ever think that he couldn’t do something so I suppose there was some level of-- I’m just trying to think like with tests and things he always wanted to be up there at the top (SP2).

Exams were a further source of anxiety for all the students. For Megan, “Exams are a big worry for her because she’s a perfectionist. It has to be right” (P4); additionally, Ryan, “got himself very stressed and agitated over the exams last week and still not quite himself” (liaison notes for S3).
In addition, Megan specifically found certain lessons anxiety provoking; for instance, “Maths, I think, tends to cause her more anxieties than others” (SP4). However, this was not raised as a specific factor for other students and has thus not been included as a cross case theme.

**4.4.1.5 Organising theme: negative peer behaviour.**

The organising theme of ‘negative peer behaviour’ was a very significant theme for all three male students, but not Megan. This is represented by three main basic themes as follows:

- Bullying;
- Teasing and name calling; and
- Being excluded by peers

Bullying arose as a particular theme and was mentioned by all participants in Ali, Matthew and Ryan’s cases, with the exception of Ali’s practitioners, who said, “I’m not sure that he even thinks about it” (SP1a) in relation to bullying. Ali himself worried about bullying, saying he was anxious, “because why are they bullying me? I’ll get hurt one day” (S1); and he additionally mentioned bullying as follows:

Student 1: The kids are just bad to me.
Researcher: Bad to you. What do you mean?
Student 1: Bullying or swearing.
Researcher: Oh dear, that doesn’t sound good, what would they do?
Student 1: They swear and like bully me.
Researcher: When you say bullying can you tell me any of the things that might happen?
Student 1: …just push me around or something.

The practitioner for Ryan specified that he would become anxious as,

he’d have nobody to sit next to, that people would pretend to be his friend and then be nasty, he was subject to bullying and people name calling and teasing because he reacted and the people who were worried about being bullied and teased would bully him as there’s a very definite pecking order in an all boys’ school and he was the bottom of the list in that class (SP3).

Parents also noted the bullying as a reason for anxiety within their children, with Matthew’s parent reporting incidents of cyber bullying, such as: “Well one incident when he went to his first school disco someone actually filmed him at the disco doing something and they put it to You Tube” (P2).
Practitioners tended to refer more to ‘teasing and name calling’; for instance,

Practitioner 2: He also got probably some teasing from the other boys because they were probably jealous of his ability in maths. He was very, very good, very quick, very quick to understand things that were happening particularly with numbers. He’s been on the maths challenge team and things like that so in a way he was probably identified as a bit of a geek by the others.

Researcher: And was he conscious of that do you think?

Practitioner 2: Not all the time but there were times when the comments did get through to him and he didn’t feel comfortable with it and that’s when he would be more stressed.

The researcher witnessed this herself in regard to Ali, and recorded it within the research diary as follows:

I actually witnessed peer ‘teasing’ (bullying) myself whilst walking down a corridor with Ali (which I subsequently reported). Whereby a peer asked for a hug (something Ali is inclined to do) in a mocking voice then laughed after Ali walked by. Ali walked faster, kept looking behind him or down to the floor in an anxious manner (R1).

Being excluded by peers was also raised as a cause of anxiety by students, practitioners and parents. For instance Ryan’s parent stated that, “They wouldn’t let him join in with anything, they told him he was weird and a freak were the worst ones at the time. They called him gay. Any name they could think of to exclude him” (P3a). Documentation available regarding Ryan identified that, “Ryan is finding drama difficult. No-one wants to interact with him. Generally a bit down” (liaison notes for S3). Matthew highlighted that, “I was never included in anything and the times which I was included they never really wanted to talk to me….I just got used to it and it was like saddening for me” (S2).

4.4.1.6 Organising theme: social situations and interaction.

The organising theme of ‘social situations and interaction’ being a contributing factor to anxiety was also raised as a significant theme within all cases. This is represented by the following basic themes:

- Difficulty with social understanding;
- Socially interacting effectively with peers;
- Working with others in lessons;
• Difficulty making friends;
• Peer conflict; and
• Peers not following the rules.

A basic theme of ‘difficulty with social understanding’ was arrived at through evidence from all cases. For example Megan’s parent described how,

Social difficulties are always difficult for her. She worries about what to talk about and how to answer people…she does struggle with what people mean. You know, like, especially girls: ‘I’m never playing with you again’ She takes that very literally and then she questions, “Why would they say that?” And so she does struggle with things like that socially (P4).

Matthew described how he was anxious about being, “always confused about things and trying to understand. Like locked up in a cage and stuff like that” (S2).

‘Socially interacting effectively with peers’ was also a cause of anxiety. For instance: “Mixers at school, end of the year gatherings where all the people meet up” were a worry for Ryan; and, “he avoided going to them because he wouldn’t interact in that” (P3b). Ali would become anxious about socially interacting with people from school outside of the school environment; “Seeing somebody, for example, it’s very common, you go to the supermarket, you see somebody, one of his teachers’ cars parked so he get anxious, he doesn’t want to see him because he has to say hello and so many times…He keep worrying, he may go in supermarket come out and sit in the car” (P1).

Additionally, ‘working with others in lessons’ was a theme whereby students were anxious about working with groups in lessons. Such as Megan, “can get quite anxious when she’s asked to work in a group where it’s not of her choosing. She likes to work with her friends” (P4). This was reflected within the other cases, except that unlike Megan, the other students were not perceived to have friends to work with in classes until supports were put in place to enable this (see sections 4.5.1.6 and 4.5.1.7).

‘Difficulty in making friends’ was raised in all cases except Megan’s. For instance, Matthew’s practitioner noted that, “Certainly as an individual with no apparent friends that was one of the problems he had in year seven was his inability to make friends” (P2). When asked what made him anxious Ryan specified, “Trying to make friends” (S3).

‘Peer conflict’, such as conflict between the students and their peers and between other peers was also a theme that contributed to anxiety. Megan was perceived to be, “not able to
cope with conflict and can become very anxious and upset when her friends fall out” (ST report for S4).

Matthew’s practitioner raised how, even within his friendship group, this was a worry:

The nurture group was never an easy ride if you like in that it was constantly, even within that group, patching and repairing. They’d fall out, somebody would have done something or said something that upset somebody within the group so the lady that was running the group was constantly repairing friendships within the group and leading them through how to make friends and keep friends (P2).

Additionally, ‘peers not following the rules’ was raised as a worry for Ryan, Matthew and Megan, with Megan’s parent explaining,

Other children were a big part of her worries; that they weren’t doing what the teacher would say they should do and she would worry endlessly about what other children were doing…Yeah, she worries that they’re not following the rules because then she questions whether she’s got the rule correct herself… and then she worries ‘Are they doing it wrong or am I doing it wrong?’ (P4).

**4.4.1.7 Organising theme: negative thinking patterns.**

The organising theme ‘Negative thinking patterns’ was a significant theme across all cases and reflects the basic themes below:

- Perfectionism;
- Worry about making mistakes;
- Self blame;
- Pessimism; and
- Dwelling on past negative events.

‘Perfectionism’ or striving to be the best was a worry for all the students, for instance Ali “gets frustrated when he cannot achieve - wanting perfection” (IEP for S1), and Matthew highlighted how, “usually I’d like think in my head that I could have done better and it would just have like kept me for the rest of the class” (S2). However, this was not just in relation to academic work. For instance, when asked what made Megan anxious, her parents stated the following:

Parent 4: Missing school.
Researcher: Okay, so if she’s sick or something like that?
Parent 4: Yeah, she… Only 100 per cent attendance is acceptable so she’s had two occasions where she had to see her doctor in school time and that made her very worried that she wouldn’t get 100 per cent attendance.

‘Worry about making mistakes’ also linked to this for the students, such as, for Megan “Worrying about getting things right. That’s always been a major thing… worrying about getting the right answer in…very reluctant to participate in case she got it wrong or everything always had to be right” (P4). Matthew was perceived to be held back in his school work due to this, as were all of the students; for instance, “Still hasn’t managed to put pictures on his art book as he is worried about getting it wrong” (liaison notes for S2).

Matthew and Ryan specifically also seemed to ‘self blame’ for factors such as social and peer difficulties; for instance:

It was all the time when I was in class just hypothesising about different things which I was like doing to see if that was like making people do stuff to me….yeah I was always thinking that it was something I was doing that was making them do it (S2).

He felt he was different and he…why other children didn’t like him, why they picked on him that was something he dwelt on quite a lot. What was it about him that made the other people not like him and pick on him and him not to be able to have friends? (P3)

Additionally, information about these two older students highlighted ‘pessimism’ as a theme linked to this. For example, Matthew stated that “all the things which I had about all the bad things that was just making me feel as if I was the reason why it was bad and that just made me pessimistic about everything I did” (S2). Ryan’s parent specified that,

It’s only recently that he’s been more positive because he got asked to do an essay at primary school about where will you be in ten years time and he handed the piece of paper to the teacher and he said ‘I don’t need to do this because in ten years time I’ll be dead’ and he was very, very down on himself, which is when we first got him referred to CAMHS (P3a).

Ryan was also perceived to be ‘dwelling on past negative events’, which was included as a due to the strength of the theme throughout his case interviews, an example being, “as I say he was probably dwelling on things and incidents and he could come back to that a lot...” (P3).
4.4.1.8 Organising theme: difficulty processing and managing feelings.

‘Difficulty processing and managing feelings’ was another dominant organising theme across the cases, made up of the following basic themes:

- Build up and overload of thoughts and feelings;
- Internalising feelings;
- Difficulty understanding their own feelings;
- Difficulty expressing worries and feelings; and
- Managing feelings effectively.

A ‘build up and overload of thoughts and feelings’ was expressed within the cases, particularly by Matthew and Megan. Matthew shared, “The more I thoughted (sic) about it the more I was worried. It was kind of like an endless loop of worrying” and that, “all the bad things that happened to me I just put them away and they were all building up to a point where I just couldn’t take any more” (S2). Megan drew on a body outline regarding her thoughts (see Appendix Y and figure 4.2 over) and stated:

Student 4: It’s just, like, loads of thoughts that, like, I don’t even remember because there’s so many at once (draws).
Researcher: Okay, so there’s just lots…
Student 4: Yeah (draws).
Researcher: …bombarding you?
Student 4: Yeah. Just like…(draws).
Researcher: All over? Right. I see, so lots of thoughts all just getting too much. Is that right?
Student 4: Yeah, a lot too much.

Figure 4.2: Megan’s Drawing Regarding Over-Thinking
This linked to ‘internalising feelings’ by the students within all cases; for instance: “With Ryan I think he repressed a lot of his emotions and things” (SP3).

‘Difficulty understanding their own feelings’ and ‘difficulty expressing worries and feelings’ were also highlighted as basic themes for all students. For instance, the interviewer asked, “can you tell me when you feel worried, what does it feel like?” Ali answered, “I’m not sure” (S1). Megan’s parent was asked, “would she tell you that as well, that she was sad, or not?” They replied, “No, she couldn’t verbalise that” (P4). Ryan’s practitioner explained,

I don’t think he could probably distinguish much between what was the emotional and what was the anger, you know what was the sort of feelings of frustration and what was sort of the feeling that nobody understood him and his life was so awful (P3).

4.4.1.9 Organising theme: home circumstances.

‘Home circumstances’ was identified as an organising theme, with ‘worry about home circumstances’ as a basic theme. This was specific to Ryan and Matthew, but was felt to be a distinct theme for both. As an example, Matthew expressed how this contributed to his anxiety:

Researcher: Are there any other things that used to make you feel anxious or even still do?
Student 2: It was how it would happen after school, what would happen at home and how I would interact with things which I do at school like at the time my mum was like really ill and acting all stressed because of all the things happening in the family and that was like putting forward until when I was at school.
Researcher: You’d worry about that at school?
Student 2: Yeah and feelings that I’d have from family, that were kind of interlinked with conversations where I was always quite nervous and thinking about how at home it was all gloomy and how at school it was the same, there was no way for it to have actually stopped.

4.4.2 Global theme: recognising the signs and impact of anxiety.

The second thematic map in relation to research question one (figure 4.3 over) summarises the main organising and basic themes within the global theme of ‘recognising the signs and impact of anxiety’. This relates to the perceived presentation of the anxiety within the students and the impact of the anxiety upon them within the school environment. Nine organising themes and 45 basic themes were identified, as follows.
Figure 4.3: Cross Case Thematic Network 2: Recognising the Signs and Impact of Anxiety
4.4.2.1 Organising theme: physiological manifestations.

The organising theme of ‘physiological manifestations’ was represented by the basic themes below. These were perceived to be signs that the students were anxious and ways in which the students presented when feeling anxious or worried:

- Sleep difficulties and tiredness;
- Nocturnal enuresis;
- Altered eating habits;
- Nausea;
- Unusual internal feelings, aches and pains;
- Shaky legs;
- Feel hot, perspire or go red;
- Rashes and changes in skin tone; and
- Muscle tension and stiffness.

‘Sleep difficulties’ when anxious were highlighted in all cases, the impact of this being ‘tiredness’ at school. For example, with Ryan:

Parent 3a: He struggles to get to sleep, he has to have music on to go to sleep but even with that he struggles to go to sleep.
Researcher: Does it seem to be worse when he is anxious?
Parent 3a: Yeah. Sometimes he just doesn’t get to sleep and he’ll come down the next day bleary eyed and say ‘Oh I don’t feel good ’cause I’ve not had any sleep’. Ryan’s teacher stated, “he would seem very, very tired sometimes, coming to school really completely washed out and tired and curl up” (SP3).

‘Nocturnal enuresis’ when anxious was also a factor for Ryan and Matthew, for example: “on some occasions he did bed-wet when it got really bad” (P2).

‘Altered eating habits’ were noted within all cases: there were reports of Ali, Megan and Ryan eating very little when anxious; and of Matthew eating more and eating selectively:

…another thing he used to do when he was anxious he would comfort eat and also he would only eat one particular thing in comfort eating and he would eat it all the time and when I would give him something of a change to eat he wouldn’t eat it, and he would only then, drinks wise… it would only be one particular drink and it used to be in like a sports bottle thing (P2).
Nausea and stomach ache was raised in all cases too e.g. when anxious, Ryan was reported to experience “…really bad stomach ache, dizziness and literally feels as if he’s going to be sick, very rare occasions he’s actually sick but Ryan never complains of being ill” (P3a).

All students except Matthew also described ‘unusual internal feelings, aches and pains’, for instance:

Student 3: Well a lot of it is a pain there (indicated to his side.)
Researcher: A pain down your side?
Student 3: Yeah and then most of the time I get massive like shocks across (indicated up his arms).
Researcher: Up your arms I think you’re saying.
Student 3: Most of my body.

Student 1: Like oh I’m just getting, you know, ‘I can’t..I’m really worried what’s happening?’
Researcher: Yeah so when you’re really worried, you touched your tummy there, does it feel funny in your tummy?
Student 1: Yeah.
Researcher: Yeah? Like, how can you describe it to me?
Student 1: Just weird.

Both Megan and Ali specifically described ‘shaky legs’ when anxious; for example Megan said, “Sometimes my legs go all shaky and wobbly” (S4).

Students, parents and practitioners also described how the students ‘feel hot, perspire or go red’ when anxious in all cases. Ali’s parent described how he “goes red in the face, as I say he cries, he becomes sweaty” (P1). Megan said, “my hands go all, like, sticky” (S4).

‘Rashes and changes in skin tone’ and ‘muscle tension and stiffness’ were also reported signs that Megan, Ali and Ryan were anxious. Ryan’s practitioner explained “he was anxious…he’d tend to be very pale, very pinched in his face or very tight, all his muscles were very tensed”, and, “He tends to get a lot of rashes and skin complaints so which would be worse, red blotches getting very itchy all over when he was anxious or upset about things as well” (SP3). Megan described, “sometimes my hands stiffen up as well. Like, I won’t be able to hold a pen” (S4).
4.4.2.2 Organising theme: outward emotional expression.

An organising theme of ‘outward emotional expression’ of anxiety resulted from the following basic themes:

- Crying;
- Sadness, upset or distress; and
- Presented differently.

‘Crying’ and ‘sadness, upset or distress’ were reported by parents and practitioners for all students when they were anxious. For example, Ali’s practitioner stated, “he will openly cry, very, very distressed” (SP1a). Megan’s parent reported that she was “quite often tearful... and she’d just do like a silent crying where she’d just have tears but nothing else” (P4).

It was also noted by practitioners that students presented differently when anxious, but they were not always able to specify exactly ‘how’. For instance, one reported, “you could see he was upset. You could see that he wasn’t happy” (SP2). Matthew also noted outward changes in himself when anxious, saying, “Even though I didn’t quite show it much of the time people knew that I was having different feelings about things just by how I was acting, my facial expressions, tone of voice etcetera” (S2).

4.4.2.3 Organising theme: difficulty with emotional regulation.

A pertinent organising theme was ‘difficulty with emotional regulation’ which was made up of the following basic themes:

- Extremes of behaviour;
- Outbursts of behaviour at home;
- Easily angered or frustrated; and
- Physical outbursts toward others.

All of the students were said to display behaviours that were perceived to be a response to their anxiousness. Anxiety-related behaviour at school was reported as a concern by adults for all the students with the exception of Megan. She, like the other students, displayed ‘extreme behaviours’ at home, however, “…her behaviour in school is generally very controlled, difficulties in school or unresolved worries can cause very extreme behaviours at home” (pen picture for S4). With respect to her ‘outbursts of behaviour at home’, Megan’s parent commented,
A lot of it was at home. Only very occasionally it over spilt into school. She was very strict with herself about keeping it together in school and it would boil over at home a lot, but occasionally it would spill over when she couldn't control it (P4).

Being ‘easily angered or frustrated’ at school was described by students, parents and teachers with regard to all students, except Megan. For instance, Matthew described how,

There’s been a few times where I’ve spiked out and just hit someone. Like once in drama club it was an activity where we were all following each other and everyone was trying to follow me to try and get me agitated I just literally pushed everyone out the way and just left the classroom (S2).

He explained, “I felt like it was everyone against me and it just made me frustrated and just spiked out” (S2).

‘Physical outbursts toward others’ were described for all the male students at school; for example it was perceived that when anxious, Ryan had “lashed out at people, thrown things around, tossed chairs and tables, destructive really” (SP3). Sometimes, difficulties controlling feelings and anxieties could lead to serious incidents, as follows:

Practitioner 1a: he can be walking, people are walking left and right, supposedly, on both sides of the corridor and Ali would just go down the middle maybe or he’d be on the left and if there are people in the way he’d just barrel through them…He might be bumped so he’s turned round and just grabbed the first thing whether it’s a girl in Year 11’s hair, which was an example, and he’s pulling at it ferociously. We had it on the CCTV, you know this girl, your sort of height he pulled down to half height.

Practitioner 1b: Because it was busy.

Practitioner 1a: And he didn’t cope.

Researcher: So did he go for her just sort of purposefully or just didn’t know what to do?

Practitioner 1b: She were (sic) in the way.

Practitioner 1a: No he just went to the first thing around him…

Practitioner 1b: …he’s bothered about getting from here to here and pushing out the way anything that gets in his way.

Practitioner 1a: Yeah but what I mean is if he was anxious and somebody was causing him a problem…

Practitioner 1b: If he was anxious, yeah.

Practitioner 1a: …he’d shove them out the way.
4.4.2.4 Organising theme: impact upon emotional wellbeing.

The organising theme of ‘impact upon emotional wellbeing’ was derived from the following basic themes:

- Low mood;
- Signs of depression; and
- Feeling unable to cope.

Students, parents and practitioners referred to past incidences that were perceived to impact upon emotional wellbeing for the students. ‘Low mood’ and ‘signs of depression’ were perceived to have been present in all students with the exception of Megan; these feelings were attributed to anxiety by the students, parents and practitioners. For example, Matthew’s parent linked a period of anxiety to mental health issues that Matthew had experienced during his early secondary school years, saying, “he would become quite frequently withdrawn, but at the period of anxiety which would link to severe emotional and mental health issues” (P2). Ryan’s practitioner also linked his anxiety to impacting upon his well being saying, “he seemed at some times very, very depressed, not happy with his life at all to the extent that I was quite worried... the school and myself were very, very concerned about his wellbeing at that time” (SP3).

Students also experienced ‘low mood’, with comments made by a TA in Ali’s daily liaison notes stating how he had expressed that he was having a “black week” during Year seven. Students also reported feeling unable to cope. Ali expressed that at times in the past he had felt, “I can’t cope with this anymore, oh I can’t” (S1); and Matthew also said that, “There was (sic) some times where I just fully broke down” (S2).

4.4.2.5 Organising theme: poor self perception.

Poor self perception was illustrated as a significant theme for all cases within the data, incorporating the basic themes of:

- Poor self confidence;
- Low self esteem; and
- Negative self concept.

All the students were perceived to display ‘poor self confidence’, with Megan especially being unable to work independently due to her worries about making errors. This, in turn, was perceived to link to her lack of self-confidence. Her practitioner reported, “Megan can be very reliant on one-to-one support and lacks the confidence to proceed without reassurance and very structured guidance” (pen picture for S4).
Ali’s parent described, “His self-esteem obviously is affected so sometimes he says ‘nobody like (sic) me’” (P1). With respect to Ali, the researcher also noted: “Seems to have a very negative self-image and self-blame for his difficulties. E.g. ‘he needs to be nicer’” (R1).

Negative self-concept was also perceived to be an impact of anxiety by parents and practitioners; for instance, Matthew’s parent stated, “…he would say, ‘I’m useless, I’m thick, I’m no good,’ all the time and that was normally at the time when he was experiencing problems and even though I would reassure him ‘No you’re not thick, (or) stupid’” (P2).

4.4.2.6 Organising theme: impact upon social interaction.

The ‘impact upon social interaction’ of the anxiety for the student was identified as an organising theme, with the following basic themes:

- Increased difficulty with social relationships;
- Become uncommunicative;
- Become more withdrawn;
- Hiding away;
- Repetitive talk when anxious;
- Difficulty with reciprocal conversation; and
- Disengagement in lessons and group activities.

As well as being a perceived reason for anxiety, ‘increased difficulty with social relationships’ was also seen to be specifically affected by anxiety in the students, especially for Ryan, although data for all cases illustrated these themes. For example, Ryan’s practitioner explained,

…the social relationships and difficulties would get worse when he was anxious about things. If something had worried him at home or something had worried him outside the school or he felt something had been unfair in a lesson then if he went to the SEN social group at lunchtime then he could possibly be aggressive or dismissive or wouldn’t want them to sit next to him, he wanted a big space around him (SP3).

Ali’s practitioner concurred and said, “What was the impact of his anxiety?…Again is this our perception..right, because it would create problems with social and peer relationships but he might not perceive that” (SP1a).

All students would also ‘become uncommunicative’ and ‘become more withdrawn’ in response to their anxiety. For example, Megan would “just worry and not talk about things
and withdraw” (P4); and Matthew presented with “lack of communication, just very withdrawn and not communicating with you” (SP2). Matthew himself explained, “if you’d see me in crowds everyone would be like talking and I’d just be there silenced and in a sense of doing nothing” and “it would be just me thinking about everything else without actually focusing on what’s around me” (S2).

Ali, Ryan and Megan were also said to be prone to ‘hiding away’ when anxious; reports suggested that Ali would avoid people, illustrated by his parent saying, “he kind of hide (sic), you know”; and, “he pretend (sic) that he’s not seen them” (P1). Megan and Ryan were reportedly more likely to take refuge in small spaces, for example Ryan would “curl up in a ball, he’d hide in his bedroom” (P3a). Megan would retreat:

Parent 4: …withdrawing and needing to hide away. She’d need to make herself small.
Researcher: Okay. Could you describe that to me? What would she do?
Parent 4: She’d go into a foetal position and she’d try and cram herself into a very small place – under a table, under a bed – somewhere where she was very confined.

The students were also perceived to engage in ‘repetitive talk when anxious’ and have more ‘difficulty with reciprocal conversation’. The former was particularly raised by Ali’s parents and practitioners; for example, “he would be talking to a member of staff in a sort of agitated way: ‘Where, where are we going? What, what?’” (SP1a). Megan would have difficulty with holding reciprocal conversations when anxious:

Parent 4: Yeah, she’ll repeat things or she’ll talk about things that just aren’t relevant.
Researcher: More when she’s anxious than at other times or all the time?
Parent 4: Yeah, anxious.
Researcher: Okay. Are there any particular examples of things?
Parent 4: She’ll just try and change the subject. So, for instance, if she’s worried about going to the toilet or something she’ll start talking about “When we went to Spain when I was three…”

The students also showed ‘disengagement in lessons and group activities’ when anxious. For example Matthew’s practitioner described how he was “more withdrawn, in certain lessons perhaps not getting involved in, you know subjects” (SP2). Matthew explained that when he was anxious, “usually in a group I would just sit there, whenever people asked me I’d just give it them and just pushed them off away” (S2).
4.4.2.7 Organising theme: increased repetitive and autistic behaviours.

‘Increased repetitive and autistic behaviours’ was a strong theme derived from factors that were perceived to be evident when the students were anxious, or were an impact of their anxiety. Behaviours typically associated with ASC, such as some repetitive behaviour, sensory behaviours, and reliance upon interests were common for the students; these were identified within the basic themes below:

- More reliance on routine and ritualistic behaviour;
- Pacing;
- Sensory responses;
- Scratching and picking hands;
- Hoarding items;
- More reliance upon interests; and
- Fidgeting or fiddling.

All students were said to have ‘more reliance on routine and ritualistic behaviour’ when anxious. Ali, for example, would be “looking at the clock all the time” (SP1a); Megan would “become more fixated, more routine…” (P4); and Matthew would “have little rituals as well going on too, like he had a little ritual of getting up and going to bed as well” (P2).

Students would also engage in ‘pacing’ or ‘sensory responses’ to anxiety-provoking events. When anxious, it was reported that Ali would often “…do this marching up and down and like looking for, like as if he was looking for something” and Ryan would, “pace around a bit” (SP3).

However, there was a general lack of recognition of this link by Ali’s practitioners, for instance, shortly after a fire alarm test, his practitioner reported that Ali engaged in sensory behaviour, but did not link it to the stress of the event:

… it was raining very hard and there might have been--. I don’t think there was anyone on the yard at all except for Ali running round in circles like an aeroplane with his arms out. Obviously he loved it but I went to get him because this is morning break so it’s quarter past eleven, he’s got the rest of the day soaked through if he stayed out there and people are looking at him thinking ‘What on earth are you doing?’ I imagine but he wasn’t aware of that at all (SP1a).

Different anxiety-related behaviours presented in individual students. Of significant note, were Ali ‘scratching and picking hands’ when anxious; and ‘hoarding items’ when anxious by Ryan currently, and Megan historically.
He kind of keep scratching… you see him picking his, picking his... once he scratch his hand and it's just seems a superficial one but he kept on picking on it when he is anxious until he's left small marks and also the school have been telling him not to pick on them so every time he does, he does his homework or get into situation when he’s anxious he tend to pick on them other than other normal children when they pick on things when they’ve got nothing else to do (P1).

Practitioner 3: He picked things up, his pockets, I don't think he trusted people or anything with his possessions, he'd hoard, a real hoarder, and he'd keep them in the inner pocket of his blazer and in the lining of things.

Researcher: What sort of things then?

Practitioner 3: Little bits and pieces that he might have picked up. He would pick up an unusual shaped stone perhaps or a bit of blue tack, something that he'd found somewhere, a bit of silvery thing, he picked up one day a blade which obviously then got him into trouble because he then was showing somebody and flashing it around. He might have notes and bits of paper or his drawings which he wanted to keep safe from anybody else, those sort of things would be in, so the pockets were always bulging. That would be the more anxious the more things there would be.

‘More reliance upon interests’ when anxious, was also raised as a theme for all students. Ali would ask more questions about cars; Ryan would model-make; Matthew would “get very obsessed with Yugioh” (SP3); and Megan would become more reliant upon certain television programmes:

... now her big fixation is the Simpsons. She's watched every episode of every season. At the moment it’s absolutely fine. She just has to watch a couple of episodes before she goes to bed. If she’s very anxious it’s hard. She wants to do it 24 hours a day, but, like I say, at the moment she's doing very well. So a couple of episodes at night just fulfils that and, like I say, on anxious days she'll need to do it all day, every day (P4).

‘Fidgeting or fiddling’ was also increased for all students when anxious; for some, this was seen as a sign of their anxiety, for others a coping mechanism. For example, Matthew was aware that when anxious he would “fidget in class all the time” (S2). All’s practitioner reported, “if he was agitated he’d be like picking at the corner of a box behind you or something like that” (SP1b). It was reported that Ryan would begin “rocking, probably a little bit of rocking and clicking fingers, fidgety things” (SP3); and “playing with things, his hand
has always got to be engaged which is why they allow him with the Blu Tack because he’s still concentrating on what’s being done but his hands have always got to be... “ (P3b).

4.4.2.8 Organising theme: sub-optimal performance.

An organising theme of ‘sub-optimal performance’ was arrived at to represent the basic themes below:

- Not working to full potential;
- Increased disorganisation;
- Impact upon concentration and attention;
- Difficulty completing homework;
- Lack of independent decision making; and
- Reluctance to contribute in class.

Within all cases, when most anxious, the students were deemed to be ‘not working to their full potential’, which was perceived to have a subsequent effect upon their overall performance. For instance, Megan’s SENCo commented, “it obviously will affect her ability to work to the level that she is able to work at... because although she’s doing incredibly well, if she didn’t have the anxieties I suspect she possibly would be doing even better” (SP4).

Some factors were perceived to link to this such as ‘increased disorganisation’. Anxiety was also considered to lead to effects including a negative ‘impact upon concentration and attention’ and ‘difficulty completing homework’. With regard to Ryan, the researcher wrote “poor organisational skills noted from liaison notes. I cannot assume that these link to the anxiety, but they do seem to cause problems with doing homework which does in turn lead to anxiety” (R3). Matthew commented that he “couldn’t focus in class, I wasn’t getting homeworks (sic) done, not good” (S2); his practitioner also reported, “he had problems with attention and concentration, if he was in an anxious state then that’s what would have been impacted” (SP2).

‘Lack of independent decision making’ was a perceived product of the anxiety, particularly for Matthew and Megan, in whom this appeared to be linked to the previously mentioned worry about making mistakes:

He needs someone sat next to him when he is doing homework as he gets so bogged down in detail e.g. measuring boxes to the millimetre when doing a poster to ensure they are the same size. Went through 100 pictures rather than just selecting one as he has difficulty making a decision and needs an adult to help him select one
quickly, he kept selecting and erasing them over and over again (Liaison notes for S2).

She gets very anxious if she thinks she’s getting anything wrong at all and does spend a lot of time checking with her TA before she answers questions, before she’ll put her hand up, before she’ll put pen to paper sometimes (SP4).

‘Reluctance to contribute in class’ was also a reported impact of the anxiety in all cases, for instance within lessons Ryan’s practitioner described how he would “be sort of huddled into himself really within the lesson and not contribute anything to the lesson” (SP3); and Megan was also reported as being “very reluctant to participate in case she got it wrong” (P4).

4.4.2.9 Organising theme: risk of lowered attendance and exclusion.

Risk of lowered attendance and exclusion was an organising theme represented by the following basic themes:

- Reluctance to attend school;
- Returning home when anxious; and
- At risk of exclusion.

This theme was particularly relevant for Ryan and Matthew, but was mentioned in relation to ‘reluctance to attend school’ for Megan and Ali too. Matthew’s SENCo explained:

We had a couple of days, not protracted periods of time but there were days when he refused to come to school. Mum would ring and explain that he was stressed or something had happened and he didn’t feel he could come into school (SP2).

Ryan and Matthew would sometimes become so anxious at school that they would need to return home. For example, “some occasions he didn’t want to go to school and then he would worry so much that the school would phone and I would have to go and get him” (P2).

Ryan and Ali had also been considered to be at risk of exclusion due to physical outbursts toward others when anxious, as mentioned previously (section 4.4.2.3) Ryan’s parent mentioned on several occasions that he “would very well, would probably have been kicked out” (P3b) had it not been for the support he received as described in the next section.
4.5 Thematic Networks Linking to Research Question Two

The third and final cross case thematic network (figure 4.4, over) relates to research question two; this considers ‘What is perceived to be effective practice in supporting students with ASC who show signs of anxiety in the mainstream secondary school setting?’

4.5.1 Global Theme: perceived effective actions and strategies to address the anxiety.

This thematic network has been summarised by a global theme of ‘perceived effective actions and strategies to address the anxiety’ and comprises 15 organising themes and 61 basic themes. Practitioners, parents and students described actions and elements of within-school support that they perceived to have helped with the students’ anxiety.

Having reviewed the main types of intervention for students with ASC and anxiety during the literature search, the evidence from the data does not allow identification of any one specific type of evaluated intervention being used at school within the findings of this thesis (e.g. CBT). However, the literature also reports a wide variety of practices and interventions which are described in previous studies that have been considered to be effective in supporting students with ASC included within mainstream schools. The findings of this thesis highlight that a range of such contextual and ecological supports were provided within the schools, which were perceived to be effective in supporting the students. The findings provide a broad picture of the holistic practices and interventions used within the mainstream secondary school context.

4.5.1.1 Organising theme: well planned transition to secondary school.

An organising theme of ‘well planned transition to secondary school’ was identified with basic themes of:

- Tours of the school at quiet times;
- Extra familiarisation visits before transition; and
- Liaison with primary schools and parents.

This theme was mentioned as a perceived important factor in helping students manage their anxiety regarding the school transition in all cases except Ryan’s. This may be because Ryan did not have a diagnosis when he commenced secondary education; his needs were only identified once the school transition had been made.
Figure 4.4: Cross Case Thematic Network 3: Perceived Effective Actions and Strategies to Address Anxiety
Megan’s school especially, implemented a highly-structured and well-organised extended transition programme (for details see Ashton, 2008) which was thought to be highly effective by Megan, her parent and the school practitioner:

We also put in place the MOTH – the Moving onto High School – which is a transition programme that we’ve used for the last couple of years and that goes on in the second half of the summer term and we did five weeks on a Thursday afternoon. So for two and half hours we had six pupils, not always special needs, a couple of them were just vulnerable pupils, coming from primary schools totally on their own who we felt would struggle when they got here and during that time...(SP4).

Megan’s transition process involved Megan accessing subjects she was particularly worried about prior to her transition; she reported that this helped: “and, like, some subjects like PE and Science I wasn’t sure of, but on sampling day they made sure that my form did them (sic) two subjects” (S4).

‘Tours of the school at quiet times’ took place as well as ‘extra familiarisation visits before transition’ which were perceived to help the students with their worries. When asked what they thought had helped Ali with his worries, the SENCo specified, “he had a pre-visit with school on his own with his teacher from the primary school” and “we take them on a tour” (SP1a).

Liaison with primary schools and parents was also seen to be an instrumental factor in preparing for students’ entry to their secondary schools; the purpose of this was to provide all the necessary information to alleviate any student worries. For example, Matthew’s SENCo reported, “the worries were presented to us by primary school so they had existed in primary. We had transition meetings for him, they gave us a lot of pre-entry information” (SP2). In Megan’s case:

I did spend quite a lot of time at the primary school before she started and heard an awful lot about her anxieties, which seemed to be very great in the primary situation. So what we put in place before she started were lots of meetings with mum and Megan into school during the summer term of year six (SP4).

Then during the transition the old one-to-one and the new one-to-one had lots of consultations. They did lots of note making between themselves to make…so that she passed on all the information and the one-to-one spent time with Megan before she went. They spent time with me, so there was a lot of information sharing. Yeah and that was probably the biggest key and they got to know her beforehand and they had all the information of what to look for – the signs – from me and the old one-to-one and it worked (P4).
4.5.1.2 Organising Theme: structure, planning and organisational support.

An organising theme of ‘structure, planning and organisational support’ was identified across all cases comprising basic themes as follows:

- Clear structure, routine and predictability;
- Use of differentiated planners and diaries;
- Daily/weekly planning and guidance for change;
- Support with planning and reviewing homework; and
- Activities and tasks during unstructured time.

As might be expected for students with ASC, all cases strongly highlighted that ‘clear structure, routine and predictability’ reportedly helped all the students in relation to their worries regarding change. For instance, when asked what supports helped the students with their worries, example replies were as follows: “Definitely structure and routine” (P3a); and, “Structure and routine – I think that’s the biggest thing with Megan, is the fact that every morning she knows exactly what’s going to happen on that day…” (SP4).

Tools to aid structure such as planners, clear visual timetables and homework diaries, were used in all cases, and were felt to be useful in supporting the students with managing their worries. In all cases, standard school templates had been differentiated to meet the specific needs of the students with ASC, for example:

We have the school planners, which are very difficult for ASD children to manage because they’re a bit of a blank page really and they have to organise themselves through that planner so we created our own special planners. Some are based around behaviours, some are based around homework and organisation and Matt used the homework organisation one so if they’re on that particular planner it’s the TA or the teacher’s job to record the homework, it’s not Matt’s job so they hand that in, the teacher will record the homework so that it’s legible and there’s some proper instructions so at home if they have support at home with homework, mum/dad whoever has got some idea of what they’re supposed to be doing. There’s also much clearer tick boxes for when they’re going to do it, when they’ve done it and when they’ve got to hand it in. It’s like a structure for the organisation so yes he used one of those (SP2).

Ali showed the researcher his planner and discussed how it helped him to manage his worries about “what’s going to happen next” (S1) saying, “It’s good so I can know what happens” (S1).

At the time of interviewing, Megan, Matthew and Ali received ‘daily/weekly planning and guidance for change’ from TAs who met with them in the morning to discuss the day’s events. Megan and Matthew received this daily and Ali weekly, as follows:
The TA will take him. It’s Monday morning first thing, the TA will go down and they’ll get his planner and he’ll come out and he’ll have a few minutes with that TA to set him up for the week. ‘Are you up to date with your homework? You’ve not got your homework in? Right what can we do to help you get it--? When is it due?’ You can imagine the sort of things. ‘Is there anything you’re worried about this week? Let’s have a look at your planner. What’s coming up this week all that (SP1b).

The students all also received specific ‘support with planning and reviewing homework’ which was deemed to help with their worry; for example “we had some TAs who supported him, not a lot in class but it was more to support his organisation…he did need some support to help him to make sure that he wasn’t in trouble for not doing homework” (SP2).

An important factor shown within the data for all cases was also provision of ‘activities and tasks during unstructured time’, which was previously identified as source of anxiety:

We put in place a lunchtime safe place for him to go, a games club where he could come and where it was staff manned and there were games so it was giving him something to do in the unstructured times (SP3).

4.5.1.3 Organising theme: adaptations in lessons.

The organising theme ‘adaptations in lessons’ incorporated the basic themes of ‘printed class notes and instructions’ and ‘adapting lessons to take into account specific needs’.

Specific examples of these were mentioned within all cases and linked to the reduction of anxiety in the students. For example, Megan’s IEP specified that she would “benefit from printed class notes to help reduce anxiety” (IEP4), and Ali used a personal whiteboard:

I’ll tell you what we do do that he sometimes writes slowly and the instructions’ll be put on the board and he hasn’t got enough time to write them down so his teaching assistant, especially in maths, uses a little white board and she writes down what they have to do so when it’s rubbed off the board we don’t have all the panic. (P1b)

Matthew highlighted that teachers changed their teaching methods once he had disclosed his diagnosis of Asperger’s syndrome, “they were briefed about how Asperger’s actually works and they changed their ways of teaching”; and, “the teachers started to talk more in our language instead of like complex language” (S2).

4.5.1.4 Organising theme: a safe space.

‘A safe space’ was identified as an organising theme which reflected the basic themes of:
Taking a break from class;
A quiet place to go; and
A safe place with adult support at unstructured times.

In all cases, it was strongly perceived that having a safe place to go and ‘taking a break from class’ was an effective strategy in supporting the students with their anxiety, for example:

…it’s agitated or anxious in class we’d bring him away from that situation to settle, refocus and he may either go back in but more often he would stay out of that, if it was half way through, he’s out of the class for than less than half an hour and go to the next lesson so he’s got a fresh start as it were. (SP1a)

‘A quiet place to go’ was also considered to help with the anxiety in all the cases, as Ryan described:

Student 3: At school they’ve got a room that’s just made that’s a chill out room, that’s run by the learning support department.
Researcher: And what is it about that that helps?
Student 3: It’s more of a secluded room so I don’t have to be facing people straight away, I can go there and calm down and be able to go back.
Researcher: Can you describe that room to me? What’s in there? What is it about that room that helps?
Student 3: The fact that it’s mainly calm ‘cause there’s part there that are kind of like a classroom in it because it’s not always used as a five minute calm down type, it’s for certain people because they can’t go into lessons because it’s that worrying for them and it’s the fact that you can sometimes have other people there that can understand what you’ve just been through.

‘A safe place with adult support at unstructured times’ was also seen to be effective in supporting all the students with their anxiety; for instance:

We’ve always run a lot of lunchtime activities, which is there really as providing a safe place so like we do a games club and they play connect four, draughts, chess, that sort of game, which actually was the sort of thing that Matt liked doing because he was with adults, he was in a safe place and he wasn’t getting picked on (SP2).

4.5.1.5 Organising theme: use of anxiety management strategies.

The organising theme of ‘use of anxiety management strategies’ was identified within all student cases except Matthew. Although the specific strategies listed in the basic themes below were
not mentioned in regard Matthew, it was considered that overarching anxiety management strategies, as mentioned throughout this section, were in fact also implemented for him:

- Using creative activities and interests to redirect and distract;
- A card system for leaving class;
- Lying down;
- Having a drink;
- Using relaxation strategies; and
- Access to favourite or comforting items.

‘Using creative activities and interests to redirect and distract’ from the anxiety was mentioned in relation to Ryan and Megan specifically. When questioned with regard to what helped them when they were worried, the following were amongst those creative activities mentioned:

like, sometimes I just sit down and draw…I got this, like, colouring-in book but it wasn’t, like, stuff…a big chunky one that has, like, dogs and stuff in.. It was, like, a really detailed one with farm animals and stuff. Just focusing on that and colouring it in (S4).

Parent 3b: Artistic, he has his own little artistic things he’ll do--
Parent 3a: With blue tack and drawings. The white picture there is one of Ryan’s.
Researcher: And do you think that helps?
Parent 3b: Via the computer we do little stick figure scenarios.
Parent 3a: It does because he’s sort of talking to the stick figures, giving them a conversation.
Parent 3b: He’s not creative in terms of art, he’s no good at art but he’s found his own artistic creative side via the computer, the things he enjoys doing, making little stories and scenarios via stick figures and stuff like that.

All the schools allowed students to exit classes when anxious; ‘a card system for leaving class’ was used by all schools except Ali’s. Ryan described his school’s system:

Student 3: There are two of the cards, there was one that said you were going to the room and one that just said you were going to sit out of the classroom for five minutes or so, you used them depending on how worried or stressed you were and most of the time I hardly ever used the second card.
Researcher: Okay so the second card is that the one where you go somewhere else?
Student 3: You went just outside the classroom.
Researcher: Just outside the classroom and what happened then?
Student 3: You just had a few minutes to calm down.
Simple strategies such as ‘lying down’ or ‘having a drink’ were also perceived to help the students when anxious, specifically Ryan and Ali; for example:

Researcher: When you’re worried what helps you to feel better?
Student 1: Like drinking something.
Researcher: Drinking something? Okay, what sort of thing?
Student 1: Like water.
Researcher: Water, does that help you feel a bit calmer?
Student 1: Yeah.
Researcher: Okay, good. Is there anything else that helps when you’re worried?
Student 1: Maybe just doing that, drinking water and lying down.

It was indicated that ‘using relaxation strategies’ helped in supporting Megan and Ryan. Within the data, it is mentioned that Megan was taught these strategies at CAMHS (see section 4.5.1.13, to follow), and it appeared that these were utilised by Megan at school too, as Megan described using, “deep breaths and just focusing on something like…not about the worries. Focus on something else” (S4).

Megan, Ali and Ryan were all perceived to find relief when anxious in having ‘access to favourite or comforting items’, as illustrated below:

Ali has a locker and…it’s like a little shrine inside of obviously things that are precious to him. Lots of pictures of him when he was a baby, lots of things that he’s made and there’s stuff…when you open the locker it’s like these, there’s things stuck on the door and things all stuck up around the locker so whether…that's a comfort to him. And a little place he goes to, his little hermitage that he goes to when he’s stressed. (SP1b)

Parent 4: she has a happy box…I think she has a small version at school. Her happy box is here and that's, like, got squeezy toys in, wiggly toys, you know, fiddly things. When she’s very stressed she likes to lick things so there are things she can lick in there.
Researcher: So she has access to that if she needs it when she’s stressed?
Parent 4: Yeah.
Researcher: That’s really good. So who came up with that idea then?
Parent 4: I think that was something that came out of a brainstorming session with the previous specialist teacher and her old one-to-one and we made her this box, and a happy book she’s got as well, which is just photographs, a few written words in it, but they’re photographs of happy memories.
Researcher: Great. Then does she look through it when she’s feeling bad?
Parent 4: She can just look through and… I mean, one of the pictures is just this room because she likes this room, so at school she can just… It’s... They’re very
random pictures. Somebody else looking at it would think “What on earth’s this?”

4.5.1.6 Organising theme: peer support networks.

‘Peer support networks’ was identified as an organising theme in all cases, but especially Matthew, Megan and Ryan’s, with the following basic themes being highlighted.

- Mutual support from friends;
- Friendships with similar peers;
- A group identity; and
- Friends to be with at unstructured times.

‘Mutual support from friends’ was identified by Matthew and Ryan, and their respective practitioners and parents, as a particularly significant theme and something which had helped them to move forward from their worries. Matthew explained,

It helped because we could share compassion with how it actually felt and how he usually dealt with I would do too and things that he had trouble with I’d tell him how I dealt with. It helped us go through school quite a lot (S2).

Both Matthew and Ryan developed friendships with peers with similar needs, through groups established by their SENCos; ‘friendships with similar peers’ was very significantly deemed to have helped with their worry. Ryan’s parents explained, “we’ve seen so much benefit from him being involved in the learning support group because he then started coming home and saying ‘Oh my friend said this’ and they were words we hadn’t really heard from Ryan” (P3a); and the support was reported as “…more about the fact that they are people having the same sort of issues. It’s not necessarily about the people themselves it’s more he’s associating with ‘they are similar to me, they have the same sort of problems’” (P3b).

It was felt that having ‘a group identity’ was a major factor in the students moving forward from their worries, as Matthew’s SENCo explained,

I really feel that that has been key to the success of not just Matthew but quite a few of those with those sort of emotional, social difficulties. The taking away of being a single person and giving them a place in a group, a group identity (SP2).

Megan’s friendship group did not include fellow peers with ASC but was also seen to be supporting factor: “she has made friends and she has got a friendship group so, again…that helps” (SP4).
‘Friends to be with at unstructured times’ was also raised as another support that served to ameliorate anxiety for the students; for example:

There was in the learning support we had like a friend circle in a way where everywhere which we went we usually had a few of us together, some people who were safe to talk to who wouldn’t really act weird with each other and that was a way for me to deal with places which like at break times where we could just hang out together and talk about things (S2).

It was noted, by the researcher, that Ali did not appear to experience these same supportive factors; and friendships were not mentioned by any of the participants within his case. The only mention with respect to Ali was his desire to make friends; for instance:

…but with girls he wants to be their friend, ‘Do you think they’ll be my friend?’ ‘Do you think they’ll be my girlfriend?’ With boys it’s hugging and he’s got himself in hot water with children who have not been happy about that (SP1a).

4.5.1.7 Organising theme: social skills support.

The organising theme of ‘social skills supports’ was established from the following basic themes:

- Small group social and communication skills work;
- Use of social scripts and visuals; and
- Friendship development support.

Help with social skills was identified within the data as being a supportive factor in relation to students’ anxiety in all cases. ‘Small group social and communication skills work’ was identified as a positive support for all the students; this was delivered through an ASC ST who regularly visited the schools attended by the participants. The support is described below:

Parent 4: The Specialist Teacher does that with her. They have like a circle. It’s called circle something…and they do that on a Monday lunchtime.
Researcher: Do you think that helps?
Parent 4: Yeah, it does. It gives her confidence.

Practitioner 2: In the nurture group compromise, learning to compromise, learning to be perhaps a little bit more flexible because he’s quite rigid sometimes, conflict resolution, how to work through a problem, getting on with people, you don’t have to like somebody but you can get on with them.
Researcher: So teaching the ins and outs of all those kind of complexities.
Practitioner 2: The complexities of social communication and understanding how to get through it with a degree of comfort I suppose without it becoming a major worry, yeah.

Researcher: What sort of things did it help you to learn about then?
Student 2: How to talk with people mostly because beforehand I wasn’t really a talkative person but now I’m willing to talk with people...like how to speak normally and how body language can help, even though body language is not really that good for me because I’m not good at showing via a body.

‘Use of social scripts and visuals’ was also reported for Ali and Megan, whose school employed approaches such as ‘Social Stories’ and ‘Comic Strip Conversations’ (Gray, 1998). These strategies were used as follows: “Social Stories, Comic Strip Conversations and happy box to help relieve anxieties. These provide visual representations of events and make concrete understanding more likely” (pen picture for S4).

She (the ST) did a card that he had in his pocket and it was a prompt card and it basically was a laminated card explaining that if people want to hug you they may not be wanting to do it as friendship, they may be doing it because they’re teasing you and other people might be watching and they’re finding it amusing so you need to be careful of that and it basically gave him instructions didn’t it? (P1a).

‘Friendship development support’ was also highlighted by all the schools, except Ali’s, as being perceived to support the students with their worries. This incorporated elements such as how to make, develop and keep friends and work in groups, for example: “we worked on specific topics, things like listening to other people, how to be a good friend and helping him develop those sort of skills so I think he benefited quite a bit from that as well” (SP3); and, “She’s (the ST) done a lot of friendship work with them and how to work in groups” (SP4).

**4.5.1.8 Organising theme: positivity and acceptance.**

This organising theme of ‘positivity and acceptance’ was identified within all cases, except Ali’s, as being a supportive factor in helping the students with their anxiety. It reflects the basic themes:

- Using strengths, talents and interests;
- Staff positivity about personal characteristics, strengths and skills;
- Use of rewards and reinforcement;
- Mentoring younger students; and
- Disclosing ASC positively to peers and teachers.
‘Using strengths, talents and interests’ was perceived within the three cases to increase self-confidence and self-esteem, which in turn was believed to help reduce students’ anxiety. This was especially true for Megan, for whom it was considered that the positivity and social standing of having a talent that is highly regarded was a factor:

... she has something that not everybody else has got I think that... It’s difficult putting it into words but I think that really helps her that...and that's an area that, comparing Megan to perhaps one or two other children on the autistic spectrum, if they haven’t got an absolute strength in something within their peers they can be seen as very different and not fitting in, but because she has something that most children in high schools want, which is to be a star in the PE department, it gives her kudos I suppose (SP4).

‘Staff positivity about personal characteristics, strengths and skills’ was also identified as a theme that was perceived to support the students’ positive self-image and negate their worries around this. This was evident for Ryan and Matthew, but appeared to be particularly the case for Megan, as noted in the researcher’s diary:

School 4 are very positive about the student, her personality and her skills. This seems to impact greatly upon her self esteem. She seems to worry less about getting things wrong when it is constantly reinforced that she is doing well and that she is skilled and likeable (R4).

‘Use of rewards and reinforcement’ was also perceived to support the students in managing their worry, perhaps through challenging their negative self perception. Matthew’s parent stated, “What helps his anxiety? Rewards and reinforcement” (P2); Megan's parent concurred, “She gets a lot of merits and certificates.” When asked if they thought if this helped with her anxiety or not, the reply was “Yeah. She gets very proud of herself” (P4).

For Matthew and Ryan ‘mentoring younger students’ was perceived as a positive means for them to develop their confidence; and to help with their anxiety through self-reflection regarding what had helped them. This was described for Ryan as follows:

As he went through the school introducing some of the younger ones that were having similar difficulties that he’d had earlier on he was able to offer some good advice and help them and also because he was so good at some of the games, the card game that they played, Yugioh cards, and knew all the rules and things that he actually could monitor the others doing it and help them or teach them and it gave him a role within another group with some of the younger ones there (SP3).

An additional theme, strongly perceived to have been a factor in helping Matthew, Megan and Ryan to gain confidence and become less worried by other students’ negative reactions,
reflected them gaining or understanding their diagnoses and ‘disclosing ASC positively to peers and teachers’. Their parents, and the students themselves, described this:

He kind of moved forward the minute he actually got his diagnosis. He became more positive, he kind of felt like he’d been given his peace and he knew where he fitted in and he knew why he didn’t fit in with everyone else. It was almost like being told yeah that’s your language and yeah no one else understands it but it’s a very good language. Instead of feeling like he was odd, didn’t fit in, was worthless, he felt like he was important and he was almost special (P3a).

Student 2: Mostly I think most of the teachers were actually briefed beforehand that they knew that I had the Autism but they didn’t know what type it was, that was until about a year ago when I actually told the PD teacher that I had Asperger’s and then everything changed….we were doing topics about mental disorders and I just came out saying that I had Asperger’s and everything changed.

Researcher: How did it change?

Student 2: Everyone acted different towards me because they researched about what Asperger’s was and they all started being more friendly and the bullying literally just stopped there.

Researcher: When you say ‘they’ do you mean other kids in the class?

Student 2: Yeah the people who originally did bully me they now knew what I actually had and it just stopped.

Researcher: Right that’s good, so maybe having that understanding for those other students actually helped them to get you and be nicer to you.

Student 2: Yeah. If I’d said it earlier that I had Asperger’s probably most of the bullying which I had beforehand probably wouldn’t have happened.

Researcher: Would you say then that it would be a good thing for other students to know if somebody has Asperger’s early on so that they understand or not?

Student 2: Yeah because if people knew that some people in the school had Asperger’s then they would be more considerate towards you and know that you’re feeling much more pain than what they’re actually having.

However, in Ali’s case there appeared to be more of a ‘within-child’ approach by staff, i.e. assumption that the cause of the difficulty lies with the child rather than considering alternate environmental and social contextual factors (Lauchlan & Boyle, 2007); this was recognised by the author and recorded in the research diary. For instance, “Strategies and information are very within child e.g. ‘I will not allow other students to make fun of me’ was written in a Social Story (R1)” and,

There seems to be a lack of understanding /acknowledgement of what is behind behaviours and a focus on reactive actions. For instance, with the situation with the student trying to hug people, staff guidance says ‘No! No! No! Under no circumstances
allow Ali to hug staff or students’. Reasons for him needing to do this seem not to have been addressed nor suitable alternatives for these needs found (R1).

Ali identified “Just getting respect”; “getting like certificates or badges”; and “being included and accepted at school” (S1) as being helpful to him. However, there was no other identified evidence within his interviews or within other data that supported that these strategies were used.

4.5.1.9 Organising theme: adult support with anxiety management.

‘Adult support with anxiety management’ was a pertinent organising theme encompassing the following basic themes which were identified across all cases:

- Adult reassurance;
- Open access to trusted staff to discuss worries;
- Support to express worries and emotions;
- Recognition of signs and triggers by staff; and
- Staff support to identify and manage thoughts and feelings.

‘Adult reassurance’ was a theme for all students, which seemed to help them to cope with their anxiety at school. For instance, Ali’s SENCo explained,

He’d be stranded and ‘What do I do? I don’t know what to do’ whereas if there’s always somebody to touch base with and reassure that this is where you should be. ‘It’s not a problem, come on now son, let’s go to class, room 21 you know where that is’ and he’d be alright then (SP1a).

‘Open access to trusted staff to discuss worries’ was also perceived to help the students with managing their anxieties. For example:

Having a safe place to go and a person that he could go to and knowing that person would be there and would listen so whilst he didn’t actually have a TA that he was attached to as such he knew who in school would listen if he turned up and said that something, whatever had gone wrong so that was really important (SP2).

In addition, it was considered that ‘support to express worries and emotions’ helped all the students to move forward from their anxieties and to further develop social skills:

…it was helping him to say that it was okay to be angry, you know when he did have a friend that it was okay that if that friend annoyed him to tell that friend and it didn’t mean that was the end of everything, which I think he sort of equated that getting annoyed that was it, you know very black and white in all of that (SP3).
An important theme for parents and practitioners in effective support for the students’ anxiety was the ‘recognition of signs and triggers by staff’:

She (the TA) is very astute at picking up whenever Megan is anxious and if things are not just working right, but she is also very good at picking up before something happens, because once she knows what the activity is going to be in that lesson she will pick up if that could create a difficulty for Megan...and she’ll plan accordingly (SP4).

‘Staff support to identify and manage thoughts and feelings’ was also considered to be an effective means of supporting the students with their anxiety, as was described by practitioners and students for all cases, with examples including:

Helping him to take that step back and think about it, which he did as he got older, did start to do, helped him because rather than thinking they’re saying that, X has said this to me because he hates me and I’m the worst person, he can actually say well it’s probably because I did…and he’s just a bit cross with me and people who are friends can just be, you know fall out and get annoyed...See those things rather than him dwelling on something that he thought (SP3).

Researcher: Is there anybody you can go to when you’re worried?
Student 1: There is quite a few people...
Researcher: Yeah. Does that help or not?
Student 1: Yeah it does. And being helped to understand my worries and how to deal with them.

4.5.1.10 Organising theme: staff deployment and approach.

An organising theme of ‘Staff deployment and approach’ represented the basic themes as follows:

- A range of flexible support;
- High levels of support regardless of funding;
- TA support at the start of the school day;
- Discreet support in lessons;
- ASC Specialist Teacher support;
- Full access to the SENCo and SEN team throughout the day; and
- Reliable and thorough TA.

These themes were identified by the researcher within and across different case studies. For example, a range of flexible support was apparent within all the schools; this was specifically highlighted by Ryan’s practitioner as a perceived means of effective support:
I was quite flexible really, we'd just see what happened when you got there, you couldn't really plan because you'd plan and then somebody'd slam through the door and it would be like oh this has been a bad day and we need to just address what's happening (SP3).

Students themselves recognised this; for instance when Matthew was asked about what helped with his worries, he stated “There was nurture group, there was learning support, there was like the buddy of friends circle” (S2).

‘High levels of support regardless of funding’ was identified as a positive element in providing effective support for the students by practitioners or parents at all the schools. For example, “they put the funds available to deal with things for Ryan knowing that they weren’t going to get this” (P3b), and “when they have trouble with getting fundings (sic) on the statementing they find whatever they have to find within themselves to give the need to my kid...” (P2).

‘Discreet support in lessons’ was an occurring theme; although students were considered to need high levels of support, the way in which this was used was considered to be important. The perception of parents and practitioners was that this should be on hand when the students were anxious, but that it should be provided in such a way so as not to cause more anxiety and to promote independence. For example, “she’s (the TA) always there for her, but she also has the ability to step back in class and let Megan manage for herself and develop independence” (SP4).

‘Full access to the SENCo and SEN team throughout the day’ was considered to be an important factor in all cases in effectively supporting the students with their anxiety. Matthew described this as follows:

Miss X (SENCo) she was the main person who actually helped because everything was passed onto her and she was the one who made everything happen. Yeah if there was anything bad I could just go to her or the SEN team in general, anyone there (S2).

A ‘reliable and thorough TA’ was raised as a theme within Megan’s case, but was a particularly substantial running theme throughout the data, as illustrated below, and has thus been included within the cross case network:

Practitioner 4: I think the fact she never leaves a stone unturned.
Researcher: Right.
Practitioner 4: she will follow everything through and she is very organised and if she says she’s going to be somewhere at a certain time she will make sure that she is there. She never fails to meet Megan first thing in the morning. If she isn’t going to be there for whatever reason she makes sure that somebody else is going to
be there. She never fails to find out exactly what's going to happen on that school day and to pass that information on to Megan.

4.5.1.11 Organising theme: staff knowledge and understanding.

‘Staff knowledge and understanding’ was an organising theme represented by the following basic themes:

- Written information to all staff regarding needs and strategies;
- Staff understanding and recognising needs;
- SENCo and specialist teacher guidance for staff;
- ASC training for staff from external specialists; and
- A TA with good experience and understanding of ASC.

Providing ‘written information to all staff regarding needs and strategies’ for the students’ anxiety was perceived to be an effective strategy by most parents and all practitioners, for example:

When the boys come in year 7 I do a pen portrait in quite a lot of depth for anybody who I’ve got a lot of information for, so your statemented children. All staff whether they would teach him or not would have that because obviously in high school you get cover or in those days teaching staff were covering so you might turn up to your maths lesson and it's not your teacher but it might be somebody who if they know some of your needs can de-stress the situation…probably about a side of A4 with some understanding of his difficulties, some useful strategies… and it goes to all staff…. then as they go through if something happens or like in Matt’s case he got the diagnosis of Asperger's we do updates so they’ll be memos on the staff system (SP2).

‘Staff understanding and recognising needs’ was seen as a key theme in supporting the students, and was perceived by parents and practitioners to develop positively over time. For example:

The longer we had him here the more we got to know him, the more staff understood who he was, where he was coming from they got used to treating him as an individual more and therefore it relieved his anxieties because they would take account of his needs (SP2).

‘SENCo and specialist teacher guidance for staff’ was identified as a theme, not directly in relation to addressing the anxiety, but in supporting staff to understand the students’ needs, as parents and practitioners reported: “The specialist teacher who ran the nurture groups, she gave us a lot of advice, feedback, suggestions, strategies, attended meetings, reviews, she was I think very pivotal in helping us as a school” (SP2); and, “…she (the SENCo) wrote it down and she said I’ll have to look into that for when Ryan starts and it was little things like that” (S3a).
‘ASC training for staff from external specialists’ was similarly considered to be important in enabling the effective support of the students, for instance: “we got somebody in to come and give us some training on Asperger’s so we had whole school training not specifically to Matthew but specifically what is ASD, how does it affect children, what can you do?” (SP2)

In Megan’s case support from a ‘TA with good experience and understanding of ASC’ was a dominant theme and has therefore been included in the cross case network:

Practitioner 4: The TA that is working with her has a good understanding of children on the autistic spectrum. She had worked in the past with children on the autistic spectrum. So we were looking for a TA with experience in autism and X was looking for a job working as a TA with a child on the autistic spectrum so we managed to put those two together.

Researcher: So do you think that experience of the TA helped?
Practitioner 4: Definitely, yeah.

The same SENCo practitioner also highlighted the strength of all the staff in supporting Megan’s needs, as follows:

I think the staff have played a big part in this. I think they’ve taken onboard, but again, because Megan is such a delightful young lady I think it’s made it easier for them to take everything onboard and to do things in the way that suits Megan because she is such a delight (SP4).

4.5.1.12 Organising theme: good home-school liaison.

‘Good home-school liaison’ as an organising theme encompassed the following basic themes:

- Regular communication between parents and school;
- Home and school developing and sharing strategies; and
- Supportive family

This was identified as an important theme in effectively supporting the students’ anxiety across all the cases. ‘Regular communication between parents and school’ was raised by all practitioners and parents, who utilised means such as phone calls, notes, in direct contact such as meetings and home visits, and ‘home-school books’; for example:

I think the biggest thing is home school communication. We have a little book in Megan’s school bag that we send notes daily so that they’re aware of, you know, the slightest thing. They can keep an eye and vice versa (P4).
This is not perceived to be immediately effective in directly addressing the anxiety, but in the overall support of the students’ needs in this area, as Megan’s parent explained,

I think the most important thing is information sharing, being open and sometimes it’s hard as a parent to say ‘Oh well, she does this’, but you have to be open and share everything that you can think of, and they can get over these barriers (P4).

‘Home and school developing and sharing strategies’ was also a theme for all cases except Ali’s, with parents perceiving that strategies being passed between home and school was effective in supporting their children. For example: “with them I’ve learnt from it too as a parent to take on what they’re doing and I do it at home” (P2); and, “we have the SENCo working with us and bringing a system into place that has worked for Ryan” (P3a).

In addition a ‘supportive family’ was seen by the school practitioners to be a facilitating factor in supporting the students in all cases. For example, when asked what they thought helped in supporting Megan with her anxiety, the SENCo replied, “I think the fact mum is very willing, she is very supportive, she comes in to everything she’s invited to” (SP4).

4.5.1.13 Organising theme: external support.

In considering rival explanations, an organising theme of ‘external support’ was identified; This represented basic themes of ‘CAMHS involvement with anxiety management’; and ‘medication’ as factors that were perceived to be effective in supporting the students with their anxiety.

Three cases were identified as having received forms of external support, with Matthew, Ryan and Megan all having received input from CAMHS. Both Megan’s and Ryan’s parents identified effective elements of the support provided:

Parent 3a: There was once. He had, I can’t remember the name of the scheme. They were running a scheme where they had a personal trainer and he did brilliantly because he was getting all his aggression out…

Parent 3b: Because it was one on one.
Parent 3a: …and it was one on one and this focus was between the two of them.
Parent 3b: It was part of CAMHS wasn’t it? It was a one on one situation where he dealt with this…a youngish guy that went to the gym at the leisure centre.
Parent 3a: That was brilliant but unfortunately they ran out of funding for it. Yeah it didn’t continue because he did actually see a big improvement in himself.

Parent 4: That one helps.
Researcher: So ‘Helping her to identify and manage her physical emotions, feelings and thoughts’.
Parent 4: Yeah.
Researcher: Who does that and how’s that done?
Parent 4: The Clinical Psychologist at CAMHS did a lot of that with her about recognising
when she’s getting stressed and what…trying to work out what it was and…
Yeah, and the Play Therapist has done work with her on that and she is very
good at recognising. She knows now that funny feeling in her tummy is a worry.

Both Megan and her parent identified elements such as taking medication for anxiety and sleep,
CBT, scaling approaches, and relaxation strategies as having been effective in helping her
anxiety:

Researcher: What sort of things might you do?
Student 4: Like, I sometimes clench my fists.
Student 4: Like, with X at CAMHS she said do that and then, like, relax and then do it again
for three seconds and then relax it.

Parent 4: They did a lot of numbers – one to ten.
Researcher: Like scaling?
Parent 4: Yeah, scaling of her worry throughout. We did, like, a worry
diary and it helped
her to recognise.
Researcher: So that was with CAMHS?
Parent 4: Yeah.

4.5.1.14 Organising theme: barriers to effective practice.

An organising theme of ‘barriers to effective practice’ was identified reflecting the following basic
themes:

- Funding process not seeing past academic achievement;
- Lack of funding; and
- Differences in responsiveness to need and guidance by teachers.

Barriers to effective practice were highlighted; not in terms of direct support for the students' anxiety from school practitioners, but with respect to the financial and documentary requirements considered to be necessary to facilitate effective support to help manage their anxiety. The lack of recognition of needs (e.g. anxiety) within statements of SEN and the statutory assessment process, and the subsequent lack of additional finances to fund the additional support required, were perceived to be problematic. Therefore, ‘funding process not seeing past academic achievement’ and ‘lack of funding’ were perceived to be barriers against provision of effective support for Matthew, Ryan and Megan:

even after he got the diagnosis they didn’t qualify for any money to help because he was deemed to be too intelligent, too good obviously which is stupid because a lot of
people with Asperger’s are quite bright in their right, but they have all the other needs (SP3b).

And people look at her academic results and think she doesn’t need any help and inside she was just falling to pieces to the point where she was selectively mute, she was doing the silent crying, she’d stopped fighting. She was just completely switched off. She would come home and sit in that chair with her big winter coat on zipped up to the top and she’d just stay there all night (P4).

I’m not convinced that the money that comes in with her statement covers her TA and the support that is put in place and all the clubs that we put on as a department but if we’re getting a child into this school I will put in whatever support I feel is necessary (P4).

Additionally, ‘differences in responsiveness to need and guidance by teachers’ was a factor highlighted within all cases as being a barrier to effective support. As an example, guidance was in place for all school staff regarding how to respond to the students effectively when they were anxious; however, the success of this was perceived to be partially dependent upon whether staff read and acted upon available guidance. In regard to school staff following guidance, Ali’s SENCo stated, “but with everything, some people might not do…” (P1a); Ryan’s practitioner explained:

And the fact that not all staff take it onboard, you know, although you can say if you shout at this boy he’s going to withdraw, he’s going to run away that they don’t always understand that he’s shut down and they think he’s being rude and cheeky and not answering them so the attitudes of staff and some of the staff who still expect everybody to do, you know, and treat them all the same. (SP3)

4.5.1.15 Organising theme: perceived positive outcomes.

In gathering the data, as well as asking participants what they perceived to be effective support, they were also asked how they felt this had been effective. This resulted in an organising theme of ‘perceived positive outcomes’, whereby participants identified positive outcomes that they attributed to the supports put in place. The following basic themes were identified:

- Like and attend school;
- Increased positivity and happiness;
- Increased confidence and enthusiasm;
- Less concerns and worry;
- Improved self-awareness and self-regulation;
- Improved social skills; and
- Progress and achievements.
It was reported that all students now ‘like and attend school’, unlike during their periods of anxiety. For instance,, “well I think that I’m glad that he’s here and not staying away. The fact that he wants to come is a positive” (SP1a), “that she actually wants to come to school and loves school and is happy” (SP4), and:

Parent 3b: I mean school refusal, in the early days he would try and avoid going to school because of things but now with structures put in place…
Parent 3a: He loves school.
Parent 3b: …he loves school because he knows there’s something there for him to go to.

‘Increased positivity and happiness’ was identified as a basic theme in all cases, with students, parents and practitioners indicating this. For example, “… just the fact that she is happy. Even though she is anxious she is happy (SP4)2, "We have good times as well. We have lots of good times. There’s lots of laughs (SP1b)”, and:

occasionally that he would report back that things were good, you know which was very, very rare for him. Initially everything was very, very black, there was nothing that was good whereas yes he’d had a good day, they’d enjoyed the games club, this had gone well, that lesson had gone well (SP3).

Students were also perceived to have demonstrated ‘increased confidence and enthusiasm’ due to the supports received. For example, Megan’s parent stated that: “Her confidence has grown and she is much more willing to "have a go" at things which challenge her” (P4 report for annual review). Ryan’s parent specified that:

His achievements I think bearing in mind he’s always said I’m not going to get to this point, seeing him not just getting to those points but the amount of effort and enthusiasm he puts into things now because I didn’t expect that but I think that’s the biggest thing. Seeing him show enthusiasm for things, other than computer games (P3a).

‘Less concerns and worry’ were also identified as a theme for all students except Ali. For example, Ryan expressed that: “I’m getting a lot less worried” (S3) and his parent that, “As he’s got older there’s been less incidences of problems, we’ve been called in to say he’s been involved in this we haven’t had that recently” (P3b).

Some students, primarily Ryan and Matthew, were also considered to have ‘improved self-awareness and self-regulation’. Matthew’s parent reported that “…he has understood his Asperger’s and Autism and realises that will not get in the way of what he wants to do in his life (P2)”, and Ryan that:
I’m a lot less violent than I was when I started because it used to be as common as once or twice a week that I’d get in some form of fight and now it’s I think over the last school year it’s probably been two or three times (S3).

‘Improved social skills’ were reported for all students with Matthew specifying that: “…I was quite nervous and I didn’t talk much but now I’m more expressive and I talk a lot (S2)”, and Megan’s teacher reporting that: “I have been impressed with Megan’s involvement in pair and group work. She has come out of her ‘shell’ and contributed really well to whole class discussions” (Teacher comments on S4’s yearly report).

Finally, ‘progress and achievements’ were reported for all students, and Matthew’s practitioner sums this up well with the following:

Well I’m just proud of Matthew because he’s completed his five years of statutory education here with his head held high, he’s going to get good results hopefully, he’s gone out there, he’s represented the school at things like the maths challenge, I always find him a very pleasant young man, I think we’ve seen him, it’s very hard to quantify a measure of his improvement socially, it’s not like doing a maths test but I think he’s made great progress and he’ll always have difficulties perhaps in that area and moving into the world of work he’s going to find as a challenge but he has got a skill set and he’s got experiences hopefully he’ll draw on from school that he can move into the world of work (P2).

4.6 Summary of Results

The research findings presented were derived from an in-depth exploration of the perceptions of experiences of four students with ASC, considering key features and elements of the experience, such as perceived effective support. Participants were able to identify perceived needs and difficulties which they considered to be important in addressing effective support for the students.

In relation to research question one, ‘What are the perceived difficulties and needs of students with ASC who show signs of anxiety in the mainstream secondary school setting?’, two global themes were created. The first, ‘recognising factors contributing to anxiety’, included the notably prominent themes of ‘managing change’, ‘social situations and interaction’, ‘negative peer behaviour’, ‘negative thinking patterns’, and ‘difficulty processing and managing feelings’. These factors were all perceived to contribute to the anxiety of the students, with basic themes of ‘change or disruption to routine’, ‘transition to secondary school’, ‘bullying’, ‘difficulty expressing worries and feelings’, ‘difficulty with social understanding’, ‘difficulty making friends’, ‘crowded, noisy and busy places’, and ‘worry about making mistakes’ being most pertinent.
The second global theme addressing research question one was that of ‘recognising the signs and impact of anxiety’. Particularly compelling organising themes were identified as, ‘poor self perception’, ‘increased repetitive and autistic behaviours’, ‘impact upon social interaction’, and ‘difficulty with emotional regulation’. These were made up of basic themes identifying signs of anxiety and related difficulties such as, ‘repetitive talk when anxious’, ‘physical outbursts toward others’, ‘sleep difficulties and tiredness’, ‘low mood’, ‘become more withdrawn’, ‘more reliance on routine and ritualistic behaviour’, and ‘impact upon concentration and attention’. These were all elements perceived to present when the students were anxious or be impacted upon by the students’ anxiety.

In relation to the research question two, regarding perceived effective practice in supporting students with ASC who show signs of anxiety, a safe space’, ‘peer support networks’, ‘social skills supports’, ‘positivity and acceptance’, and ‘staff knowledge and understanding’ were perceived to be particularly significant organising themes. Within these, specific strategies perceived to be effective in supporting the students with managing their anxiety were identified as basic themes, such as ‘daily/weekly planning and guidance for change’, ‘a quiet place to go’, ‘using creative activities and interests to redirect and distract’, ‘a card system for leaving class’, ‘a group identity’, ‘small group social and communication skills work’, ‘disclosing ASC positively to peers and teachers’, ‘support to express worries and emotions’, ‘SENCo and specialist teacher guidance for staff’, and ‘regular communication between parents and school’. It was evident from the data that perceived improvements in the levels and management of the students’ anxiety were attributed to actions and practices carried out within school and through school supports.

The findings across the four cases showed a good degree of commonality, yet each case brought its own distinctive features which will be discussed further in chapter five.
5 Discussion

5.1 Chapter Introduction

This chapter will discuss key findings in relation to the research aims with reference to relevant literature, prior research and psychological theory. The theoretical propositions and rival explanations will also be examined. The possible implications of the findings in relation to the students and parents, and the practice of schools, EPs and the LA will be explored. Potential future research will then be considered. Finally, limitations of the research presented within this thesis will be considered and reflections upon the role of the author within the research process will be discussed.

5.2 Success of the Research in Achieving the Study Aims

The principle aim of the study outlined in this thesis was to conduct an in depth exploration of the experiences of anxiety of students with ASC within the mainstream secondary school setting. Additional aims were:

- to identify the specific needs and difficulties of students with ASC and signs of anxiety within mainstream secondary schools;
- to explore what was perceived to be effective in supporting students with ASC and signs of anxiety within the naturalistic school setting;
- to elicit preliminary theory that could be tested in further research;
- to develop further understanding of experiences and support needs for students with ASC and anxiety within mainstream secondary school; and
- to add to the limited knowledge base of support and intervention for these students within this setting.

An embedded case study design was used which involved four cases and incorporated data from semi-structured interviews and documentary analysis.

Within section 3.5.2.1, the ‘Statement of Theoretical Framework Factors’ (Table 3.2) identifies success criteria for the study as follows:

- That information is gained regarding perceptions of ‘what works?’ which shows some reflection of the research propositions;
- That new information regarding perceptions of ‘what works?’ is gained which can be shown across participants, cases or sources; and
- That stated actions to increase reliability and validity are met within this process.

As discussed within chapter two, few studies were identified which focused upon mainstream secondary school students with ASC within the school context and upon anxiety. The data
collected in this study confirmed the findings of previous qualitative studies regarding students with ASC within mainstream secondary school in general (Carrington & Graham, 2001; Humphrey & Lewis, 2008a; Morewood et al., 2011; Tobias, 2009), and from those considering inclusion (Humphrey & Lewis, 2008b; Humphrey & Symes, 2011; Humphrey, 2008; Symes & Humphrey, 2010) and student progress (Osborne & Reed, 2011); with further detailed and triangulated evidence being provided.

On balance the aforementioned study aims have been accomplished as the data presented in the results chapter extends the current knowledge of, and provides detailed, fine-grained information regarding the needs and difficulties of students with ASC and anxiety and perceptions of effective support for them. These will be discussed further in section 5.3 below. The three factors indicating a successful study have been achieved, therefore the research can be considered as such. Additionally, section 5.6.7 (to follow), will present findings which are considered to merit further research.

The research also aimed to contribute to knowledge by considering how EPs can support the transfer of the research into professional practice and informing local settings and practice regarding effective support for students with ASC who show signs of anxiety within the mainstream secondary school setting. Within the study it was not possible to directly evaluate these aims as the research was not of an action research nature, whereby the implementation of findings was part of the research itself. However, section 5.6.4 will explore the possibilities for these aims to be met through implications for practice.

5.3 Discussion in relation to the Research Questions

Key findings are discussed below in relation to each of the research questions that the study attempted to answer, as follows:

Research question one: What are the perceived difficulties and needs of students with ASC who show signs of anxiety in the mainstream secondary school setting?

And,

Research question two: What is perceived to be effective practice in supporting students with ASC who show signs of anxiety in the mainstream secondary school setting?

There was a good degree of commonality within the features and patterns of the findings across the four cases. However, distinctive features were present within cases which were discussed in chapter four.

There were definite connections within and between the findings of research question one and two. For instance, identified factors contributing to the students’ needs (the anxiety) were
typically linked with the presenting difficulties related to the anxiety which the students experienced within school. In turn, it was apparent that these needs, contributing factors and presenting difficulties, not unexpectedly, were discussed by participants in relation to the effectiveness of the supports and perceived effective practice that was evidenced. It was apparent that contributing factors and difficulties were generally recognised in order that effective practice to support the students’ needs was implemented.

Each student experienced unique elements to their periods of anxiety and the contextual factors surrounding them, such as the type of school setting (e.g. mixed gender, all male or all female, small or medium sized, denominational or not), personal characteristics, family situation, gender, age and stage of schooling. However, after consideration, it was felt these contextual factors did not influence the findings enough to be construed as adversely affecting these findings. The similarities between the cases which led to cross case findings being arrived at outweighed any potential differences in context other than those unique factors mentioned hereafter.

5.3.1 Research question one.

With respect to the perceived difficulties and needs of the students that were explored, the units of analysis were the key features and elements of the experience of the anxiety episode from the perspective of the participants. Factors contributing to anxiety for the students, and the presenting signs and impact of anxiety, were recognised by participants as being intrinsically part of the specific needs and difficulties that they experienced within the school setting.

5.3.1.1 Change and lack of structure.

Managing change and unstructured time were identified as aspects of school life that caused anxiety for the students. This extends upon previous research identifying these factors as contributors to anxiety for students with ASC (Browning et al., 2009; Connor, 2000; Jones et al., 2008). Elements of change that are perceived to lead to anxiety have only been addressed in any detail within the recent work of Ozsivadjian et al. (2012), although their study was not specific to school. New and unfamiliar experiences, change in classes and rooms, change or disruption to routine, new or changed staff, daily transitions and transition to secondary school were all perceived to lead to anxiety for the students within this study. This information adds to the findings of Ozsivadjian et al. (2012) that change or changes in routines, supply teachers, sports days, school holidays and changing schools, can precipitate anxiety. The impact of supply teachers upon the students’ anxiety was specifically highlighted within the research within this thesis by several participants; this issue had not previously been identified as a particular factor in this area of research other than being touched upon briefly by Ozsivadjian et al. (2012). Factors such as supply teachers not understanding students’ needs, the student not knowing the supply teacher and their style, and the supply teacher not following the supplied
materials and curriculum, were all highlighted in this research as being difficulties which could cause anxiety.

5.3.1.2 Transition to secondary school.

Students in this study were perceived (by parents, practitioners and themselves) to experience anxiety regarding their transition to secondary school. This finding adds further weight to the previous evidence base that transition to and from secondary school is deemed to cause particular anxiety for students with ASC (Browning et al., 2009; Jindal-Snape et al., 2006; Jones et al., 2008; Tobias, 2009).

5.3.1.3 Environmental and sensory factors.

Within this study, environmental and sensory factors were perceived to lead to anxiety within the school environment (cf. Attwood, 2004; Connor, 2000; Humphrey & Lewis, 2008a; Ozsivadjian et al., 2012), with crowded, busy and noisy places, being bumped into within these, noise sensitivity, and sensitivity to smells, being contributing factors. These findings further support available literature which has suggested that environmental and sensory issues can also lead to social withdrawal and poor performance at school, including difficulties with concentration and attention (Humphrey & Lewis, 2008a, 2008b; Jones et al., 2012).

5.3.1.4 Increased repetitive and autistic behaviours.

Increased repetitive and autistic behaviours were apparent at times of anxiety for the students in this study, for example, increased reliance upon routine and repetitive and ritualistic behaviours (cf. Greig & MacKay, 2005; Muris, Steerneman, Merckelbach, Holdrinet, & Meesters, 1998; Ozsivadjian et al., 2012; Tantam, 2000). Actions such as fidgeting and fiddling, pacing, repetitive looking at clocks and watches, hoarding items, repetitive scratching and picking at skin, and increased reliance upon specific interests were all features identified as being present during times of anxiety for the students. Some of these appeared to be linked to students’ sensory needs and they seemed, at times, to present with sensory responses to their anxiety, finding comfort in sensory behaviours and activities such as running around in the rain, hoarding shiny objects, or fiddling with Blu Tack. However, there was a lack of recognition of this link by Ali’s practitioners, with them appearing to see his sensory behaviours more as problem behaviours than connecting them to relieving his anxiety; a relationship which was highlighted by Ali himself and practitioners such as the ST and EP within documentary evidence.

5.3.1.5 Academic and social pressures and expectations.

The students in this study reported anxiety regarding academic and social pressures and expectations from themselves and from educational systems, such as target setting processes. Although this issue has featured in quantitative reports (Ozsivadjian & Knott, 2011; White, Oswald, et al., 2009), it appears to be a little-reported factor in relation to anxiety in previous
qualitative literature. Identified papers which made reference to pressure and expectations being linked to anxiety for students with ASC associated this with the expectations of others (Ozsivadjian et al., 2012); the research within this thesis however, found that the expectations and pressures to achieve highly typically came from the students themselves.

5.3.1.6 Negative thinking patterns.
A difficulty which repeatedly arose during interviews and within documentation analysed in this study was that of negative thinking patterns within the students. This encompassed patterns of thinking such as worry about making mistakes, self blame, dwelling on past events, pessimism and perfectionism. These were reported to lead to, and be a result of, the anxiety; seemingly presenting in a vicious circle of anxiety and negative thoughts. These findings reflect the literature regarding cognitive manifestations of anxiety and specific negative thinking patterns that are commonly reported in individuals with ASC (Greig & MacKay, 2005; Hare, 2004; Ozsivadjian et al., 2012), such as negative, fatalistic, and 'all or nothing' thinking.

5.3.1.7 Poor self-perception.
Poor self-perception was reported in this study as being both a cause and a consequence of the anxiety. Students experienced poor self-confidence, low self-esteem, and negative self-concept during periods of anxiety with these issues intensifying when they were most anxious. It was reported that the students would lack confidence to engage in learning tasks and social interactions; and were negative regarding their personal capabilities and attributes both academically and socially during these times. However, limited previous literature has linked these factors directly to anxiety within the school environment, other than tentative links within recent work by Ozsivadjian et al. (2012) which these findings support.

5.3.1.8 Negative peer behaviour.
Difficulties experienced by the students in this study were linked to negative peer behaviour, with social situations and interactions being reported to contribute to the anxiety. These factors appeared to cause negative thinking and low self-esteem within the students and led to considerable anxiety. Bullying, teasing, name-calling, and being excluded by peers all caused the students to worry, with the exception of Megan. Negative peer behaviour was not reported as a contributing factor or a difficulty for Megan, and this was perceived by her parent and practitioner to be due to her strong friendship group and perhaps attending an all-girl’s school. High levels of bullying have been reported for students with ASC (Etherington, 2007; Humphrey & Symes, 2010a, 2010b; Reid & Batten, 2006) and the findings within this thesis support current literature which reports a negative impact of bullying upon the students’ confidence and anxiety levels (Browning et al., 2009; Humphrey & Symes, 2010a, 2010b; Morewood et al., 2011; Ozsivadjian et al., 2012).
Interestingly, the students and parents in this study reported that ‘bullying’ led to anxiety; yet practitioners referred more to ‘teasing’ and ‘name-calling’. The different terminology used by the latter appearing to minimise the construct. It seems that the students primarily experienced relational bullying, where social exclusion and name calling were experienced and students were targeted as they were not perceived to fit social norms (Bauman & Del Rio, 2006). It has previously been suggested that teachers view relational bullying as normative behaviour (Bishop Mills & Muckleroy Carwile, 2009) or as less serious than physical bullying (Bauman & Del Rio, 2006; Craig, Henderson, & Murphy, 2000; Mishna, Scarcello, Pepler, & Wiener, 2005), despite students reporting this as the worst form of bullying, and as harmful as physical aggression (Crick & Grotpeter, 1995; Newman & Murray, 2005; Sharp, 1995). This study provided evidence to support these previous findings, for example, Ail’s practitioners did not appear to realise the impact upon him of bullying, and other practitioners appeared to normalise the bullying behaviour.

5.3.1.9 Social situations and interaction.

Social situations and interaction with others also led to anxiety in the students involved in this study. Issues such as difficulty making friends; working with others in lessons; socially interacting effectively with peers; peer conflict; peers not following the rules; and difficulty with social understanding were all reported as being anxiety provoking (cf. Browning et al., 2009; Connor, 2000; Morewood et al., 2011; Ozsivadjian et al., 2012). It has been suggested that fear of humiliation and rejection leads to social anxiety in those with ASC (Müller, Schuler, & Yates, 2008; White, Oswald, et al., 2009; White & Roberson-Nay, 2009), however, this study did not find evidence to support or refute this theory.

5.3.1.10 Impact upon social interaction.

The results of this study indicate that anxiety also impacted upon students’ social interaction with individuals and groups, for example, causing them to hide away and be more withdrawn, become uncommunicative, and to disengage with lessons and group activities. This supports the findings of prior studies which report anxiety as leading to isolation and withdrawal (Carrington & Graham, 2001; Ozsivadjian et al., 2012). Additionally, students in this study reported increased difficulty with social relationships, reciprocal conversation, and repetitive talk when anxious. Much of the existing qualitative research in the literature has identified that difficulty with social skills and building social relationships is linked to the development of anxiety for children with ASC (Browning et al., 2009; Connor, 2000; Morewood et al., 2011; Ozsivadjian et al., 2012). However, research which previously identified the two-way relationship between anxiety and social interaction was quantitative in nature; with anxiety being found to both be caused by and impact further upon social interaction and peer relationships for students with ASC (Reaven et al., 2011; Reaven, 2009). This study, therefore, enhances the quantitative findings and provides a richer picture of the ‘real life’ situation faced by students with ASC and anxiety.
5.3.1.11 Emotional wellbeing.

The students within this study also reported that anxiety impacted upon their emotional wellbeing, with low mood and signs of depression being seen to increase during times of anxiety for all students except Megan. Students also reported feeling unable to cope at times when they were anxious. This is not surprising, as previous literature suggests that mental health needs are greater in children with ASC (Green et al., 2005; Madders, 2010; Ozsivadjian & Knott, 2011; Reaven et al., 2011).

5.3.1.12 Processing and managing feelings.

Students in this study also experienced difficulty in processing and managing feelings, which led to increased anxiety. This is consistent with findings of previous research which highlighted that internalising problems were more prevalent in students with AS (Macintosh & Dissanayake, 2006). Internalisation of feelings was common within the students, who experienced difficulty in both understanding and expressing their feelings and worries. This would often result in a build up or overload of thoughts and feelings and it was apparent that all of the students showed difficulty in managing their feelings effectively.

5.3.1.13 Physiological manifestations and outward emotional expression.

Despite internalisation of feelings, in this study the students’ anxiety would typically present in obvious physiological manifestations and outward emotional expression that could be recognised by the parents and practitioners and sometimes the students themselves. The students tended to present differently, become easily sad, upset and distressed, and would experience physical signs and symptoms such as aches and pains, nausea, hotness and muscle tension (cf. Browning et al., 2009; Ozsivadjian et al., 2012). The students themselves were much more able to recognise and express the physical signs and impact of their anxiety than other effects, such as the emotional and social impact. This is reflected within popular ASC literature, which suggests that individuals with ASC are more able to express physical feelings than emotions (Attwood, 2007), but has not been identified within previous research relating to students with ASC within school.

Sleeping and eating difficulties were highlighted as being prevalent within the students when they were anxious, with all of them experiencing difficulty with sleeping and having either lowered or increased food consumption during periods of anxiety. Sleep difficulties were reported to impact upon the students during the school day due to tiredness being observed by school practitioners, with some of the students even needing to lie down or sleep at school during periods of anxiety. Such fatigue, sleep disturbance and altered eating patterns and are reflected within the previous literature (Carrington & Graham, 2001; Greig & MacKay, 2005;
Reaven, 2009), but the impact of this within school has not been explored and was not a focus of these studies.

5.3.1.14 Emotional regulation.

All of the students in this study experienced difficulty in controlling their emotional responses when anxious. They presented with extremes of behaviour, being easily angered or frustrated and displaying physical outbursts toward others. Megan, however, only showed these outbursts of behaviour at home, a factor commonly reported in students with ASC, whereby they hide their feelings at school and express them with anger and frustration when they get home. This is a concept referred to as ‘masquerading’ by Carrington and Graham (2001). At school, emotional responses such as throwing furniture, hitting out and pulling hair were evident when the students were particularly anxious. This may be due to their difficulty in expressing feelings, their internalisation of these, and the subsequent build up of emotions and worry. Such emotional regulation difficulties are said to be significant in ASC (Jahromi, Meek, & Ober-Reynolds, 2012). Anxiety in ASC is reported to often be expressed through behaviour (Ozsivadjian et al., 2012), with stress and anxiety in ASC being linked to ‘aggressive’ behaviour (Farrugia & Hudson, 2006; Ghaziuddin, 2005; Mattila et al., 2010). Increased arousal and a tendency for outbursts, rapid mood changes and being easily frustrated (Ashburner et al., 2010; Ozsivadjian et al., 2012) have all been purported to be prevalent in children with ASC. Social anxiety in students with ASC has been linked to increased anger and aggression (Pugliese, White, White, & Ollendick, 2013), and externalised behaviours such as opposition and defiance (Ashburner et al., 2010) and an increase in avoidance and escape behaviours (Ozsivadjian et al., 2012).

5.3.1.15 Exclusion and attendance.

It has been reported that students with autism are more at risk of exclusion from school than non-autistic students or students with other SEN, particularly due to extreme (potentially anxiety-related) behaviour (Jones et al., 2008). The findings of this thesis support Jones et al.’s evidence; parents and teachers reported that during periods of high anxiety, three of the students had been at risk of possible exclusion due to their behaviour. Additionally, when particularly anxious, students would sometimes resist attending school. One student would need to return home as he was unable to function; this issue is not reflected within the current qualitative literature regarding anxiety for students with ASC. Two qualitative studies have been identified which mention this to a limited degree; the findings of these suggested that school phobia (Rotheram-Fuller & MacMullen, 2011), and resistance in attending school (Reaven, 2009), were factors linked to anxiety for children with ASC.

5.3.1.16 Lowered performance within school.

It was reported that the students in this study would not perform to their potential during periods of anxiety. They would be increasingly disorganised, have difficulty with concentration and
attention, have difficulty in completing homework, be reluctant to contribute in class, and lacked independent decision-making ability, all of which impacted upon their school performance. Several factors previously mentioned have been considered to impact upon these areas of difficulty and are intrinsically linked to the anxiety. For instance, difficulties in focus and attention have been linked to sensory sensitivities and anxiety (Humphrey & Lewis, 2008b; Jones et al., 2012), and poor self-esteem has been linked to academic under-achievement (Ashburner et al., 2010) which in turn is related to anxiety in students with ASC. High rates of academic under-achievement, 54% of students with ASC compared to 8% of non-ASC students, have been reported (Ashburner et al., 2010); it is possible that such anxieties and the related difficulties mentioned herein contribute to this.

5.3.2 Research question two.

With respect to the second research question, the units of analysis were the participants’ perceptions of effective support during the anxiety episodes within school.

Perceived effective actions and strategies to address anxiety were recognised by participants. These were primarily wide-ranging, individually-tailored, ecological and contextual interventions, rather than evidence based therapeutic interventions such as CBT, mentioned previously in section 2.7.4.8. Exploring these wide ranging interventions within this study provided a much broader picture of the supports for students with ASC and anxiety in mainstream than the evaluation of one specific intervention.

5.3.2.1 Well-planned transition to secondary school.

Well-planned support with respect to the transition to secondary school was considered to be effective in alleviating anxiety for three of the students in this study (one student’s needs were not known at the time of transition). Visits prior to entry, liaison with primary school staff, familiarisation visits and tours, and a comprehensive transitions programme for one student, were strategies reported to have helped the students manage their anxiety regarding the transition. These findings support those of non-anxiety related studies investigating strategies for meeting the needs of students with ASC (Humphrey & Lewis, 2008a; Tobias, 2009). Additionally, they reflect findings which suggest that the anxiety for students around the transition period can be settled quickly and easily with appropriate support (Parsons, Lewis, & Ellins, 2009).

5.3.2.2 Structure, planning and organisational support.

The importance of structure throughout the school day, regular planning with the students and support with organisational skills were all considered to be features of support that helped the students in this study with their anxiety. Supports were deemed to help manage anxiety related to change, unstructured time, academic pressures and expectations and disorganisation
associated with the anxiety. Clear structure, routine and predictability were reported as being important to all the students for management of their anxiety; this reflects the strong message within non-anxiety specific practitioner and parent guidance literature regarding the need for these strategies for students with ASC for coping with change (e.g. Attwood, 2007; Baron-Cohen, 2008; Jordan, 1999). However, detail regarding how this helped with managing the anxiety is provided by the findings of this thesis. For instance, the use of daily or weekly individual sessions to plan for change and provide guidance with organisation was perceived by participants in this study to be effective in supporting the students with anxiety. Being forewarned of any changes appeared to help students manage their anxiousness and to avoid associated behavioural outbursts. Differentiated planners and diaries, with added detail, were also used to provide visual cues for routines and support them with organising their time and school work. Recording, remembering and completing homework was an organisational factor which featured strongly for the students in leading to anxiety, which such supports helped to address.

Additionally, activities during unstructured times, such as homework clubs at lunch time, supported the students with managing their homework and reducing anxiety around this, and also in dealing with the anxieties caused by the social and environmental factors that lead to anxiety which are particularly prevalent during lunch and break times, such as busy dining halls and unstructured interactions with non ASC peers.

5.3.2.3 Adaptations in lessons.

Participants in this study reported a number of adaptations within lessons as being effective; however these were generally not linked directly to management of their anxiety. Reports varied considerably depending upon the students’ individual needs. Adaptations accounting for students’ specific needs included modified language, and teaching strategies using more practical approaches. It was noted that teacher-awareness of ASC played a part in whether these adaptations were implemented or not, which will be discussed in section 5.3.2.4. Having printed class notes and instructions was one adaptation that featured as helping most of the students with managing their worries with regard to assimilation of information written on the whiteboard, or verbal information. These findings lend support to the non-anxiety specific ASC literature which recommends that adaptations to language, hands on activities, and written worksheets and instructions aid students with ASC within lessons (Connor, 2000; Rotheram-Fuller & MacMullen, 2011). These being reported requirements for teaching and learning to be better tailored to ASC students’ individual needs (Humphrey & Lewis, 2008b).

5.3.2.4 Staff knowledge and understanding.

Staff knowledge and understanding regarding ASC was seen in this study to be a significant factor for reduction of anxiety in students. Students themselves especially noted that when teachers showed knowledge and recognition of ASC they felt less anxious due to the
subsequent improved teaching approaches and understanding; this was also reflected by the accounts of parents and practitioners. Knowledge was typically facilitated by written information provided by the SENCO regarding the students' needs (e.g. communication passports or pen portraits); and through support and guidance for teaching staff from the SENCo and visiting ASC STs. Additionally, staff training regarding ASC was considered to support the management of the students’ anxiety. These factors were not considered to impact directly upon the students’ anxiety; rather, they were perceived to facilitate staff in employing anxiety-alleviating teaching approaches. The need for awareness, training and knowledge is consistent with previous literature (Connor, 2000; Humphrey & Symes, 2011; Humphrey, 2008).

Knowledge and understanding of ASC has been reported to improve the confidence of teachers working with ASC students (McGregor & Campbell, 2001), and can change deficit-based views of the students by teaching staff (Bevan-Brown et al., 2008). In this study, there was acknowledgement of an underlying relationship whereby increased staff knowledge correlated with decreased student anxiety, although the findings also indicate that many other factors will also have influenced this decrease in anxiety, as discussed herein.

Differences in teacher responsiveness to the students' needs, and the guidance provided to them were also perceived as barriers to effective support for the students in this study. In a few instances students, parents and practitioners felt that a minority of staff did not take on board the guidance and approaches, and that this led to increased student anxiety. In particular, they cited a lack of use of appropriate approaches; lack of understanding of their emotional responses and sensory needs; and staff failing to facilitate appropriate strategies to enable peer interaction and group work without undue stress being caused to the ASC students.

5.3.2.5 Staff deployment and approach.

The deployment of staff and their approach was considered by participants in this study to be important for the effective support of students and the management of their anxiety. Creative and flexible use of staffing and high levels of support regardless of funding were indirectly associated within successful intervention, as it was felt that without these the students would not have the range, level and accessibility of support needed when they experienced anxiety. Features of such support included access to the SENCo and SEN staff as and when required, pastoral support outside of lessons for some students, and discreet support in lessons for others. Therefore, students did not become reliant upon TAs, but had the security of their presence and knowledge that support would be forthcoming if they became anxious. This finding reflects non-anxiety specific ASC literature regarding the need for subtle support to enable socialisation and independence (Humphrey & Lewis, 2008a), and the potential detrimental effects that having obvious support can bring by highlighting the difference of the student and over-dependence upon staff (Osborne & Reed, 2011). Literature regarding the specific role of staff within class regarding supporting ASC students with anxiety was not found, although some studies do highlight the need for pastoral support as discussed in (Browning et al., 2009; Tobias, 2009).
However, a perceived barrier to staff support for students with ASC was lack of funding; and particularly funding processes which focused solely on students’ high academic achievements, thus failing to acknowledge the support required for anxiety related needs. It was felt that these factors depended upon schools being able to afford the staffing levels required for the students to fully meet their needs, although it was acknowledged that the support had been implemented regardless of the monies received. No previous literature was found regarding this area in relation to ASC students’ anxiety.

5.3.2.6 Adult support with anxiety management.

All the students in this study benefited when trusted adults within school provided direct support for management of their anxiety. Open access to dedicated adults to discuss worries ad hoc; reassurance from an adult when anxious; and provision of support to identify and manage feelings, were considered to be effective in supporting the students. Difficulties associated with expression and management of feelings were raised in section 5.3.1.12; the availability of an understanding adult at school (e.g. SEN TA, SENCo or regularly visiting ST) with knowledge of the anxieties that students with ASC might experience, and who could build a relationship with the student, was seen as paramount in supporting appropriate expression and management of feelings (cf. Bevan-Brown et al., 2008).

Individual and small group sessions with ‘safe’ peers (e.g. other peers with social communication needs and/or SEN); and access when required in periods of particular anxiety, were mentioned by study participants as being effective in supporting students to talk through their worries, or have time away from class or peers with reassurance available as required. The need for such pastoral support has not been raised in ASC specific studies as much as one might expect, but was acknowledged as being beneficial in a study by Tobias (2009). Support with learning to manage anxieties and emotional reactions has, however, been raised as a particular need (Carrington & Graham, 2001; Connor, 2000). Interestingly, the practitioners involved in the study were limited in the specific details of the anxiety management approaches that they could provide; these were typically carried out by specialist teachers. However, approaches such as ‘Social Stories’ (Gray, 1998) and relaxation techniques were specified.

5.3.2.7 Use of anxiety management strategies.

Use of specific anxiety management approaches was considered to be an effective intervention for the students in this study to help them manage their anxiety at school. The students themselves, and parents particularly, highlighted specific details of such strategies, such as access to favourite and comforting items, lying down, having a drink and use of relaxation approaches such as breathing techniques and muscle relaxation. These findings reflect the recommendations in previous studies non-anxiety specific studies (Carrington & Graham, 2001; Jones et al., 2008). The use of a card system for exiting class when anxious was unanimously
considered to be an effective strategy for the students in this study; and the use of creative activities and interests to redirect them from their anxieties were reported to be successfully used within their support. For instance, drawing, model making or playing strategy games to help them relax.

5.3.2.8 A ‘safe’ space.

Having a ‘safe’ space to enable students to take a break from classes when they were feeling anxious was reported in this study to be a particularly effective support. The need for quiet has been raised as a sought-after element of an ‘ideal school’ by students with ASC (Williams & Hanke, 2007).

Additionally, having a safe place with adult support at unstructured times (e.g. lunch and break times) also reportedly helped the students to manage their anxiety. Unstructured time appeared to be linked to the anxieties caused by sensory and environmental factors, so retreating to a quiet place away from these factors helped to reduce anxiety. The anxieties surrounding daily transitions, busy corridors, peer conflict, social interaction, peer negativity and unstructured time were found to link to the need for a safe space away from non-ASC peers during lunch and break times (cf. Bevan-Brown et al., 2008; Connor, 2000; Humphrey & Lewis, 2008a; Tobias, 2009).

5.3.2.9 Social skills support.

Social skills support was identified as an effective intervention in helping the students manage anxiety. Small group social and communication skills work, and friendship development work, was considered to be valuable in supporting the students, not necessarily directly with the anxiety, but with the social difficulties that precipitated anxiety (highlighted in section 5.3.1.9). Previous research has provided evidence for the use of social skills approaches as effective support for students with ASC (Elder et al., 2006; Koenig et al., 2009; Konstantareas, 2006; White, Ollendick, et al., 2009). However, definite links to reduction of anxiety have not been established although these are suggested within qualitative studies (Bevan-Brown et al., 2008; Humphrey, 2008).

Approaches such as the use of social scripts and visuals to develop students’ social understanding, and thus reduce anxiety related to this, were also considered to be effective by the school practitioners involved in this study (cf. Bevan-Brown et al., 2008; Connor, 2000; Humphrey, 2008). It was noted, however, that these strategies were primarily used within the early years of secondary schools for the younger students; older students did not utilise such supports. Within previous studies these approaches had primarily been used regarding students’ anxieties to help them manage their social fears and worries. However, the findings of this study were that approaches such as ‘Social Stories’ (Gray, 1998) were used to help the students manage their behaviours that led to or resulted from anxiety, such as one student who
wanted to hug fellow students, but when he did was teased and thus became anxious about
this.

5.3.2.10 Peer support networks.

The development of peer support networks was perceived to effectively enable the students in
this study with management of their anxiety. Developing friendships with peers with ASC or
similar needs (or non-ASC peers in Megan’s case), having friends to be with during
unstructured times, mutual support from friends, and having a group identity, were all features of
this support. Children with ASC are found to have less friendships than typically-developing
children (Green et al., 2005; Mazurek & Kanne, 2010); and additionally have difficulty
developing and sustaining friendships, with associated impact upon their well-being (White &
Roberson-Nay, 2009; White et al., 2010). Therefore it would be reasonable to assume that
developing supportive friendships would help to reduce anxiety (cf. Humphrey, 2008); however,
a study to test this hypothesis, found that ASC students with better quality friendships actually
experienced greater anxiety and depression (Mazurek & Kanne, 2010). The authors suggested
that self-awareness and increased awareness of their difficulties could perhaps make their
social difficulties more self-evident and thus lead to increased anxiety and depressive
symptoms. The findings within this thesis, however, contrast to this; whilst difficulties managing
peer conflict caused anxiety, in general the students’ development of friendships seemed to
promote management of anxiety, with the support of peers and a sense of ‘fitting in’ being key
to this.

5.3.2.11 Positivity and acceptance.

Demonstration of positivity towards ASC students, and their acceptance by others, was
considered by participants in this study to be a resiliency factor for anxiety. Compliments from
staff with regard to students’ personal characteristics, strengths and skills were highlighted as
being important for positive student self-perception reduction of anxiety. Positivity of school staff
in relation to students with autism has previously been identified as an important factor in their
successful inclusion in mainstream schools (Simpson, de Boer-Ott, & Smith-Myles, 2003). The
need for an inclusive and positive whole school ethos for students with ASC has also been
raised by previous research (Morewood et al., 2011). However, in Ali’s case there appeared to
be more of a ‘within-child’ approach by staff. Such approaches do not address the underlying
environmental and contextual factors and so potentially effective programmes of support may
not be implemented (Frederickson, Webster, & Wright, 1991).

Unfortunately, with the exception of Megan’s case, the findings of this study do not report that
positivity extended throughout the schools to become a whole school ethos; rather, there was a
theme of bullying and peer rejection throughout by non-ASC peers.

The use of rewards and reinforcement was identified by students and parents as being helpful
for anxiety management. Students valued positive feedback regarding specific incidents when
they performed well. However, this support was not raised by school practitioners; a participant
from one school commented that they had not considered this factor as part of the support mechanism for ASC students and would endeavour to do this more. Research findings which corroborated the association of rewards and positive reinforcement with reduced anxiety were not apparent in the current literature; however, Greig and MacKay (2005) considered the need for tangible rewards for good effort of students with ASC.

Focusing on strengths, talents and interests appeared to help the students in this study to manage their anxiety; again, this linked to development of positive self-perception and self-esteem for the students, and also provided a distraction from their worry and negative thinking. This finding supports previous research which concluded that preferred activities can alleviate stress for ASC students (Bevan-Brown et al., 2008); however, literature exploring the use of strengths, special interests, skills or talents for supporting anxiety management has not been found. Megan’s practitioner also suggested that high social regard for Megan’s gymnastic talent was a factor which contributed to her social acceptance by peers.

Disclosing ASC positively to peers and teachers was considered to be an effective anxiety management strategy by students in this study. The parents, and in particular the students themselves (with the exception of Ali who was not aware of his specific diagnosis), raised this as a factor which had helped them in managing their worries. Students recognised that being open about their ASC with peers and teachers improved understanding and prompted different teaching/management approaches to be used, which in turn reduced their levels of anxiety regarding others’ perceptions of them, and alleviated worry about making social errors. Although no specific links between disclosure and reduction in anxiety could be found within the literature, previous studies have highlighted peer awareness; raising this as being important in reducing bullying and increasing inclusion for students with ASC (Connor, 2000; Humphrey & Symes, 2010b). As these factors were perceived to cause student anxiety it is probable that the positive impact upon levels of bullying and inclusion would be a factor in decreasing the anxiety.

In addition the lead up to the decision to disclose ASC may encompass a journey of self-exploration and enhanced self-understanding, which can increase resiliency, self-acceptance, self-confidence and self-esteem (Cann, 2007; Morewood et al., 2011; Tobias, 2009).

5.3.2.12 Good home-school liaison.

Regular communication between parents/carers and school staff, including liaison to develop and share strategies regarding the students’ specific needs, was seen as being important for anxiety management. This supports findings of previous research which suggest that good quality and regular communication between parents and school practitioners, and liaison regarding the students’ worries, can be beneficial to supporting the student (Connor, 2000; Tobias, 2009).
5.4 Theoretical Propositions and Rival Explanations

5.4.1 Analysis of the research propositions.

Prior to the data collection stage of the research process, theoretical propositions were developed to guide the factors to be investigated, aid the organisation of the case study exploration, and support identification of relevant information from the case studies (Yin, 2009).

Following exploration of the research findings it was considered that all the four overarching research propositions (as detailed in appendix D) could be supported by the findings. The propositions are presented in table 5.1 below:

Table 5.1: Summary of Analysis of the Theoretical Propositions

<table>
<thead>
<tr>
<th>Propositions in relation to research question 1</th>
<th>Overarching Theoretical Propositions</th>
<th>Is the Proposition Supported?</th>
</tr>
</thead>
<tbody>
<tr>
<td>That the students with ASC will show noticeable signs of anxiety within the school environment</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>That specific factors within school cause anxiety for the students with ASC</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>That when anxious, the presentation, experiences and behaviour of the students with ASC are adversely affected within school</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>That specific actions, intervention, support and/or strategies at school can help limit or manage anxiety for students with ASC</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

Analysis of the detailed sub propositions (linked to those included in Table 5.1 above) which formed the basis of the card sort exercise prompts are fully detailed in appendices TT and UU. A summary is shown below (table 5.2):

Table 5.2: Summary of Analysis of the Sub-Propositions

<table>
<thead>
<tr>
<th>Sub propositions in relation to research question 1</th>
<th>Sub Propositions Supported</th>
<th>Sub Propositions Partially Supported</th>
<th>Sub Propositions Unsupported</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>5</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

The evidence for the supported propositions is discussed within the results chapter and section 5.3 above. Partially supported and unsupported propositions will now be discussed.

In relation to research question one, the proposition that ‘the students displayed non-verbal signs that were untypical when anxious’ was only partially supported; the findings provided evidence which highlighted that whilst students exhibited non-verbal signs of anxiety, such as
fidgeting and fiddling, these were not necessarily all untypical, rather these were heightened during times of stress.

The proposition that ‘the students’ awareness of their own differences or needs caused anxiety’ was not supported. In the author’s view, the students’ awareness of their differences and needs did appear to impact upon their anxiety levels, yet neither they, nor the parents or practitioners, alluded to this themselves. For example, students’ poor perception of self seemed to be linked in part to their difficulties in relating to other students and negative per attitude toward them. Difficulty in understanding their own feelings (as previously described in section 5.3.1.12) is likely to have had some impact upon their ability to ascertain the effect of their self-awareness upon levels of anxiety.

‘The students became anxious about meeting aspirations or expectations of them’ was partially supported as a proposition. Participants in this study did report that the students experienced anxiety related to academic pressures and expectations, but that this stemmed from the students themselves rather than from others. The students tended to become more anxious about pressures they put upon themselves e.g. worry about making mistakes and perfectionism, but some reference to wider pressures from school target setting systems was evidenced.

The proposition that ‘the students’ anxiety resulted from a perceived lack of adult understanding of the needs of the student within school’ was partially supported. This was not identified as a specific factor directly contributing to anxiety; however, it was seen as a barrier to effective practice. Differences in responsiveness to need between teachers; and differences in responsiveness to guidance regarding need, were identified as difficulties in effectively supporting students’ anxiety management.

In relation to research question two, the proposition that ‘teaching staff providing suitable adaptations to communication and language use would help to limit the students’ anxiety’ was partially supported. Adaptations in lessons were perceived as being effective actions, with strategies including use of printed class notes and instructions and adaptations to lessons to take into account specific needs being identified as having a positive impact on anxiety management. However, these were not specific to the adaptation of language and communication, although they did encompass this to some degree, for instance by ensuring that verbal instructions were clear.

The proposition that ‘the use of modelling approaches helped the students to manage their anxiety within school’ was not supported. This strategy was mentioned only briefly in relation to one student, the detail of which did not constitute enough evidence for a theme nor to support the proposition. Rather than not being effective, it appears that such approaches were scarcely used for students involved in this study and therefore it is not possible to say whether they would be effective or not.
The proposition that ‘opportunities to practise learned strategies within the school environment helped to reduce the students’ anxiety’ was not supported. This was alluded to briefly by Matthew and by Matthew and Megan’s practitioners, but was otherwise not supported as a proposition. Evidence suggested that students were provided with opportunities to practise social skills within the school environment, especially through role play; however, the practice element of this was not specifically identified as an element of the support that helped reduce anxiety.

‘Providing opportunities to help the students generalise skills that had been learned to other settings or situations helped to reduce their anxiety’ was unsupported as a proposition. Use of generalisation to support the students was chosen in the card sort exercise by some practitioners, parents and students, but no specific examples or evidence of this in practice were given and therefore it was not possible to say whether this was an effective support.

The proposition ‘that adults (such as teaching staff and other professionals) collaborating with each other regarding the students’ needs helped in managing the students’ anxiety’ was partially supported. This was evidenced only by practitioners, and primarily within the school in relation to liaison from the SENCo with teaching staff. Although there was considerable reference and discussion regarding collaborating with external specialist ASD teachers, there was little other evidence to support the proposition of collaboration with any other external professionals specifically regarding support for the students’ anxiety by the schools (e.g. CAMHS workers or EPs).

The proposition that ‘the students’ anxiety was reduced by teaching them relaxation and calming strategies at school’ was partially supported. The use of anxiety management strategies (including redirection and calming activities) was identified as a means of addressing anxiety for all students except Matthew. However, the use of relaxation strategies specifically was indicated in supporting Megan and Ryan only. In Megan’s case these strategies had been taught and implemented through CAMHS, although they were also utilised at school.

‘Involving the students in planning for their needs at school helped to reduce their anxiety’ was unsupported as a proposition. This was mentioned briefly in relation to two students by staff members, but little other evidence was apparent for this to constitute a theme or support the proposition that it helped with management of their anxiety.

The proposition that ‘the students’ anxiety was reduced by the use of genuine inclusionary approaches and acceptance at school’ was partially supported. Positivity and acceptance was identified as being an effective support within all cases except Ali’s. The evidenced acceptance could imply inclusion; however, although the schools did appear to use inclusionary approaches, there were some elements of inclusion, identified by Booth and Ainscow (2000), and discussed in section 2.4.3, which could be questioned e.g. the continued reference to bullying in three of the cases.
'Making adaptations regarding environmental factors at school helped to decrease the students’ anxiety levels' was partially supported as a proposition. Adaptations were used and identified that would support anxiety reduction, such as the students having a quiet place to go and a card system for leaving class. However, sensory and environmental factors that impacted upon the students’ anxiety such as crowded, noisy and busy places, noise sensitivity, and sensitivity to smells were not necessarily perceived to be problematic and therefore strategies were not in place to address them. Some were mentioned in brief, such as students going to class earlier or later to avoid crowds, but these did not demonstrate pertinent enough evidence for a theme or support the proposition in full.

Although some of the sub-propositions in relation to the research questions were unsupported or partially supported, this does not suggest that the theory behind them is invalid. It merely shows that they were unsupported within this particular context for these particular students with ASC and anxiety. Nor does it mean that the strategies within the literature leading to the propositions would not be effective for students with ASC within mainstream secondary schools in general. It was within this particular context within these cases that evidence of these strategies was unsupported. In some cases, this was due to the strategies not being used, whereas in others it was that the evidence did not indicate that the strategy was a factor that assisted in the management or amelioration of the anxiety.

5.4.2 Analysis of the rival explanations.

Prior to the data collection stage of the research process, rival explanations (as detailed in appendix E) were developed to enable consideration of other possible influences or explanations that may account for relationships within the data to allow greater transparency and confidence in the results (Yin, 2009). Following analysis of the research findings, the rival explanations were revisited to consider whether alternate explanations for the findings could be found. The analysis of the rival explanations is presented in table 5.3 (over).

It is considered that the overarching rival explanations could be ruled out due to careful adherence to the methodology in order to minimise researcher bias and issues of reliability.

In relation to the rival explanations linking to research question one, there is some possibility that factors other than anxiety may have affected the students’ experiences and behaviour, however those that were identified, such as negative peer behaviour, environmental and sensory factors, and social situations and interaction were associated with the anxiety of participants. The researcher took care to clarify with participants whether they considered factors to be related to the anxiety or to other factors.
Table 5.3: Analysis of the Rival Explanations

<table>
<thead>
<tr>
<th>Rival explanations</th>
<th>Specific rival explanation</th>
<th>Evidence to support the Rival Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overarching rival explanations</td>
<td>That outcomes of the research are due to researcher bias</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>That outcomes of the research are due to a limitation in sample</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>That outcomes of the research are due to issues of reliability within data collection and analysis</td>
<td>No</td>
</tr>
<tr>
<td>Rival explanations linking to RQ 1: What are the perceived difficulties and needs of students with ASC who show signs of anxiety in the mainstream secondary school setting?</td>
<td>That the presentation, experiences and behaviour of the students with ASC were adversely affected within school by factors other than anxiety</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>That the students with ASC did not show noticeable signs of anxiety within the school setting</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>That the presentation of the students within the school setting was not due to anxiety, but to the nature of ASC</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>That the needs and difficulties associated with the students’ anxiety were caused by factors outside of the school setting</td>
<td>Partially</td>
</tr>
<tr>
<td>Rival explanations linking to RQ 2: What is perceived to be effective practice in supporting students with ASC who show signs of anxiety in the mainstream secondary school setting?</td>
<td>That supports and interventions not mentioned within the data collection account for the perceptions of ‘what worked’ for the students with ASC within the mainstream setting</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>That support or intervention provided outside of the school setting accounted for the perceptions of ‘what worked’ for the students with ASC within the mainstream setting</td>
<td>Partially</td>
</tr>
</tbody>
</table>

It could be argued that the needs and difficulties experienced by the students, such as repetitive actions or difficulty with social interaction could be linked to the nature of ASC rather than anxiety (see section 2.6). However, in this instance, the researcher clarified whether the actions or behaviours were present when the child was not anxious and/or whether they increased during times of anxiety; this helped to confirm whether the behaviours were a typical part of the child’s autism or whether they were brought on, or exacerbated by, the anxiety. The behaviours described within the findings were all clarified to have been related to the anxiety through this means.

Home circumstances were identified for two students as leading to anxiety; however, these were one identified contributing factor of many, with the rest being related specifically to factors within the school context.

In relation to the rival explanations linking to research question two, support from outside of the school was identified as accounting for effective support of two of the students to some degree.
Some of the students were taking, or had taken, medication for their anxiety symptoms. However, as the medication had been taken for some time prior to the supports being implemented within school, without the described changes to the students’ anxiety being evident, it is considered that the alleviation of the anxiety was not specifically related to the medication; although it is acknowledged that it may have been a contributing factor.

Support with anxiety management from CAMHS was identified for Megan and Ryan. Ryan accessed support for only a short period and Megan accessed CBT which was perceived to have been effective in supporting her, beginning some years prior to attending secondary school. A plethora of other supports implemented directly at school were identified within the research and therefore it is considered that these external supports were only one small part of a holistic range of interventions that were considered to have been effective in supporting the students with their anxiety. It is important to note that the evidence from participants indicated that they perceived that the school-related supports described had been effective regardless of the use of medication or external supports, and care was taken to ascertain this during interview.

5.5 Contributions and Limitations of the Research

5.5.1 Contributions of the research.

The findings of the study presented within this thesis were consistent with previous studies, and provided corroboration of the existing research with additional detailed and triangulated evidence expanding upon this. Most importantly, the study was related to experiences of the students with ASC in mainstream secondary school specifically regarding anxiety, and therefore the reported evidence relating to anxiety in previous non-anxiety specific studies has been able to be explored in more detail.

Most importantly, unlike other studies regarding ASC and anxiety (e.g. Bevan-Brown et al., 2008; Reaven et al., 2011; Russell & Sofronoff, 2005; Sofronoff et al., 2005; White, Oswald, et al., 2009; White & Roberson-Nay, 2009) the study described within this thesis included gaining the students’ views in detail, through methods which enabled exploration of their perceptions more comprehensively than self-reports using standardised measures might allow.

The author is not aware of any previous research that has considered the needs, difficulties and effective practice for students with ASC and anxiety in school in this level of detail, particularly within the context of a mainstream setting. This has allowed for a greater understanding of the needs of students with ASC and anxiety within the school context, adding to the existing, largely clinical studies, regarding ASC and anxiety in children.

The methods employed enabled a large amount of fine-grained data to be gained within a short period of time (Cohen et al., 2007), explored from the perceptions of different participants, which
allowed for triangulation of the findings. Additionally, the multiple case study design allowed the study to be more robust and generalisable than other qualitative methods such as a single case study might have allowed (Yin, 2009).

The use of theoretical propositions and exploration of rival explanations helped to guide and organise the research which, being a multiple case study design, generated large amounts of data. This was considered to be beneficial in guiding the focus of the research and in providing more transparency in the full exploration of the findings, thus allowing greater confidence in the results.

Therefore, it is considered that the findings of the research within this thesis have contributed knowledge regarding the relevant real world experiences for students with ASC and anxiety within mainstream secondary education; highlighting the specific needs of the students and the perceived effective practice therein that enables them to manage their anxiety.

As limited previous research regarding this specific population of students was identified, the research within this thesis fills a gap in the literature by making relevant, in-depth and triangulated results available which can be used as the basis for further exploration within this area.

5.5.2 Limitations of the research.

Various methodological factors may have impacted upon the study, and it is important that the study’s limitations are acknowledged when considering the findings and drawing conclusions.

A limitation of any research with a case study design can be the lack of generalisibility to a wider population (Coolican, 2009), in this case, to the students with ASC and anxiety in mainstream secondary schools outside of the particular LA. As the study was undertaken within one LA, transferability of the findings to other areas of the country should be considered with caution, as the factors and experiences within one LA may not be pertinent to all others. In addition a larger sample size may have increased external validity and thus generalisability (Gray, 2004).

However, within qualitative research, external validity can be demonstrated through effective methods of triangulation and reflexivity (Willig, 2008) leading to analytic rather than statistical generalisability of theoretical constructs rather than to wider populations (Yin, 2009). Although the findings are not intended to be generalised more widely, they may be used to inform understanding of the needs of these students, potential implications for practice and future research, and development of theory.

Another possible limitation is unbalanced data across the cases and differences in the congruence of the data within the cases. For instance, the quality of the documentary data
within Megan’s case was perceived by the author to be better than that of the other cases, allowing greater data collection and triangulation with the interview sources. This may have resulted in the strength of evidence from this particular case being greater. However, all cases had their strengths and weaknesses; for example, Matthew appeared to be the most eloquent of the students and most able to articulate his views, yet his parent gave the least relevant data to the research questions. However, cases are not intended to be matched in a qualitative embedded case study design, and on balance discrepancies in the amount and quality of data across cases should have been outweighed by the evidence sought in the extensive cross case analysis.

Given questions over the reliability of self reports by children with ASC (Mazefsky et al., 2011; Russell & Sofronoff, 2005; Vickerstaff et al., 2007), it could be argued that the students would perhaps not recognise signs of anxiety within themselves, which may limit the available data. Although the students did show some difficulty with recognising signs of their anxiety themselves (other than physiological signs), evidence from within the data that they provided was triangulated with the other sources to build a picture of their experience that was comprehensive and relevant to the particular participants’ realities.

There did appear to be more congruence with certain sources of data than others; for instance, Matthew appeared to have more congruence with the practitioner than the parent, Ali and the parent showed more congruence than with the practitioner, Ryan’s parent and practitioner showed more congruence, and there was good congruence across sources for Megan. However, no measure of this was taken due to the qualitative nature of the study and, again, on balance, the range of different sources and differences in congruence across cases should have been outweighed by the extensive analysis process and the multiple views gained across the cases.

As opportunistic sampling was used to recruit participants, this could be a limiting factor as it is argued that such sampling approaches do not represent the wider population (Cohen et al., 2007) and therefore limit the scope of the results. An approach such as random sampling could have been used; however due to the sampling criteria and the complex nature of the participants, this would have proved difficult within the timescale available.

The practitioner’s role within the research may also have been a limiting factor in relation to the reliability of the data. In general the school SENCos arranged practitioner involvement within the research and mostly took on the practitioner participant role themselves. In this aspect they may have played a ‘gate-keeping’ role whereby they could grant or prevent access to others within the school for research purposes (Cohen et al., 2007). By taking on the participant role themselves it could be argued that SENCos were able to have better control over what was discussed and may have been likely to withhold information that could have been considered to impact negatively upon the school or their involvement in the case. However, as the research was focused upon positive elements of the student support and this was made clear prior to
their involvement, and generally SENCos were those who best met the practitioner participant
criteria, it was considered that the risk of this was low. In addition, during data analysis,
triangulation across sources did not reveal any factors from other sources that appeared to
have been hidden or omitted by the practitioners.

It is recommended that a research protocol is used to improve reliability within case study
research (Yin, 2009), however, in this instance one was not used as the details were contained
within the research plan, thesis text and appendices of the thesis. In hindsight, a specific
protocol may have proven advantageous in terms of further supporting reliability and potential
replicability of the research in the future to allow all information regarding the process to be
contained explicitly and concisely in one document.

The use of the multiple case study design was time consuming and yielded extensive amounts
of data that resulted in a large amount of organising and basic themes, which could perhaps be
considered to be excessive. The interview questions, and theoretical propositions guiding
these, could have been narrowed, but it is felt by the author that this would have limited the
detailed, dynamic picture that was gained from the research. The aims of the research were
ultimately to influence practice, and it is felt that without this level of specificity, the research
would not have added further to any existing findings nor provided the level of relevant detail
required to inform practice.

An additional methodological approach which may have influenced findings was the use of the
card sort prompts during participant interviews. It could be argued that use of this approach may
have influenced the responses provided by participants toward the research propositions.
However, as the card sorts were used only after open ended questions and only as a prompt for
discussion it is considered that the use of these would not adversely influence participant
responses. The items on the cards were partially derived from data within the documentary
sources and therefore based upon what was already known of the students’ experiences. Only
responses which provided further evidence of the specific factor mentioned on the card were
analysed within the data and these were triangulated with data from the other sources.

One of the most difficult limitations of the study was the time constraint of carrying out the
research whilst working in a busy LA. Methods were partially chosen to accommodate these
factors, such as use of one-off participant interviews. With two of the student participants, it was
felt that building a relationship with them prior to interview may have facilitated their ability to
discuss their experiences more effectively. Due to the nature of their needs, considerable time
was spent putting them at ease during the interviews, and it was felt that more time with the
researcher would have enabled them to feel more comfortable to explore their experiences
further. However, it was felt that relevant, good quality data was gained from all student
participants and it was not considered that any participant was adversely affected by the
interview process. However, in retrospect alternative methods may have enabled more actual
hands-on participation by the students. On reflection, had time allowed, a process of
participatory action research could have been utilised, perhaps using video-making or
development of a cartoon strip which utilised the students’ interests to gain their views. This
may have allowed a safe and comfortable relationship with the researcher to develop, and may
perhaps have gained a fuller picture of the students’ experiences.

5.6 Implications of the research.

The following section considers the possible implications of the research findings for schools
and educational practitioners and the LA, as well as for future research.

The final results will be shared with the study participants; and with the educational psychology
service and LA in which the author worked whilst conducting the research. The author intends
to produce a summary report for such purposes and present the findings at a feedback session
for the research stakeholders. It is hoped that the findings can be further developed to influence
practice within the area and to inform future research.

5.6.1 Implications for students.

The majority of implications for students with ASC depend upon actions taken by practitioners,
within schools and by local authorities, and will be discussed in the remainder of this section.
However, specific implications that students with ASC and anxiety themselves, with the support
of their families and practitioners, can explicitly consider are: the benefits of developing self
awareness, whether to disclose their ASC, and learning self-management and self-regulation
strategies.

It was apparent that the students who participated in the research perceived that their anxiety at
school had improved and that they had made progress in self-management of their needs. The
students became increasingly aware of what helped them and what contributed to their anxiety,
although they needed support in many instances to recognise this and implement appropriate
strategies. However, it was apparent that those students who did report increased self-
awareness of their own needs and of their ASC, such as Matthew and Ryan, benefitted from
this in terms of their progression though the periods of anxiety.

The students also reported that the self-understanding they developed regarding their diagnosis
had helped them to manage their anxiety and build self-esteem, which is something that other
students with ASC may wish to explore. Humphrey and Lewis (2008a) suggest that
understanding of the ‘label’ of ASC and what it means to the student are important in making
sense of their experiences and in their view of themselves. Providing positive opportunities for
students to explore their ASC can help develop their understanding of their interaction with the
environment and those within it (Morewood et al., 2011) and may aid them to feel more valued
and less excluded from their social context. Given the experiences that the students within this
research described, this may benefit them in addressing some of the negative thinking that was considered to lead to anxiety.

Such self-understanding can help to build self-esteem, and provide a basis for understanding feelings and behaviours and developing self-management in difficult situations (Jones, 2001). However, students themselves should be ready and willing to engage in this process.

In addition the perception that the negative views and actions of others, particularly peers, could impact considerably upon the students’ anxiety was pertinent within the findings, and students themselves felt that self-disclosure of their ASC helped minimise this. Disclosure of ASC, again, should be decided by the student, in discussion with parents and relevant practitioners. However, positive disclosure has been suggested to increase understanding, reduce bullying and increase inclusion (Connor, 2000; Humphrey & Symes, 2010b), and thus potentially could help to reduce anxiety for some students. Therefore, whether to disclose their ASC to others should be something that students are helped to consider, bearing in mind that this will not be suitable action for all students. In addition, the lead up to the decision of whether to disclose ASC may encompass a journey of self-exploration and enhanced self-understanding, which can increase resiliency, self-acceptance, self-confidence and self-esteem (Cann, 2007; Morewood et al., 2011; Tobias, 2009).

5.6.2 Implications for parents/carers.

Recognition of the presence of anxiety and the impact of this upon the students’ presentation was a key factor within the findings in enabling the development of appropriate and effective support strategies. Therefore the need for, not only schools, but also parents to recognise the signs and presentation of anxiety in their children with ASC is important (cf. Browning et al., 2009), especially (as reported for some students) these may manifest more at home than at school (cf. Carrington & Graham, 2001).

In addition, it is important that parents/carers and school practitioners liaise appropriately regarding these signs and the student’s anxiety-related needs. This study highlighted the importance of the relationship between home and school in helping to manage the students’ anxiety and ensure that effective support is provided. Home-school partnership working has been identified as a target for promoting inclusion of students with SEN (Department for Education and Skills, 2004) and literature regarding ASC and anxiety suggests that involving parents, so that new coping skills can be transferred from home to school, can be beneficial (Rotheram-Fuller & MacMullen, 2011).

Liaison between schools and external agencies, particularly health services, regarding the students’ anxiety was not particularly evident within the research, yet is recommended as an important element of practice within literature. For instance, good liaison and planning with health professionals to identify risks and needs in relation to anxiety (Jones et al., 2008), and
sharing information and planning interventions across settings (Bevan-Brown et al., 2008), have been reported as valuable to supporting these students. It is suggested that parents may act as a conduit to this process, as was the situation in Megan’s case, where a relationship was already in place with health services at transition to the school and the parent helped to transfer information between the school and health agencies.

5.6.3 Implications for schools.

The potential implications for schools are provided in the form of key recommendations derived from the research findings.

The findings indicate that there are a wide range of approaches and strategies which schools can employ that can effectively support students with ASC and anxiety within the secondary mainstream context. However, as advised above, caution must be exercised in generalising the findings to areas outside the LA in which the research took place, and such strategies should always be carefully planned with the individual student’s strengths, areas for development, and needs firmly at the centre of any planning; with a multi-disciplinary focus and full parental involvement.

The research findings highlighted that appropriate information and guidance for staff was important to understanding the students’ anxiety related needs, but that this guidance may not be read or followed by some staff members. Therefore, school management should ensure that guidance exists in relation to the needs of students with ASC, and that relevant guidance is adhered to (cf. Batten, Corbett, Rosenblatt, Withers, & Yuille, 2006; Department for Education and Skills/Department of Health, 2002a, 2002b; Jones, Baker, English, & Lyn-Cook, 2012; National Initiative for Autism: Screening and Assessment, 2003).

Recognising when the students were becoming anxious, the contributing factors to their anxiety, providing quiet time away from the anxiety-provoking factors and implementing distraction and relaxation strategies at these times were all identified as effective supports. Accordingly, all staff should play a role in identifying when the students are anxious, in order to ensure their needs are met and anxiety-provoking factors are reduced (cf. Jones et al., 2012). As such, they should have knowledge of how to recognise the signs of this, as evidenced within this study, such as physiological complaints and increased repetitive behaviours. Moreover, they should be aware of the impact of the various elements of the students’ cognitive profiles and the school setting that can exacerbate anxiety, such as negative thinking patterns, their own high academic expectations, internalisation of feelings, sensory factors, change of rooms, peers not following the rules, and negative peer relationships. Additionally, they should be cognisant of the potential impact of the anxiety upon students, for instance difficulties completing homework, participation in class activities, tiredness, increased disorganisation, etc.
In this study considerable anxiety-related effects upon the students were reported, including, increased withdrawal, reluctance to attend school, low mood, difficulties with concentration and attention, increased frustration and increased social difficulties. Based on these findings, a suitably experienced staff member, such as the SENCo, should be responsible for observing for the potential impact of anxiety upon students with ASC and carefully monitor areas of risk such as attendance, bullying, academic progress, homework, concentration, and relationship development.

As the research highlighted that staff knowledge and understanding was considered to be effective in addressing the students’ anxiety, schools should ensure that staff have awareness and understanding of ASC, including the high risk of anxiety and the potential signs of this. Continuing Professional Development (CPD) for teaching and non teaching staff should include training and awareness-raising regarding these needs, along with information concerning basic strategies and adaptations to help reduce anxiety for students. Personalised information should be provided regarding individual students’ needs in this area, and all new staff should be made aware of this as part of their induction. A knowledgeable existing member of staff within schools should be responsible for ensuring that new staff and supply staff are aware of the needs of any students with ASC that they will encounter. Research has reported an increase in knowledge and understanding of stress and anxiety in students with ASC by teachers, notably when their training incorporated objectives such as understanding of tools used to assess for stress and anxiety, identifying factors that affect the students’ behaviour, and learning strategies to help decrease anxiety (Leblanc et al., 2009).

Positivity and acceptance were identified as factors that were effective in the support of the students, yet this was more evident from staff than other students. Therefore, an inclusive culture should be developed across schools, not just amongst staff members, but also students and non teaching staff. There is a role for key staff within schools (such as the SENCo) in raising awareness of ASC and in facilitating change of any negative teacher or peer attitudes and approaches. The students within the research identified that others’ awareness of their ASC helped them in managing their anxiety and positive awareness raising is recommended for enhancing peer acceptance of students with ASC and decreasing bullying and ignorance (Connor, 2000; Morewood et al., 2011). Personal Social and Health Education (PSHE) and citizenship curricula as well as school assemblies could be used as opportunities to develop awareness of ASC, including understanding of issues such as isolation and bullying, but also focusing upon strengths and talents, perhaps drawing upon well known role models with a diagnosis of ASC, such as Temple Grandin.

A focus upon positivity toward diversity and individual strengths, skills and talents should be central to this, and especially in promoting the self esteem of the students themselves, as these were areas identified within the research as aiding the students to overcome their anxiety. Whole school systems that focus upon identifying positive characteristics and rewarding achievements, not just in academic areas, should be developed (cf. Morewood et al., 2011), for
instance teachers providing specific positive feedback about what students did well when acknowledging achievements, providing merits and certificates for effort as well as attainment, and developing targeted reward systems around areas of specific difficulty in order to encourage the student, all of which were highlighted with the research.

As negative peer behaviour, especially bullying, was identified as a main source of anxiety within the research, schools should have robust anti-bullying policies in place. These should stress how all negative actions by peers, including name calling, teasing and exclusion can impact upon students (cf. Crick & Grotpeter, 1995; Newman & Murray, 2005; Sharp, 1995), especially those who are particularly vulnerable such as students with ASC (cf. Etherington, 2007; Humphrey & Symes, 2010a, 2010b; Reid & Batten, 2006). These factors were identified within the research as being particularly pertinent to the students, yet under-acknowledged by staff. Staff should be made aware of this vulnerability and be particularly vigilant in identifying any potential issues.

In addition to peer awareness raising, SEN staff should consider programmes of support and/or individual or small group work to support students with developing positive and effective relationships and friendships with peers (cf. Koegel, Kim, Koegel, & Schwartzman, 2013). Within the study, the development of positive friendships and peer support networks was identified as a key factor in resilience to anxiety for the students, yet it was reported that they required adult support with developing such friendships. Therefore, any social skills programmes that are utilised should incorporate such elements, and approaches such as ‘circle of friends’ (cf. Gus, 2000) and organised peer support such as buddying systems, might be considered. These can facilitate social acceptance and remediate social withdrawal (Wood et al., 2009).

However, students should also be afforded support to develop friendships around their special interests and skills, such as Manga, role playing games, drawing, or cartooning. Use of such interests were reported within the research to aid students in becoming a part of social groups and in developing peers networks. Opportunities such as this during unstructured times would also provide much needed structure, a safe place to be and a small but select social group with which the student can develop their interaction and friendships skills. All of these were highlighted as being important to the minimisation of anxiety for the students within the study. Recent research suggests that use of preferred interests as a basis for lunch time activities can increase socialisation and conversational skills with peers and increase feelings of happiness (Koegel et al., 2013). Students should be supported with opportunities to develop friendships with non ASC peers, but also to develop a group identity with peers with similar needs. This was a source of great support, comfort and personal development for the students within this study, and helped facilitate the development of their self understanding, self identity and confidence. Indeed, friendship development for children with ASC has been found to be related to increased self worth (Bauminger, Shulman, & Agam, 2004), self-awareness (Bauminger et al., 2004; Mazurek & Kanne, 2010), and improved social skills (Bauminger & Shulman, 2003).
As with all SEN students, those with ASC should have access to personalised support arrangements (DCSF, 2008) which consider their individual needs, aspirations, skills and interests, and are regularly monitored and reviewed. This should include not only adaptations required within lessons, but also access to support with homework, self management and organisation, and pastoral support. These factors enabled the students within the research presented in this thesis to manage the impact of their anxiety and to remain engaged in the learning process. As illustrated within the research, effective use of staffing to support the students should reflect this and be tailored to specific students’ needs, but may incorporate some students requiring arm’s length support within class, and others requiring more pastoral support outside of lessons. Provision mapping, a means of planning and documenting support for students including setting appropriate targets and measuring outcomes (Samson, Grimes, & Vickers, 2010), and good quality IEPs, can be used to plan and monitor effective support.

The need for pastoral support was especially evident from the research findings, which shows that students require support with aspects such as easing pressure upon themselves to achieve highly, negative thinking, poor self perception, processing and managing feelings, emotional regulation and overall emotional wellbeing. Schools should develop support systems for students with ASC to address these elements, and should seek specialist external support with these, for instance from STs and EPs and/or CAMHS practitioners. Students may benefit from national initiatives such as the Targeted Mental Health in Schools Project (Department for Children Schools and Families, 2008) and Social and Emotional Aspects of Learning curriculum resources (Department for Education and Skills, 2007), appropriately differentiated for the learning styles and needs of students with ASC. The former indicates the need for schools to take a role in the promotion of good mental health and promoting resilience in this area for all students.

Easy access to trusted staff members to discuss concerns, safe spaces when anxious, and staff support with the development of anxiety management strategies, should be available within schools for students with ASC, as identified within the research findings. As indicated by the students, these do not necessarily all require high levels of staffing or funding, and can be as simple as students being allowed a break to have a drink, having access to comforting items, or access to a quiet space or to lie down.

In addition, greater understanding by school staff of sensory and environmental factors upon the students’ anxiety and emotional responses would be beneficial to enable appropriate adaptations to be made (cf. Jones et al., 2012). Although adaptations in these areas were implemented by the schools, it was evident that more awareness of the relationships between these and anxiety was required. This may include allowing adaptations such as avoidance of corridors and communal areas at busy times, students working in the quietest areas of the class or outside of the classroom for small group work, exiting lessons when sensory factors are becoming overwhelming, access to ‘fidget’ or sensory items in class, and ensuring limitation of
excess noise within classes for the students. It would be advisable for an environmental audit to be carried out for students with ASC prior to entry to the secondary school setting and schools with limited experience in this area should seek guidance from an ST or EP.

It would be appropriate for schools to improve their collaboration with external agencies working with the students regarding their anxiety related needs, particularly services such as CAMHS. This was not specifically recognised within the research findings, yet is highlighted with existing literature as being essential to the support of such students (cf. Bevan-Brown et al., 2008; Charman et al., 2011; Jones et al., 2008). Within the research findings, students were accessing support from external agencies, and using some of these approaches within schools. It is therefore important that school practitioners are aware of these strategies and can mutually share information with other agencies to ensure the success of such approaches within the school setting. Approaches such as calming and relaxation techniques and strategies to help manage negative thinking in the students could be shared, and schools could play a role in helping to monitor the students’ anxiety related presentation and behaviour within their everyday setting. It is envisaged that the ‘Education, Health and Care Plans’ (EHCPs) outlined within the draft SEN and disability green paper (Department for Education, 2011a), due to be implemented circa 2014, would be a means of facilitating this. The EHCPs are aimed at bringing together support for students with SEN across services, in order to support their changing needs and provide clarity regarding provision of support (Department for Education, 2011a).

5.6.4 Implications for Educational Psychologists.

The findings of the research have implications for EPs, and are expected to be of interest in the practice of EPs as, due to high levels of ASC as an SEN (as reported in section 2.4.4), EPs are being called upon increasingly to guide and advise schools in developing successful interventions for students with ASC (Ali & Frederickson, 2006; Greig & MacKay, 2005). ASC related work is becoming increasingly prevalent within EPs' work and is likely to make up a large amount of an EP's caseload (Greig & MacKay, 2005).

The research findings have provided a detailed and fine-grained picture of the needs and difficulties of students with ASC and anxiety within mainstream secondary school, and perceived effective practice therein. However, it is considered by the author that the level of knowledge required to transfer the detail into practice in relation to specific students' cognitive, social and emotional profiles is relatively specialised, and EPs are in a key position to facilitate the transfer of this knowledge into the school environment. The ‘Scientist-Practitioner’ role (Lane & Corrie, 2006) enables an EP to reflect upon such knowledge and facilitate application of this within practice. The HCPC ‘standards of proficiency for practitioner psychologists’ states that EPs should “be able to work with key partners to support the design, implementation, conduct, evaluation and dissemination of research activities and to support evidence-based research” (Health and Care Professions Council, 2012b, p.17).
EPs are in an ideal place to inform practice for students with ASC (Waite & Woods, 1999) and support the development of interventions for students with ASC within educational settings (Greenway, 2000). It is argued that psychological understanding can enhance the implementation of processes to support the education of children with ASC, and that EPs can support the understanding of the psychological functioning of students with ASC to influence effective pedagogy and curriculum development for such students (Tutt, Powell, & Thornton, 2006). EPs are well placed to support SENCOs in the development of personalised learning approaches, whole school awareness raising, and social and emotional support identified within the findings of this study.

Additionally, BPS guidance for psychologists working with children with ASC (The British Psychological Society, 2006) also recommends that they have a role in the assessment of mental health issues and protective factors. EPs should be mindful of the risks of anxiety to students with ASC, and should ensure that assessment of these needs is considered within their casework with such students. It is also raises that EPs are an important therapeutic resource for students within schools, and their balance of therapeutic training, knowledge of child and adolescent psychology, and understanding of educational systems, is unique in meeting the emotional and mental health needs of students effectively (MacKay, 2007). The TaMHS report also highlights the role of the EP in supporting students with emotional needs (Department for Education, 2011b). With this in mind, EPs are in a good position to address the emotional wellbeing and anxiety management needs highlighted within the research findings.

The importance of effective pastoral supports was highlighted within the thesis findings and EPs could support schools in developing appropriate pastoral systems for ASC students. They could provide assessment and consultation regarding the development of anxiety management strategies, social skills support and building confidence, resilience and self-esteem (cf. The British Psychological Society, 2006). Individualised support by suitably qualified EPs using CBT based approaches may be beneficial in addressing the negative cognitive attributions of such students, which has been reported to be effective within the natural setting of the school environment (Greig & MacKay, 2005).

EP skills in solution focused approaches (cf. Bliss & Edmonds, 2007) and Personal Construct Psychology (cf. Moran, 2006) could be beneficial in supporting students with ASC in developing their self-concept, self-esteem and resilience. Using such approaches in consultation with school staff and parents could also be useful in developing understanding of the strengths and attributes of the students.

It is also considered that EPs can be actively involved in the promotion and dissemination of ASC awareness activities to and within schools to improve social inclusion of students with ASC (cf. Gus, 2000). The role of EPs can encompass activities such as facilitating Circle of Friends and social skills approaches (Atkinson, Corban, & Templeton, 2011; Gus, 2000). As raised within the research findings and as previously discussed, awareness raising with peers and...
anti-bullying work would be expedient in supporting students with ASC in mainstream secondary schools. It is suggested that EPs can take a role in this (Symes & Humphrey, 2010), particularly in providing guidance and advice to schools regarding how to address this carefully in order to eliminate possible further exclusion.

School staff could also be supported by EPs to consider the discursive constructs used around bullying. They could work systematically to shift the focus away from the concept of bullying being acceptable when referred to as ‘teasing’ (Bishop Mills & Muckleroy Carwile, 2009) and the within-child characteristics of the bullied child being focused upon (Hepburn, 1997), as shown at times within the research findings, to an understanding of the severe impact that name calling and exclusion can have upon students (Sharp, 1995). EPs can support schools to understand the genuine vulnerability of students with ASC to bullying and exclusion (Humphrey & Lewis, 2008b), and facilitate the development of appropriate preventative supports, such as awareness raising and friendship development work, as raised within the research findings.

EPs can also play a part in promoting and developing multi-disciplinary work between schools and external services such as CAMHS (Department for Education, 2011b). This would help to ensure that the needs of the students are identified appropriately, that all relevant parties are aware of these needs, that strategies are transferred from one setting to another and that concerns and progress are discussed and monitored across settings. It is also considered that EPs and STs should work more closely together in supporting each other and schools in the provision of specialist support for the wellbeing of students with ASC within schools (cf. Charman et al., 2011).

It may be that EPs themselves need to develop their awareness of the area of anxiety in students with ASC in order to fulfil this role. It is the author’s opinion from the process of documentary analysis that there was a wide variety of quality of EP reports in relation to the students’ anxiety related needs. Some did not address this at all, and in others the EP report was praised by parents and practitioners for its helpfulness in addressing the needs of the student in is area. Feedback to the EP team regarding the research would be beneficial in addressing these CPD needs.

As a basis for further research, it might also be beneficial and enlightening to establish the level of existing knowledge in school practitioners regarding ASC and anxiety within mainstream schools. An EP may be in an ideal position to carry out an audit of current knowledge and practice in order to implement change within the LA.

The findings from the research reinforce that EPs are in an excellent position to gain the views of students with ASC and in translating and disseminating the findings to influence practice positively (The British Psychological Society, 2006). The author intends to share the results of the study so that they can be utilised accordingly in supporting the development of practice for students with ASC and anxiety within the LA.
5.6.5 Implications for the Local Authority.

The findings indicate that there is a wealth of existing effective practice which can be built upon within the local authority. This could be further developed through various strategic approaches to aspects of the research findings.

LA strategic managers can consider the examples of good practice highlighted within the research, and reflect upon how they may be able to inform practice across other schools within the LA through further exploration and dissemination of the findings. They can facilitate communication and multi-agency work around this area by considering the findings within existing ASC related strategic groups and within the development of policy. These managers can play a key role in raising awareness through management meetings, provision of guidance and strategic planning.

There is a potential for reduction in out-of-authority placements by investing in further exploration and implementation of these findings across the LA, as discussion with senior LA staff and anecdotal evidence suggest that the anxiety of students with ASC is a significant reason for students' mainstream placements breaking down and their accessing out-of-authority placements at significant costs. This is supported by literature which reports that mental health difficulties such as anxiety can lead to out-of-authority placements (Jones et al., 2008). The findings within this thesis, although not indicating this, do suggest that students' attendance and risk of exclusion from school can be impacted upon by their anxiety. However, timely and appropriate supports provided by the schools at these times, such as home visits, addressing the contributing factors to the anxiety, and making appropriate adaptations within the school, helped to ameliorate the possibility of this. Therefore such practice could be considered more widely across the LA.

It would be worthwhile for the LA to explore utilising the expertise and skills of the practitioners highlighted within the study (such as SENCos and STs) more widely across the LA in supporting the development of practice across other schools and/or in modelling their work to practitioners from schools who do not have such practice in place. Additionally, as the use of STs featured strongly in being perceived to support the needs of these students effectively, this should be acknowledged within the LA, and systems should ensure that appropriate access to such support is available to all such students and their schools requiring this.

EPs, STs and SENCos may also have a role in developing awareness of these non-academic needs of students with ASC relating to anxiety in those involved in statutory process decision making, such as SEN Officers. The lack of understanding of anxiety by those involved in the statementing processes was identified as a barrier to the provision of effective support for students within the study. Therefore, awareness raising of factors such as understanding of the potential impact of anxiety if needs are not met should be central to this. For example,
increased emotional well-being issues, social difficulties, lowered performance, emotional outbursts and risk of attendance difficulties, should be raised within this awareness raising. It may also be pertinent to review stating criteria to ensure that anxiety-related needs are recognised within these for students with ASC.

The research findings will be presented to LA EP management, and opportunities for further discussion and work around development of the findings into practice and for strategic planning will be made available.

5.6.6 National implications.

As the research comprised a case study methodology and generalisability was not a primary aim, use of the findings outside of the LA should be exercised with caution. However, as there was a good degree of congruence with previous research regarding the needs of students with ASC (e.g. Connor, 2000; Humphrey & Lewis, 2008a; Ozsivadjian et al., 2012; Tobias, 2009), some key messages could be given due consideration more widely than in the specific LA context, for instance by national bodies such as the Department for Education and Office for Standards in Education, Children’s Services and Skills (Ofsted).

The rival explanations identified that, from the findings, support from outside school, specifically CAMHS, was considered to be effective in supporting students with ASC and anxiety regarding their anxieties within school. However, liaison and multi-agency working regarding these needs was scarce, yet is considered to be important within previous literature (Bevan-Brown et al., 2008; Charman et al., 2011; Jones et al., 2008). Therefore it is recommended that guidance could be provided to schools to make them more aware of the services that external agencies such as CAMHS and Educational Psychology Services can provide in relation to these needs, and to encourage practitioners to liaise more with one another to identify such needs, share strategies and monitor progress.

Additionally, pressure upon CAMHS could be eased by school practitioners such as SENCOs, enabling prevention and early intervention through recognition of need, and practitioners such as EPs and STs providing direct support within the naturalistic context. Providing evidence to national bodies’ regarding this could help to support the need for early intervention within schools for students with ASC. It is envisaged that identification of need and examples of good practice from the research within this thesis could enable the early support of students with ASC who present with signs of anxiety prior to tier 2 of the CAMHS tiered model (NHS Health Advisory Service, 1995), by promoting the use of appropriate approaches within the school setting.

The need for training and awareness raising regarding the needs of students with ASC and anxiety, and the potential of anxiety for such students, should be promoted to mainstream schools as an area for development. This exists in brief in recent guidance (Jones et al., 2008,
2012), but further promotion of this across local authorities would be pertinent and the findings of this research could add some weight to such existing guidance.

5.6.7 Implications for future research.

The research findings act as a detailed base from which to explore the area of support for students with ASC and anxiety in mainstream school further. In the long term, the author would ideally hope to develop a framework to support those working with students with ASC and anxiety in mainstream education to meet their needs most effectively. This would encompass suggested strategies, approaches and interventions based upon evidence of ‘what works’ in prevention, support and management of anxiety for these students. The author would be keen to collaborate with authors of existing related research in order to develop such a tool. However, in order to do so, further exploration of this area would be required, as the effective practices highlighted within the study are perceptions of mechanisms of what worked and as such are a starting point for further exploration. This could take the form of further case studies across different LAs, a survey of the use and perceived effectiveness of the identified approaches from the research across a wider sample of ASC students, and/or a longitudinal evaluation of such approaches within a random sample of schools who do not currently use such approaches.

Furthermore, research considering the needs of the students with ASC and anxiety in comparison to non-ASC peers with anxiety may highlight specific areas to focus upon in relation to differentiation of resources and approaches within schools and educationally focused mental health and wellbeing guidance.

Development of a validated, standardised measure of anxiety in students with ASC would be beneficial for further assessing the effectiveness of support for these students within educational settings, as existing measures for generic populations may not be suitable for identifying the specific presentation of anxiety in this population (Ozsivadjian et al., 2012). Existing generic measures may be useful, but literature reports that the features of anxiety more pertinent to an ASD population tend not to be contained within these (MacNeil et al., 2009). Preliminary studies regarding two ASC specific measures have been reported (Bakken et al., 2010; Helverschou, Bakken, & Martinsen, 2009; Leyfer et al., 2006), but these are broad measures of psychiatric and affective conditions and not anxiety specific, are clinic-based tools, and are not presently available for use.

The research findings highlight areas which were strongly perceived to have specific impact upon the resilience of the students to anxiety within the school setting; these being the development of friendships and peer support networks, a positive school approach and development of positive awareness raising. The findings from the research could be used as a starting point to develop further hypotheses and research regarding the relationship of these factors upon the resilience of students with ASC to anxiety, and building upon existing non-
anxiety specific ASC research in this area (Bauminger et al., 2004; Koegel et al., 2013; Mazurek & Kanne, 2010; Morewood et al., 2011; Wainscot, Naylor, Sutcliffe, Tantam, & Williams, 2008). In addition, exploring why some students with ASC appear to be more accepted by peers and less vulnerable to bullying than others within the mainstream setting (as was the case with Megan) might help to identify further resiliency factors.

Further exploration of the use of pastoral and therapeutic supports within schools for anxiety management in students with ASC would supplement the findings of this research and existing literature (Browning et al., 2009; Tobias, 2009) to provide further detail and evidence to support the needs for such interventions. Exploration of the strengths, special interests, skills and talents of students with ASC and the use of these in building resiliency to, and management of, anxiety is a considerably under-explored area within this population of students, and would merit further investigation to build upon the research findings and existing recent literature (Koegel et al., 2013).

Future research should utilise elements of the existing methodology regarding carefully gaining the views of the students with ASC and anxiety themselves, as the key stakeholders in the exploration of this issue. However, utilising alternative methods such as participatory action research, in which stronger relationships with the students might be developed in order to enhance the research process, may be a consideration.

**5.7 Reflections upon the Research**

The author, also the researcher/interviewer, found conducting the research to be a challenging yet valuable experience which added considerable further knowledge and understanding to her existing experience of the needs of students with ASC. However, unfortunately, the extent of good practice, innovation and tenacity of the school practitioners (especially the SENCos) in ensuring that the needs of the students were met within the research schools does not match prior experiences of support for this area of need, hence the reason for the research being conducted. It is hoped that the examples of good practice and evidence of these can be utilised in due course in further supporting students with ASC and anxiety positively in other schools.

The research was carefully designed and implemented but, due to the unpredictable nature of real world research, methodological elements required to be changed during the course of the process. Most specifically, the recruitment process was problematic, as the criteria of students not currently experiencing unmanageable anxiety ruled out the majority of potential participants. In retrospect, much longer should have been allowed for recruitment processes. In addition, although the student interviews elicited rich data, the author felt that the students’ engagement in the process could perhaps have been more dynamic with alternate approaches used over time.
Although the researcher offered to meet the students prior to interview to build rapport, this was not taken up by most participants. Carrying out this process may have improved the engagement of students and, in future similar research, this process would be encouraged. However, after carrying out the interviews and meeting the students, alternative means of gaining students’ views would also be considered. Although the interviews were deemed to be successful in eliciting data, the students’ voices may have been ‘heard’ more effectively in a more participatory process, which time did not allow in this instance. The students all showed interest and skills in artistic and creative areas such as drawing, modelling, role-playing and/or use of video. They became animated and opened up more when discussing these areas of interest, and the research findings suggested that use of specialist interests can be used to help them develop relationships. Therefore, future research might benefit from using participatory approaches involving use of video, cartooning, model-making or other artistic activities in more actively gaining the views of the student participants. However, the methods used in this study were not thought to be detrimental in any way; one parent even commented that they, and their child, had enjoyed the process. Another parent reported that the student had found it to be a therapeutic experience.

The research diary enabled reflection upon the process of the research as the study progressed. Although in the initial stages completion of this seemed arduous, and not one of the best uses of time, it transpired to be a useful tool, especially in reflecting upon the interview processes. Additionally, informal supervision with EP and TEP colleagues proved invaluable to ensuring that the researcher’s own assumptions and experiences of working with students with ASC did not adversely influence the research analysis process.

Through the research process, the author has developed skills in research methods which were not previously utilised, and in considering different epistemological paradigms and the potential influence of these upon research and practice. Due to a specialist role in working with students with autism, the author has already been raising awareness of these areas of need within schools, and hopes to expand upon this by reflecting upon the findings within individual casework and school/parent consultations, which it is hoped will expand her existing skills and knowledge in practice.

5.8 Conclusion

Previous research regarding ASC and anxiety has had a predominantly clinical focus, and existing studies regarding the needs of students with ASC in mainstream education which highlight anxiety related factors are typically not specific to this area of need. Therefore it is considered that the research presented in this thesis has provided a unique contribution to the area by presenting a detailed and triangulated exploration of the needs and difficulties of students with ASC and anxiety within mainstream secondary schools within one LA, relevant to the key stakeholders. Comprehensive information regarding perceived effective practice in supporting such students from a range of sources has been elicited, and fills a gap in the
existing literature. Particularly pertinent are the views of the students themselves, who were able, quite eloquently, to provide examples of their experiences and what they perceived to help them with their anxiety related needs. These displayed good congruence with other sources of data which, overall, led to a broad picture of the experiences of students with ASC and anxiety within mainstream schools.

It is hoped that the findings of the study will provide utility for the LA in which the study was conducted, in order that the effective practice can be sustained and developed further throughout the LA, thus effecting positive change for more students with ASC.

The findings from this study highlight that, although the experiences and personal characteristics of students with autism and ASC vary, there are significant areas of commonality which can be utilised in exploring the effective support of such students further. The literature review and findings have highlighted specific common signs of anxiety that present within students with ASC in schools, along with information regarding contributing factors and the impact that anxiety has for these students within the school setting. It is clear that it is not only the actions and practice of teachers within lessons that impacts upon the experiences of anxiety for students with ASC, but most importantly, the wider school context. The majority of the identified factors which impacted upon students’ anxiety occurred outside the classroom, and the relationships of the students with peers played a key role in their experiences. The limited literature regarding effective support for students with ASC specific to anxiety within the school setting has been expanded upon. It demonstrates that the wider school context and non-classroom based support play a most influential part in minimising the impact of anxiety for students with ASC.

In conclusion, it is considered that this small scale exploratory case study has not only provided support for existing theory regarding the needs of students with ASC, but has expanded upon this with fine-grained dynamic information about the experiences of students with ASC and anxiety which can be related to practice. Effective practice in supporting students with ASC and anxiety does exist and students have evidently progressed well with targeted and tailored support. As one parent expressed regarding their child: “She is a major success story. We cannot believe now going back to those dark times to where she is at now. It’s just unbelievable how well she’s doing” (P4).
6 References


Hare, D. J. (2004). Developing cognitive behavioural work with people with ASD. Good Autism Practice, 5(1), 18–22.


7 Appendices

Please note that the layout and/or format of letters and information sheets provided to students, parents, schools and colleagues may be different to those that were sent to them. This is due to formatting for the presentation of the thesis, such as wide margins for thesis binding.
APPENDIX A: Literature Search Strategy

The literature review was based upon a systematic search of published literature, initially during March 2011, which was amended and updated during December 2011 following a change in design and methods and a resubmission of the thesis proposal. This was then updated again in April and December 2012 to include any new literature and additional search terms.

The systematic search to identify literature for the review involved searching online databases that commonly feature journal articles related to psychology and education using search terms asperger* OR autis* AND anxi* AND school OR educat* in the abstract. Additional terms of perceive* OR perception* OR view* were then used to identify the most pertinent literature. A full breakdown of terms used is shown in the table below.

Books and book chapters were included for review if they were found within searches and reference harvesting, but were not specifically systematically searched for.

<table>
<thead>
<tr>
<th>Date</th>
<th>Databases or search facility</th>
<th>Search terms and options used</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>16th April 2011</td>
<td>Test searches in well known search engines and meta search engines such as Dogpile, Google, Google Scholar, Yahoo and Bing. E.g.</td>
<td>autism AND anxiety Asperger AND anxiety</td>
<td>Produced unmanageably large yields and/or majority results that were not relevant.</td>
</tr>
<tr>
<td></td>
<td>Google Search</td>
<td></td>
<td>15,200,000 and 72,200 results respectively</td>
</tr>
<tr>
<td></td>
<td>Google Scholar</td>
<td></td>
<td>9,310,000 and 18,100 results respectively</td>
</tr>
<tr>
<td>March 2011</td>
<td>Education and psychology related databases: ASSIA, ERIC, PsycInfo, Sage Journals Online, Pub Med, Web of Knowledge, InformaWorld, and ScienceDirect</td>
<td>search terms &quot;asperger* OR autis* AND anxi*&quot; in the abstract or keywords (depending upon the search facility) 'to date'</td>
<td>Yielded an unmanageable amount of referenced works of 7,772 in total. Many articles in this first search had a primary focus regarding adults with ASC</td>
</tr>
<tr>
<td>December 2011</td>
<td>As Above</td>
<td>Using the same terms as above but refined by adding the search terms 'AND child* OR adolescen* OR &quot;young pe*&quot; in abstract'</td>
<td>It was noted that several databases appeared to source exactly the same articles, or primarily articles with a medical focus and therefore these were cross checked and omitted. A total of 776 results were found</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>April 2012</td>
<td>Focus upon databases that included well known ASC journals (for instance; the Journal of Autism and Developmental Disorders, Autism, and Focus on Autism and Other Developmental Disabilities), and special education and/or psychology journals. Those focusing upon medical journals were excluded. Therefore ERIC, ScienceDirect, Sage Journals Online, Wiley Online Library, ASSIA, PsycINFO, and Taylor &amp; Francis Online (was InformaWorld) databases were searched.</td>
<td>Replaced ‘AND child* OR adolescen* OR &quot;young pe&quot;* in abstract’ with ‘AND school OR educat* in abstract’ to avoid clinically focused articles. Search criteria for ‘peer reviewed’ articles ‘to date’ used. Further terms ‘worr*’ (for worry, worries, worried, and worrying), ‘emoti*’ (for emotional, emotive, and emotions), ‘stress*’ (for stress, stressed and stressors) and ‘inclus*’ (for inclusion or inclusive) were used. A hand search of the final results for the relevance of the search terms in the abstracts was carried out. Further search criteria such as restricting to article titles rather than abstracts omitted key relevant articles. Retrieved documents for these terms were already included in the anxiety related searches. A total of 278 results were found. Many of the articles at first appeared relevant but, upon further exploration, were not specific enough for the literature review. For instance, many referred to ‘school-age’ children and therefore presented in the search even if the paper/study was not related to practice in schools.</td>
<td></td>
</tr>
<tr>
<td>April 2012</td>
<td>Consultation with EP colleagues and the university supervisory/tutorial team</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>April 2012</td>
<td>Furthermore the ProQuest Dissertations &amp; Theses, Index to Theses and EThOS (Electronic Theses Online Service) databases were searched for relevant theses</td>
<td>asperger* OR autis* in abstract AND anxi* in abstract AND school OR educat* in abstract. 17 theses found none of which fully met criteria after further exploration.</td>
<td></td>
</tr>
<tr>
<td>April 2012</td>
<td>Back issues of the British Psychological Society Division of Educational and Child Psychology ‘Educational and Child Psychology’ journal (volumes 14(1) to 24(4)), available online, were also searched by hand.</td>
<td>Hand search using the ‘find’ facility in Adobe Acrobat for ‘anxi’ and for ‘autis’ and ‘asperger’. 11 articles found, 1 of which met criteria.</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Activity Description</td>
<td>Search Terms</td>
<td>Results</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>April 2012</td>
<td>Government legislation and guidance were searched for, using the Department for Education website</td>
<td>‘find’ facility in Adobe Acrobat for ‘anxi’ and for ‘autis’ and ‘asperger’</td>
<td>13 search results found, none met the criteria</td>
</tr>
<tr>
<td>April 2012</td>
<td>Reference harvesting of the papers identified through the systematic search</td>
<td>Relevant articles identified during reading</td>
<td></td>
</tr>
<tr>
<td>December 2012</td>
<td>A search of all final identified articles and an additional search of the databases searched in April 2012</td>
<td>search terms ‘asperger* OR autis* AND anxi*’ AND school OR educat* in abstract ‘to date’ and ‘peer reviewed’ (based on the main search from April 2012), plus an additional search for articles containing perceive* OR perception* OR view* in abstract within the last 10 years to date</td>
<td>166 found</td>
</tr>
<tr>
<td>December 2012</td>
<td>Reference harvesting of the papers identified through the systematic search</td>
<td>Relevant articles identified during reading</td>
<td></td>
</tr>
</tbody>
</table>

Due to the large number of potential articles, but the disparity in relevance, the literature review was broken into two final stages. Phase one (see appendix B) identified a total of 14 final articles from a range of journals, reference harvesting and consultation with colleagues/tutors. These articles focused upon ASC and perceptions of school by students, parents or practitioners and made some reference to anxiety within this, but were not specifically focused upon anxiety. For instance, the article may have been focused upon social skills or inclusion for students with ASC, but made some reference to anxiety within the discussion surrounding this.

Phase two (see appendix C) identified two of these articles whose whole focus pertained specifically to students’, parents’ and/or practitioners’ perceptions of school or education for young people with ASC and with a specific emphasis upon anxiety.

Many of the omitted articles involved a focus upon participants outside the targeted age range or type (e.g., adults or pre-school children, parents or siblings), or with other conditions as the focus (e.g. Attention Deficit Disorder). Those articles written by clinicians were included if the outcomes of the study were relevant to school, regardless of whether the study was itself clinically focused. Yet if the focus and outcomes were specific to a clinical domain, they were not included. For instance, some articles written by clinicians, although mentioning school-age children, focused solely upon clinical aspects such as medical treatment or diagnosis, and thus were not included, whereas others focused more holistically upon the impact and presentation of the child across environments, including school, and were therefore included.
APPENDIX B: Inclusion and Exclusion Criteria for Phase 1 of the Literature Review

<table>
<thead>
<tr>
<th>Literature Review Inclusion Criteria for Phase 1</th>
<th>Reason for inclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>✅ Peer reviewed articles or literature that is externally published and widely available</td>
<td>To ensure the literature is of a high and reliable standard and to limit the amount of literature found to a manageable amount</td>
</tr>
<tr>
<td>✅ PhD. and doctoral theses</td>
<td>These are externally peer reviewed which allows for greater validity and reliability.</td>
</tr>
<tr>
<td>✅ Articles containing autis* OR asperger* AND anxi* AND school OR educat* within the abstract through database searches</td>
<td>To highlight articles focusing upon ASC and anxiety within school or education</td>
</tr>
<tr>
<td>✅ The main focus of the article is specifically regarding children/young people with HFA and/or AS (or this group included within the participant cohort)</td>
<td>To limit articles to those most relevant to the participant group being studied within this research</td>
</tr>
<tr>
<td>✅ The article makes reference to anxiety and how this might present or manifest within school or education for this group of children and young people</td>
<td>To ensure that these factors are considered within the educational/school setting as per the research rationale</td>
</tr>
<tr>
<td>✅ Articles regarding the perspectives, perceptions, and/or views of participants</td>
<td>To fit with the epistemological and ontological approach of the research and to provide a richer picture than that already reported within current literature</td>
</tr>
<tr>
<td>✅ Articles that include details of supports or interventions that are evidence based</td>
<td>To gain a picture of what is deemed to be effective in supporting students with ASC and anxiety and to ensure that there is some validity to the literature and the source of the data being reported. The evidence base could be from a variety of sources (e.g. participant interviews, documentary evidence, self-report measures) provided that this is stated and is shown to be reliable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Literature Review Exclusion Criteria</th>
<th>Reason for omission</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗ Not in English language</td>
<td>Lack of relevance to British EP practice and inaccessible to the researcher</td>
</tr>
<tr>
<td>✗ Not peer reviewed</td>
<td>See the text regarding lack of validity of ASD information and limiting the review to manageable numbers of relevant documents</td>
</tr>
<tr>
<td>✗ Masters dissertations</td>
<td>These are not externally reviewed and therefore the level of reliability and validity may not be as great</td>
</tr>
<tr>
<td>✗ Not related specifically to ASC</td>
<td>Lack of relevance to the research as the focus is regarding students with ASC specifically</td>
</tr>
<tr>
<td>✗ Comparison with/focus on other conditions (e.g. ADHD, OCD, Schizophrenia)</td>
<td>As above</td>
</tr>
<tr>
<td>✗ Solely biological/ neurological studies</td>
<td>Lack of relevance to EP practice within schools and to the research - the research is regarding practical supports/interventions rather than neurological/biological</td>
</tr>
<tr>
<td>Articles solely regarding the use of psychotropic/pharmacological treatment</td>
<td>Lack of relevance to EP practice within schools and to the research - the research is regarding practical supports/interventions rather than pharmacological interventions</td>
</tr>
<tr>
<td>Articles about parents/carers’ anxiety</td>
<td>The focus of the research is not about parental anxiety, but the student's anxiety and the supports that schools provide</td>
</tr>
<tr>
<td>Adult focus (16+) only</td>
<td>The research is focused upon compulsory secondary school age children and the specific needs/difficulties relating to this</td>
</tr>
<tr>
<td>Pre-school focus only</td>
<td>As above</td>
</tr>
<tr>
<td>Focus upon primary school age only</td>
<td>As above</td>
</tr>
<tr>
<td>Specific to a special school population only</td>
<td>The focus is upon mainstream education due to needs highlighted in this population</td>
</tr>
<tr>
<td>Specific to children with ASC and additional generalised learning difficulty only</td>
<td>The research is focused specifically upon those with AS or HFA, and therefore articles pertaining to those with an additional learning difficulty may lack relevance to this research population</td>
</tr>
<tr>
<td>Specifically relating to transition from primary to secondary school</td>
<td>This is a topic of research in its own right; transition factors will be taken into account, but as the research covers all ages of secondary education articles focusing solely upon transition will not encompass this.</td>
</tr>
<tr>
<td>Anxiety specific to one area that is not education related (e.g. using public transport, phobia of dogs), e.g. an article found titled ‘Fear of Routine Physical Exams in Children With Autism Spectrum Disorders: Prevalence and Intervention Effectiveness’ (Gillis, Hammond Natof, Lockshin, &amp; Romanczyk, 2009)</td>
<td>This is too specific for the research in focus and lacks relevance to a wider population.</td>
</tr>
<tr>
<td>Focused on one approach/perspective that is particular to use by professionals not primarily practising in schools/education (e.g. clinicians, non school based psychodynamic counsellors, non school based art therapists etc.)</td>
<td>Studies with clinic based outcomes are not directly relevant to the practice being considered within schools. Additionally there is a need for the literature and interventions described within the studies to be directly relevant and intelligible to practitioners working within an educational context. Therefore non educationally focused articles with social, ecological, cognitive or behavioural foci and outcomes may have been included, but, for instance, those with a solely clinical, psychodynamic or counselling emphasis may not.</td>
</tr>
<tr>
<td>Studies using only quantitative methods of data collection</td>
<td>To fit with the epistemological and ontological position and to provide an alternative to those studies that are presently predominant within this area</td>
</tr>
<tr>
<td>Articles that do not provide details of the evidence base for the supports or interventions they refer to</td>
<td>To ensure that there is some validity to the literature and the source of the data being reported.</td>
</tr>
</tbody>
</table>
### APPENDIX C: Inclusion and Exclusion Criteria for Phase 2 of the Literature Review

<table>
<thead>
<tr>
<th>Literature Review Inclusion Criteria for Phase 2</th>
<th>Reason for inclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inclusion criteria phase 2</strong></td>
<td>To highlight articles focusing upon ASC and anxiety within school or education</td>
</tr>
<tr>
<td>✓ Articles containing autis* OR asperger* AND anxi* AND school OR educat* within the abstract through database searches</td>
<td>To limit articles to those most relevant to the participant group being studied within this research</td>
</tr>
<tr>
<td>✓ The main focus of the article is specifically regarding children/young people with HFA and/or AS (or this group included within the participant cohort)</td>
<td>To further focus the literature review to the most relevant articles with a main focus pertinent to the primary area of need being studied as opposed to wider areas of need</td>
</tr>
<tr>
<td>✓ The main focus of the article is regarding anxiety in this group of children/young people</td>
<td>To further focus the literature review to the most relevant perspectives of the research being carried out</td>
</tr>
<tr>
<td>✓ The article is written from an educational practitioner perspective and/or the main focus is regarding school/education for this group of children/young people</td>
<td></td>
</tr>
</tbody>
</table>

Some of the literature which did specifically mention anxiety within school, although peer reviewed, did not make reference to interventions or supports based upon evidence or did not make the evidence base clear, - for instance, not specifying where the suggested approaches and interventions had been gathered from nor what quantitative or qualitative methods were used to explore these and therefore has not been included (e.g. Smith Myles, 2003).

<table>
<thead>
<tr>
<th>Literature Review Exclusion Criteria</th>
<th>Reason for omission</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exclusion criteria for phase 2</strong></td>
<td>To focus the literature review upon detailed literature regarding the specific area of study rather than a wide range of general literature regarding students with ASC within school</td>
</tr>
<tr>
<td>As per phase 1 plus:</td>
<td></td>
</tr>
<tr>
<td>× Not specifically focused upon anxiety, worry or stress for the student</td>
<td></td>
</tr>
</tbody>
</table>

220
**APPENDIX D: Theoretical Propositions**

**Overarching proposition:** The students with ASC showed noticeable signs of anxiety within the school environment

**Linking to Research Question 1:** What are the perceived difficulties and needs of students with ASC who show signs of anxiety in the mainstream secondary school setting?

<table>
<thead>
<tr>
<th>Sub Proposition</th>
<th>Links to Theory / Literature</th>
</tr>
</thead>
</table>
| The students displayed negative patterns of thinking linked to their anxiety | • Rigid, negative, polarised and fatalistic thinking, biased perceptions, ‘all or nothing thinking’, and inaccurate attributions (Greig & MacKay, 2005; Hare, 2004).  
  • Polarised thinking (Greig & MacKay, 2005).  
  • Fatalistic thinking (Greig & MacKay, 2005).  
  • Inaccurate attributions (Greig & MacKay, 2005).  
  • Thinking errors, cognitive distortions, catastrophising, and ‘all or nothing thinking’ (Ozsivadjian et al., 2012).  
  • Negative future predications (Ozsivadjian et al., 2012).  
  • Obsessive worrying (Rotheram-Fuller & MacMullen, 2011). |
| The students experienced physical signs or symptoms when anxious | • Physiological signs, such as complaints of feeling sick and being uptight and tense (Browning et al., 2009).  
  • An increase in complaints of sickness, stomach aches and unusual feelings in their stomachs, changes in the skin such as redness, bumps and boils, clamminess and darkness around the eyes (Ozsivadjian et al., 2012).  
  • Heart racing, sweating, changes in their breathing, ‘butterflies’, wobbly legs, and feeling sick (Ozsivadjian et al., 2012). |
| The students displayed non-verbal signs that were untypical when anxious | • Increased activity levels such as ‘jumping about’ (Ozsivadjian et al., 2012).  
  • Nervous behaviour such as biting nails (Ozsivadjian et al., 2012).  
  • ‘Becoming edgy’ (Ozsivadjian et al., 2012).  
  • Continuous movements of the eyes (Ozsivadjian et al., 2012).  
  • Visible signs of discomfort (Browning et al., 2009).  
  • Inappropriate non-verbal communication (Greig & MacKay, 2005). |
| The students’ anxiety led to changes in their speech or vocalisations | • Repeating questions (Ozsivadjian et al., 2012).  
  • Making noises such as humming (Ozsivadjian et al., 2012). |
| The students displayed emotional distress or vulnerability when anxious | • Crying (Carrington & Graham, 2001)  
  • Emotionally over-aroused (Charman et al., 2011)  
  • Sadness (Macintosh & Dissanayake, 2006).  
  • Moods (Greig & MacKay, 2005) |

Continued over
Overarching proposition: Specific factors within school caused anxiety for the students with ASC

Linking to Research Question 1: What are the perceived difficulties and needs of students with ASC who show signs of anxiety in the mainstream secondary school setting?

<table>
<thead>
<tr>
<th>Sub Proposition</th>
<th>Links to Theory / Literature</th>
</tr>
</thead>
</table>
| Sensory and/or environmental factors within school may have impacted upon the students' anxiety | • Noise and disruptions within class (Humphrey & Lewis, 2008a).  
• Sensory responsiveness (Green & Ben-Sasson, 2010).  
• The school environment (Humphrey & Lewis, 2008a).  
• Chaotic environment (Humphrey & Lewis, 2008a).  
• The noise and typical ‘hustle and bustle’ of the secondary school environment (Humphrey & Lewis, 2008a).  
• The ‘bustle’ of school (Connor, 2000).  
• The busy secondary school environment (Connor, 2000).  
• Sensory differences (Jones et al., 2012).  
• Sensory factors such as loud noises, teachers shouting, multiple voices, and certain smells at school (Ozsivadjian et al., 2012).  
• Sensory sensitivity (Ozsivadjian et al., 2012). |
| Social situations and differences in social understanding led to anxiety for the students | • Social worries (Ozsivadjian et al., 2012).  
• Social skills difficulties (Bellini, 2004).  
• Social worry regarding interaction with peers outside of classes, not knowing what to say, being self conscious in social situations, others’ perceptions of them, interpreting social situations, being the centre of attention, and being ridiculed (Browning et al., 2009; Connor, 2000; Humphrey & Lewis, 2008a; Ozsivadjian et al., 2012).  
• Difficulty in social skills and building social relationships with peers, feelings of isolation, trying to ‘fit in’, and poor social confidence (Browning et al., 2009; Connor, 2000; Morewood et al., 2011; Ozsivadjian et al., 2012).  
• Managing the social expectations of peers (Carrington & Graham, 2001). |
| The students' anxiety was heightened by changes at school | • Change or changes in routines (Ozsivadjian et al., 2012).  
• Being taught by a supply teacher, changing clothes for PE lessons, sports days, school holidays and changing schools (Ozsivadjian et al., 2012).  
• Unexpected events or changes in expectations, routine, or environment (Wilkerson & Wilkerson, 2004).  
• The impact of routine changes (Greig & MacKay, 2005).  
• Changes in routine (Ozsivadjian & Knott, 2011). |
| Perceived peer exclusion, teasing or bullying by other students may have led to anxiety for the students | • Peer reactions (Ozsivadjian et al., 2012).  
• Being ridiculed (Ozsivadjian et al., 2012).  
• Negative attention from other students (Browning et al., 2009; Connor, 2000; Humphrey & Lewis, 2008a; Ozsivadjian et al., 2012).  
• Feelings of isolation and limited social acceptance (Browning et al., 2009; Connor, 2000; Morewood et al., 2011; Ozsivadjian et al., 2012).  
• Peer exclusion, teasing, and bullying (Wilkerson & Wilkerson, 2004). |
| The students experienced anxiety during times of transition | • Changes of school, transition to secondary school and transition at age 16 (Browning et al., 2009; Jones et al., 2008).  
• Delayed placement decisions at transition time (Jindal-Snape et al., 2006). |
<table>
<thead>
<tr>
<th>The students’ awareness of their own differences or needs caused anxiety</th>
<th>• Awareness and anxiety regarding their social differences, idiosyncratic style (Browning et al., 2009; Connor, 2000; Humphrey &amp; Lewis, 2008a; Ozsivadjian et al., 2012).</th>
</tr>
</thead>
<tbody>
<tr>
<td>The students became anxious about achieving aspirations or about expectations of them</td>
<td>• Worry about school performance (Ozsivadjian et al., 2012). • Worry about completing school work (Carrington &amp; Graham, 2001). • Performance-related anxieties (Ozsivadjian &amp; Knott, 2011). • Perceived expectations of others (Ozsivadjian &amp; Knott, 2011).</td>
</tr>
<tr>
<td>Difficulties with understanding and managing their own feelings heighten the students’ anxiety</td>
<td>• Understanding and expressing emotion and in introspection (e.g. Baron-Cohen et al., 1985; Baron-Cohen, 2008). • Complexity of self regulation (Greig &amp; MacKay, 2005). • Internalising problems (Macintosh &amp; Dissanayake, 2006).</td>
</tr>
<tr>
<td>Unstructured times were a cause of anxiety for the students within school</td>
<td>• Long unstructured periods (Connor, 2000). • Lunch and break times (Connor, 2000).</td>
</tr>
<tr>
<td>The students’ anxiety resulted from a perceived lack of adult understanding of the needs of the student within school</td>
<td>• Teachers misunderstanding AS (Wilkerson &amp; Wilkerson, 2004). • Efforts to include students with ASDs were met with ambivalence and lack of recognition (Humphrey &amp; Lewis, 2008b). • Scepticism among staff (Humphrey &amp; Lewis, 2008b). • Staff unaware of the policy that they were supposed to be implementing (Humphrey &amp; Lewis, 2008b). • Difficulties of staff translating policy into practice (Humphrey &amp; Lewis, 2008b). • Some teachers’ lack of understanding of the needs of students with ASDs (Humphrey &amp; Lewis, 2008b). • Failure of staff to accommodate the ‘literality of thought’ of students with ASDs (Humphrey &amp; Lewis, 2008b). • Teaching and learning to be better tailored to students’ individual needs (Humphrey &amp; Lewis, 2008b).</td>
</tr>
</tbody>
</table>

Continued over
**Overarching proposition**
When anxious, the presentation, experiences and behaviour of the students with ASC were adversely affected within school

**Linking to Research Question 1:** What are the perceived difficulties and needs of students with ASC who show signs of anxiety in the mainstream secondary school setting?

<table>
<thead>
<tr>
<th>Sub Proposition</th>
<th>Links to Theory / Literature</th>
</tr>
</thead>
</table>
| The students’ anxiety impacted upon their social and peer relationships at school | • Loneliness and social skill difficulties (Macintosh & Dissanayake, 2006).  
• Relationship problems (Greig & MacKay, 2005).  
• Peer relationships (Reaven, 2009) (Rotheram-Fuller & MacMullen, 2011).  
• Inappropriate verbal communication (Greig & MacKay, 2005).  
• Isolation. (Carrington & Graham, 2001). |
| The students’ anxiety may have had an adverse effect upon their academic performance | • Not reaching potential (Greig & MacKay, 2005).  
• Affects academic performance (Rotheram-Fuller & MacMullen, 2011).  
• Difficulty in engaging in learning (Charman et al., 2011).  
• Organisational factors, e.g. getting to the right lessons at the right time and having the necessary equipment (Connor, 2000).  
• Difficulties with attention and focusing on the relevant information (Jones et al., 2012).  
• Completing school work (Carrington & Graham, 2001). |
| The students’ anxiety contributed to their lowered self-esteem | • Low self worth (Ozsivadjian et al., 2012).  
• Low self-esteem (Macintosh & Dissanayake, 2006).  
• Impact upon self-esteem (Greig & MacKay, 2005).  
• Lowered self-esteem (Wilkerson & Wilkerson, 2004). |
| The students’ eating or sleeping patterns were affected when experiencing periods of anxiety | • Problems with eating patterns (Greig & MacKay, 2005).  
• Problems sleeping (Greig & MacKay, 2005).  
• Fatigue (Carrington & Graham, 2001). |
| The students may have experienced severe emotional or mental health needs during their periods of anxiety | • ‘Suicidal remarks’ (Carrington & Graham, 2001).  
• Psychiatric hospitalization (Wilkerson & Wilkerson, 2004).  
• Emotional breakdowns (Wilkerson & Wilkerson, 2004). |
| The students experienced changes in attention and concentration at school when anxious | • Inattentive and disorganised behaviour (Carrington & Graham, 2001).  
• Difficulties in concentration (Humphrey & Lewis, 2008b).  
• Attention, concentration and organisation difficulties (Greig & MacKay, 2005). |
| The students may have displayed adverse behaviour at school when anxious | • Increased arousal and challenging behaviour. (Ozsivadjian et al., 2012).  
• Anxiety expressed primarily through behaviour (Ozsivadjian et al., 2012).  
• Behavioral outbursts (Wilkerson & Wilkerson, 2004).  
• Disruptive and attention-seeking behaviour (Greig & MacKay, 2005).  
• Disrupted classrooms (Wilkerson & Wilkerson, 2004). |
The students’ anxiety may have caused repetitive or compulsive behaviours

| The students’ anxiety may have caused repetitive or compulsive behaviours | • Increased obsessional and repetitive behaviours (Ozsivadjian et al., 2012).  
• Repetitive play, repeating questions and intense focus on specific subjects (Ozsivadjian et al., 2012).  
• Compulsive behaviors (Rotheram-Fuller & MacMullen, 2011).  
• Tics (Greig & MacKay, 2005).  
• Intensifying the characteristics associated with ASC (Greig & MacKay, 2005). |
| The students’ anxiety led to physical or emotional withdrawal | • An increase in withdrawal and avoidance and escape behaviours (Ozsivadjian et al., 2012).  
• Often sought refuge (Humphrey & Lewis, 2008b).  
• Isolation (Carrington & Graham, 2001).  
• Present as isolated and unoccupied (Connor, 2000). |

Continued over
**Overarching proposition:** Specific actions, intervention, support and/or strategies at school helped to limit or manage anxiety for the students with ASC

**Linking to Research Question 2:** What is perceived to be effective practice in supporting students with ASC who show signs of anxiety in the mainstream secondary school setting?

<table>
<thead>
<tr>
<th>Sub Proposition</th>
<th>Links to Theory / Literature</th>
</tr>
</thead>
</table>
| Good knowledge, understanding and approach of school staff lessened the likelihood of anxiousness within the students | • Getting to know students with ASC (Bevan-Brown et al., 2008).
• Taking on board information about the student and ASC (Bevan-Brown et al., 2008).
• Identifying students’ specific needs (Bevan-Brown et al., 2008).
• Greater awareness of AS by staff (Connor, 2000).
• Use of adapted teaching approaches to take account of the specific patterns of strength and need in students with ASC (Connor, 2000; Humphrey, 2008).
• Training for teachers re students ‘displaying inappropriate emotions’ (Humphrey & Symes, 2011).
• Teacher knowledge and understanding of ASC (Humphrey & Lewis, 2008b).
• Specialist knowledge of SENCo and TAs (Humphrey & Lewis, 2008b).
• Motivation of the teaching staff (Humphrey & Lewis, 2008b).
• Teaching and learning being better tailored to students’ individual needs (Humphrey & Lewis, 2008b).
• Changes in expectations of staff (Connor, 2000).
• Recognising students’ anxious and vulnerable states (Jones et al., 2008).
• Acknowledgement of the distinct needs of students with ASC in mainstream schools (Humphrey & Lewis, 2008b). |
| The students’ anxiety was reduced through the use of appropriate visual and concrete teaching approaches | • Use of visual aids (Rotheram-Fuller & MacMullen, 2011).
• Hands-on activities (Rotheram-Fuller & MacMullen, 2011).
• Written worksheets to introduce new concepts (Rotheram-Fuller & MacMullen, 2011). |
| Teaching staff providing suitable adaptations to communication and language use would help to limit the students' anxiety | • Clear communication (Jones et al., 2008).
• Adapting language and instructions appropriately for the students (Connor, 2000).
• Use of modified language and interactions (Connor, 2000; Humphrey, 2008).
• Consistency amongst practitioners in the use of direct and unambiguous directions (Connor, 2000; Humphrey, 2008).
• Teacher confidence to communicate with the student (Humphrey & Lewis, 2008b).
• Adaptations to the language used within sessions (Rotheram-Fuller & MacMullen, 2011).
• Communication must be made concrete and developmentally appropriate (Rotheram-Fuller & MacMullen, 2011).
• Communication approaches (Humphrey & Lewis, 2008b). |
| The students’ anxiety was reduced through the use of social skills lessons and/or the ‘hidden curriculum’ | • Structured and targeted social skills support (Bevan-Brown et al., 2008; Connor, 2000; Humphrey, 2008).
• Social skills class (Wilkerson & Wilkerson, 2004).
• Teaching the ‘Hidden Curriculum’ (Wilkerson & Wilkerson, 2004).
• Social skills in the daily curriculum (Wilkerson & Wilkerson, 2004).
• Modified curriculum (Connor, 2000). |
### The students’ anxiety in school was reduced by teaching specific social and/or communication skills

- Teaching specific social skills within the school setting (Humphrey, 2008).
- Identifying problematic social situations, considering options and exploring the best solutions (Wilkerson & Wilkerson, 2004).
- Work on how to manage teasing from peers (Wilkerson & Wilkerson, 2004).
- Teaching students who to interact with (Wilkerson & Wilkerson, 2004).
- Teaching behaviours that attract positive attention (Wilkerson & Wilkerson, 2004).
- Providing explicit direct (social skills) instruction (Rotheram-Fuller & MacMullen, 2011).

### The use of visually based social skills approaches helped the students to manage their anxiety within school

- Scripts or comic strip conversations (Rotheram-Fuller & MacMullen, 2011).
- Cartooning (Wilkerson & Wilkerson, 2004).
- Using approaches such as role play (Wilkerson & Wilkerson, 2004).
- ‘Social Stories’ (Bevan-Brown et al., 2008; Connor, 2000; Humphrey, 2008).

### The use of modelling approaches helped the students to manage their anxiety within school

- Modelling social skills concepts (Wilkerson & Wilkerson, 2004).
- Modelling specific feedback (Rotheram-Fuller & MacMullen, 2011).
- Video modelling and video activities (Rotheram-Fuller & MacMullen, 2011).

### Opportunities to practise learned strategies within the school environment helped to reduce the students’ anxiety

- Exposure and practice of new skills (Rotheram-Fuller & MacMullen, 2011).
- Provide multiple opportunities for repetition and practice (Rotheram-Fuller & MacMullen, 2011).
- In vivo rehearsal in the most relevant setting (Rotheram-Fuller & MacMullen, 2011).
- Group therapy for practice opportunities (Rotheram-Fuller & MacMullen, 2011).
- Role play allowing for practice of the chosen techniques (Wilkerson & Wilkerson, 2004).
- Focusing on social problem solving or anxiety reduction in the setting in which it most often occurs (Rotheram-Fuller & MacMullen, 2011).

### Providing opportunities to help the students generalise skills that had been learned to other settings or situations helped to reduce their anxiety

- Helping children to generalise the skills (Rotheram-Fuller & MacMullen, 2011).
- Attempting to generalize the concepts (social skills) (Wilkerson & Wilkerson, 2004).
- Promoting generalization of skills to new contexts (Rotheram-Fuller & MacMullen, 2011).
- Providing specific strategies for generalization (Rotheram-Fuller & MacMullen, 2011).
- On-site coaching before and after an interaction or behaviour to improve generalization to nonclinical settings (Rotheram-Fuller & MacMullen, 2011).

### The students’ anxiety was reduced by emphasising and utilising their strengths and talents

- Focusing more heavily on the child’s strengths and building on existing skills and knowledge (Rotheram-Fuller & MacMullen, 2011).
- Using special talents or characteristics to advantage (Greig & MacKay, 2005).
- Focus on strengths (Rotheram-Fuller & MacMullen, 2011)
- Using the special abilities as a key feature (Greig & MacKay, 2005).
- Teaching to take account of the specific patterns of strength (Connor, 2000; Humphrey, 2008).
| **Including the students’ specific interests more at school helped them with managing their anxiety** | • Focus on expanding current areas of interest (Rotheram-Fuller & MacMullen, 2011).
• Special interests which fit with everyday popular activities (Carrington & Graham, 2001; Connor, 2000).
• Use of preferred activities (Bevan-Brown et al., 2008). |
| **Professionals external to the school helped to reduce the students’ anxiety** | • Advice and support from EP to parent, school and community (Greig & MacKay, 2005).
• Involvement of EP in therapeutic work / individual casework with the pupil (Greig & MacKay, 2005). |
| **Understanding and support from peers helped the students with their anxiety** | • A need for peer awareness and understanding (Connor, 2000).
• Mentoring (Connor, 2000).
• The ‘Circle of Friends’ approach (Connor, 2000).
• Lunchtime clubs (Connor, 2000).
• A need for peer understanding of the behaviours and characteristics of ASC students (Humphrey & Symes, 2010b).
• Positive support from peers (Humphrey, 2008). |
| **Professionals external to the school helped to reduce the students’ anxiety** | • Advice and support from EP to parent, school and community (Greig & MacKay, 2005).
• Involvement of EP in therapeutic work / individual casework with the pupil (Greig & MacKay, 2005). |
| **Understanding and support from peers helped the students with their anxiety** | • A need for peer awareness and understanding (Connor, 2000).
• Mentoring (Connor, 2000).
• The ‘Circle of Friends’ approach (Connor, 2000).
• Lunchtime clubs (Connor, 2000).
• A need for peer understanding of the behaviours and characteristics of ASC students (Humphrey & Symes, 2010b).
• Positive support from peers (Humphrey, 2008). |
| **Professionals external to the school helped to reduce the students’ anxiety** | • Advice and support from EP to parent, school and community (Greig & MacKay, 2005).
• Involvement of EP in therapeutic work / individual casework with the pupil (Greig & MacKay, 2005). |
| **Understanding and support from peers helped the students with their anxiety** | • A need for peer awareness and understanding (Connor, 2000).
• Mentoring (Connor, 2000).
• The ‘Circle of Friends’ approach (Connor, 2000).
• Lunchtime clubs (Connor, 2000).
• A need for peer understanding of the behaviours and characteristics of ASC students (Humphrey & Symes, 2010b).
• Positive support from peers (Humphrey, 2008). |
| **Adults (such as teaching staff and other professionals) collaborating with each other regarding the students’ needs helped in managing the students’ anxiety** | • Good liaison and planning with health professionals to identify risks and needs in relation to anxiety (Jones et al., 2008).
• Liaison with a range of professionals from different disciplines (Charman et al., 2011).
• A collaborative approach (Charman et al., 2011).
• A collaborative process, with support from school management (Bevan-Brown et al., 2008).
• Sharing information and planning interventions across settings (Bevan-Brown et al., 2008).
• Involvement from practitioners across the school (Humphrey & Symes, 2011; Humphrey, 2008).
• Communication between SENCo and subject teachers (Humphrey & Lewis, 2008b).
• Collaborative approach (Greig & MacKay, 2005).
• Quality communication in school (Humphrey & Lewis, 2008b). |
| **School involvement with parents/carers helped to reduce the students’ anxiety** | • Good quality and regular communication between school practitioners and parents (Connor, 2000; Tobias, 2009).
• Communication with parents and dedicated time to listening to concerns and talking to parents (Connor, 2000; Tobias, 2009).
• Involving parents so that new coping skills can be transferred from home to school (Rotheram-Fuller & MacMullen, 2011).
• Parent participation (Rotheram-Fuller & MacMullen, 2011).
• Including parents (Rotheram-Fuller & MacMullen, 2011). |
| **The students’ anxiety was reduced by helping them to identify physical and emotional feelings and thoughts** | • Talking about physical symptoms rather than emotional experiences to help the child identify when he or she is feeling anxious (Rotheram-Fuller & MacMullen, 2011).
• Using CBT approaches within the school environment (Rotheram-Fuller & MacMullen, 2011).
• Use of CBT approaches (Greig & MacKay, 2005). |
| **The students’ anxiety was reduced by helping them to identify and manage negative feelings, thoughts and worries** | • Opportunities and support for the students to express their emotions and anxieties and learn to manage these (Carrington & Graham, 2001; Connor, 2000).
• The use of hands-on activities and visual aids to identify anxious feelings (Rotheram-Fuller & MacMullen, 2011).
• Involving parents so that new coping skills can be transferred from home to school (Rotheram-Fuller & MacMullen, 2011).
• Socratic questions that incorporate hints of the correct answer to provide opportunities to put concepts into their own words (Rotheram-Fuller & MacMullen, 2011).
• Teaching how to manage their emotional reactions (Carrington & Graham, 2001; Jones et al., 2008). |
The students’ anxiety was reduced by teaching them relaxation and calming strategies at school
- Relaxation strategies and use of pleasurable activities (Carrington & Graham, 2001; Jones et al., 2008).
- Listening to music (Carrington & Graham, 2001).
- Calming activities (Bevan-Brown et al., 2008).

Involving the students in planning for their needs at school helped to reduce their anxiety
- Empowered through being collaborators in their plans for change (Greig & MacKay, 2005).
- Respecting the young person’s perspective (Greig & MacKay, 2005).

The students’ anxiety was reduced by the use of genuine inclusionary approaches and acceptance at school
- Whole school inclusion and support (Humphrey & Symes, 2011; Humphrey, 2008).
- A core value system that respects and supports the students’ diversity (Humphrey & Symes, 2011; Humphrey, 2008).
- A positive school ethos (Tobias, 2009; Williams & Hanke, 2007).
- Acceptance and valuing diversity (Humphrey & Lewis, 2008b).
- School’s leadership demonstrate commitment to inclusion (Humphrey & Lewis, 2008b).
- True rather than ‘token’ commitment to inclusive principles (Humphrey & Lewis, 2008b).
- School ethos and commitment to inclusion (Humphrey & Lewis, 2008b).
- Inclusive practices (Humphrey & Lewis, 2008b).

The students having access to supportive and trusted adults at school helped to alleviate anxiety
- Learning support staff in classes supporting students (Humphrey & Lewis, 2008b).
- Building effective relationships (Bevan-Brown et al., 2008).
- Support from adults such as teachers and teaching assistants (TAs) (Humphrey & Lewis, 2008a).
- Subtle adult support Humphrey and Lewis (2008a).
- The importance of building trusting relationships (Bevan-Brown et al., 2008).
- A supportive environment (Bevan-Brown et al., 2008).

The students having a specific place to go to when anxious at school helped to reduce their anxiety
- Having a ‘safe space’ (a quiet calm area where the student can take refuge when anxious or at busy times such as lunch times) (Bevan-Brown et al., 2008; Connor, 2000; Humphrey & Lewis, 2008a; Tobias, 2009).

The students’ anxiety was reduced by having clear routines and structures in place at school
- Order and predictability (Humphrey & Lewis, 2008b)
- Clear routines (Humphrey & Lewis, 2008b).
- Structured, time-limited approach (Greig & MacKay, 2005).
- Providing clear structure (Jones et al., 2008).
- A controlled environment (Jones et al., 2008).
- Visual timetables and personalised schedules and routines prepared in advance (Bevan-Brown et al., 2008; Humphrey, 2008; Tobias, 2009).
- Providing a list of rules (Rotheram-Fuller & MacMullen, 2011).

Making adaptations regarding environmental factors at school helped to decrease the students’ anxiety levels
- Picking quieter classes/groups when splitting year groups into classes (Humphrey & Lewis, 2008b)
- Changes to the environment (Bevan-Brown et al., 2008).
- Environmental modifications (Jones et al., 2008).
- Providing clear structure (Jones et al., 2008).
- Use of individual workstations (Bevan-Brown et al., 2008; Humphrey, 2008; Tobias, 2009).
| Planning and support prior to transition to secondary schools helped manage the students’ anxiety | • Appropriate support and planning at times of transition (Humphrey & Lewis, 2008a; Tobias, 2009).  
• Providing detailed information about the new school to the student before transition (Tobias, 2009).  
• Providing information about the student to staff before transition (Tobias, 2009).  
• Discussing problem solving strategies for possible situations with the student before transition (Tobias, 2009). |
| --- | --- |
| The use of creative, artistic or sensory activities at school helped the students to manage their anxiety | • Provide creative outlets for expression (e.g., photography, drawing) (Rotheram-Fuller & MacMullen, 2011).  
• Creative use of procedural, visual and technological intervention tools (Greig & MacKay, 2005). |
| The use of rewards and reinforcement for the students when they engage in anxiety reducing behaviours or faced their fears at school helped them in managing their anxiety | • Tangible rewards for good efforts (Greig & MacKay, 2005).  
• Using behavioral supports to increase attentiveness and participation (e.g., token economies and routines) (Rotheram-Fuller & MacMullen, 2011).  
• Incorporate social reinforcement (Rotheram-Fuller & MacMullen, 2011). |
## APPENDIX E: Rival Explanations

<table>
<thead>
<tr>
<th>Specific rival explanation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overarching rival explanations</strong></td>
<td></td>
</tr>
<tr>
<td>• Outcomes of the research are due to researcher bias</td>
<td></td>
</tr>
<tr>
<td>• Outcomes of the research are due to a limitation in sample</td>
<td></td>
</tr>
<tr>
<td>• Outcomes of the research are due to issues of reliability within data collection and analysis</td>
<td></td>
</tr>
<tr>
<td><strong>Rival explanations linking to Research Question 1:</strong> What are the perceived difficulties and needs of students with ASC who show signs of anxiety in the mainstream secondary school setting?</td>
<td></td>
</tr>
<tr>
<td>• The presentation, experiences and behaviour of the students with ASC were adversely affected within school by factors other than anxiety</td>
<td></td>
</tr>
<tr>
<td>• The students with ASC did not show noticeable signs of anxiety within the school setting</td>
<td></td>
</tr>
<tr>
<td>• The presentation of the students within the school setting was not due to anxiety, but to the nature of AS</td>
<td></td>
</tr>
<tr>
<td>• The needs and difficulties associated with the students’ anxiety were caused by factors outside of the school setting</td>
<td></td>
</tr>
<tr>
<td><strong>Rival explanations linking to Research Question 2:</strong> What is perceived to be effective practice in supporting students with ASC who show signs of anxiety in the mainstream secondary school setting?</td>
<td></td>
</tr>
<tr>
<td>• Supports and interventions not mentioned within the data collection account for the perceptions of ‘what worked’ for the students with ASC within the mainstream setting</td>
<td></td>
</tr>
<tr>
<td>• Support or intervention provided outside of the school setting accounted for the perceptions of ‘what worked’ for the students with ASC within the mainstream setting</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX F: Criteria for Student Inclusion and Recruitment Checklist

Exploring Needs and Provision for Students with Autism Spectrum Conditions who Display Signs of Anxiety within the Mainstream School Setting

You are being asked to provide only information that you know or can easily and quickly find out. If required, further information will be sought by the researcher once permission is gained from the parents. For instance, you may know the student's general diagnosis and general level of academic performance, but further details on the specifics of these can be clarified by the researcher.

<table>
<thead>
<tr>
<th>Your name:</th>
<th>Your contact no:</th>
</tr>
</thead>
<tbody>
<tr>
<td>School name:</td>
<td>An anonymous reference for you to identify the student:</td>
</tr>
</tbody>
</table>

Criterion for student inclusion in the research are as follows:

- A male or female student of statutory education age in mainstream secondary school (i.e., age 11 to 16) whose current stage in school allows for them to take up to 3 half hour sessions out of lessons for interview participation (e.g., this may not be viable for students about to embark upon their GCSEs due to the time missed from lessons).

- The student must have a formal diagnosis of an autism spectrum condition from a registered practitioner (e.g., Autism, Asperger Syndrome, Asperger Disorder, Childhood Autism, Autistic Disorder, Atypical Autism, Autism Spectrum Disorder, Autistic Spectrum Disorder, Pervasive Developmental Disorder Not Otherwise Specified [PDD NOS]).

- Students being sought are those considered to fit the criteria of having ‘high-functioning autism’ or Asperger’s syndrome through consideration of their diagnosis and having a full scale IQ score of 70 or above at diagnosis (e.g., no additional generalised learning difficulty or disability). However, this will be explored once potential participants have been identified and unless already known to the EP, the EP will only be asked to give their views of whether the student might be likely to meet this criterion.

- The student should have displayed signs of anxiety or have made their anxieties known to staff or parents during their time in secondary education. A checklist of indicators of anxiety in students with ASC is attached.

- The student should be considered not to currently be in a critical or crisis stage due to these difficulties. E.g., these concerns are currently being managed and/or have ceased.

- The student should not have indicated or been treated for signs of any severe mental health need (e.g., psychosis, suicidal intentions) that would render them potentially at risk from taking part in the research.

- The student should be functioning at or above the national curriculum level appropriate to their age and stage (e.g., most recent attainment scores such as CAT or SAT scores and Wide Range Achievement Test scores [WRAT] can be used to indicate this).

- The student must be likely to be able and willing to share their views, be verbally able and have sufficient language ability to take part. This can be determined through practitioner knowledge of the students as well as most recent WRAT scores, as well as reading age scores, and details from their profile that suggest whether there are associated complex speech and language and/or comprehension difficulties in addition to the ASC.
Please complete details you are aware of. Further information can be gained by the researcher, as required, once permission has been received.

**Checklist for indicators of anxiety in student participants with ASC**

During the period of concern in question (this does not have to be current, but during their time at your school), the student should have presented with a period of at least one month with recurring excessive, disproportionate and intrusive anxieties or worries occurring more days than not.

This should have included staff members/parents observations or student reports of marked feelings of at least three of the following:

*(Please tick all that have applied)*

- Concerns about their performance in areas such as schoolwork, sports, and other activities
- Concerns about physical health or about being injured (despite apparent good health)
- Concerns or worries about other specific factors (e.g. money/financial, punctuality, appearance, catastrophes, disasters, etc.)
- Recurrent complaints about bodily pain and discomfort (e.g. headaches, stomach aches, etc.) for which no physical basis can be found.
- A frequent need for reassurance that continues despite attempts to reassure them
- Physical symptoms such as palpitations, sweating, dry mouth, etc.
- Sleep disturbance (e.g. difficulty falling or staying asleep, or restless unsatisfying sleep)
- Restlessness or reports of feeling keyed up or on edge
- Being easily fatigued
- Difficulty concentrating or reports of their ‘mind going blank’
- Irritability
- Muscle tension
- Inability to relax
- Nervousness

These worries should have:
*(Please tick all that applied)*

- Been about a number of events or activities
- Been about at least two situations, activities, contexts or circumstances
- Interfered in a significant way with the student’s activities on a daily basis
- Been difficult for the student to control
- Caused significant distress or impairment in social, educational, or other areas of functioning

They should not have included:
*(Please tick if these applied)*

- Sudden panic attacks
- Worries only about a single topic or situation

To discuss please contact: Dawn Menzies - Trainee Educational & Child Psychologist
Phone: XXXXXXXX / XXXXXXXXXXXXXX / Email: XXXXXXXXXXXXXXXX
Please return to: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
### APPENDIX G: Students’ School Details

<table>
<thead>
<tr>
<th></th>
<th>School 1</th>
<th>School 2</th>
<th>School 3</th>
<th>School 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number on School Roll</strong></td>
<td>700-800</td>
<td>700-800</td>
<td>700-800</td>
<td>600-700</td>
</tr>
<tr>
<td><strong>Age Range of Students</strong></td>
<td>11-16</td>
<td>11-18</td>
<td>11-18</td>
<td>11-16</td>
</tr>
<tr>
<td><strong>School Type</strong></td>
<td>LA maintained Roman Catholic High School</td>
<td>Voluntary Aided Church of England High School</td>
<td>Voluntary Aided Church of England High School</td>
<td>LA Maintained All Girls High School</td>
</tr>
<tr>
<td><strong>Latest Overall Ofsted Category</strong></td>
<td>Good</td>
<td>Outstanding</td>
<td>Outstanding</td>
<td>Good</td>
</tr>
<tr>
<td><strong>SEN Provision</strong></td>
<td>Own resources such as rooms, toilets and kitchen with full time SENCo</td>
<td>Access to own room, IT resources and office with full-time SENCo</td>
<td>Own respite room, office and IT provision with full-time SENCo</td>
<td>Own room and office with 0.8 SENCo</td>
</tr>
<tr>
<td><strong>Catchment Area</strong></td>
<td>Town centre and rural with high deprivation</td>
<td>Mostly rural and some town centre with low deprivation</td>
<td>Rural and town centre with low deprivation</td>
<td>Rural and city with some high deprivation and a high ethnic minority population</td>
</tr>
<tr>
<td><strong>% of Free School Meals</strong></td>
<td>20.6%</td>
<td>5.5%</td>
<td>5.5%</td>
<td>9.6%</td>
</tr>
<tr>
<td></td>
<td>National Average 15.9%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>% of English as An Additional Language</strong></td>
<td>22.7%</td>
<td>5.3%</td>
<td>5.3%</td>
<td>22.1%</td>
</tr>
<tr>
<td></td>
<td>National Average 12.3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>% of SEN in the school</strong></td>
<td>7.7%</td>
<td>5.3%</td>
<td>5.3%</td>
<td>6.7%</td>
</tr>
<tr>
<td></td>
<td>National average 21.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

1 Department for Education (2011a)
2 Department for Education (2011a)
3 Department for Education (2011a) and Department for Education (2011b)
## APPENDIX H: The Original Planned Participant Recruitment Process

**The Participant Recruitment Process**

- EP processes will be used as part of the recruitment and selection procedure whereby EP colleagues will be asked to identify (not by name at this stage) any students who appear to meet the criteria for possible inclusion who have been raised by link schools within the consultation and review process as part of their day to day work during the last 18 months.

- A letter via email will be sent to EP colleagues in order to seek their support in identifying potential participants.

- Once potential participants have been identified, the EP will phone the student’s parent/carer to ask if further discussion can take place to identify whether their child might meet the requirements for the research, and advise them that a letter will be sent to this effect.

- The EP will have a script to explain what is meant by ‘anxiety’ in this instance, to help alleviate any concerns about a ‘label’ being given (e.g. linking it to the behaviours and concerns that were previously reported, so it is not seen as a ‘new’ concern). They will reassure the parent that no new concerns have been raised and that further assessment and re-evaluation will not be taking place, but that it is previous needs from their original referral that are of interest, and how their child and the school have managed these.

- Once permissions have been sought by the parents, discussion will take place with the school and EP files and school records regarding the students and their cognitive and attainment levels will be considered, to identify whether they meet the sampling criteria.

- If the student is deemed to meet the criteria, a letter and information will be sent to their parents, along with information for the students, to seek consent from the parents for the students to participate in the research and assent from the students themselves.

- Parents whose children do not meet the criteria will be informed.

- The parent/carer (male or female) who has parental rights for the student meeting the criteria above will also be invited to take part in the research. Permission will also be sought from the parent/carer for them to participate in a semi-structured interview, and telephone discussion will take place as part of this recruitment process if required.

- Identification of an educational practitioner who works with the student and will also be able to participate will also take place, and information and consent to participate will be sought via letter and through discussion as required.
APPENDIX I: Recruitment Letter to SENCos

Dawn Menzies, Trainee Educational & Child Psychologist
Educational Support & Inclusion
School of Education, Ellen Wilkinson Building
The University of Manchester
Oxford Road
Manchester, M13 9PL
Email: XXXXXXX
Tel: XXXXXX

May 2012

Dear X

Thank you for your time on the phone today. As I mentioned, I am a trainee Educational Psychologist at Manchester University, carrying out training with XXXXX Inclusion and Disability Support Service. As part of this I am conducting a research project looking at the needs of young people with Autism Spectrum Conditions (ASC) who have struggled with anxiety or worry.

As you will be aware, schools are increasingly expected to play a vital role in meeting the emotional needs of students and promoting emotional literacy. Research highlights that individuals with ASC are particularly at risk of anxiety. I have become aware of a group of young people with high-functioning autism and Asperger’s syndrome who show some signs of anxiety or worry at, or about, school. This particularly seems to show once they begin attending secondary school.

In order to investigate how schools support these students I intend to interview a number of students with high-functioning autism or Asperger’s Syndrome, their parents and school staff across various schools within XXXXX.

The overall aim of research is to extend knowledge of how to support students with ASC who display signs of anxiety or worry within the mainstream high school environment. The research aims to consider need, current effective practice, and barriers to meeting need, in order to inform practice within this area. The hope is that the information gained from the evaluation can be used to highlight good practice and to guide further work in this area.

Participant recruitment
As part of my research I am trying to find students who attend mainstream secondary school within the XXXXX area, who have a diagnosis of an autism spectrum condition (ASC) and who might have shown some difficulties with anxiety or worry. I asked my Educational Psychologist, Special Educational Needs and Disability Officer and Specialist Teacher colleagues to let me know of any high schools that are known to implement good practice in this area and your school was raised.

How can you help?
You can help in two ways. Firstly, you can help by identifying a student who may be suitable for taking part in the research. Secondly, if the student and their parent agree to take part you can help by providing a staff member, who knows the student well, who can also take part in an interview for the research.

I hope to identify mainstream secondary students with ASC who have shown signs of anxiety or worry at high school, but whose needs in this area are currently being managed satisfactorily in school. The students should be considered to be likely to meet the attached
criteria. I would be grateful if you would consider the criteria and whether there is a student within your school who might meet these criteria.

If you are able to identify such a student you will be asked to aid me in making contact with their parent/carer regarding potential participation in the research. Due to issues of confidentiality, at this stage you would only be able to raise the young person with me anonymously for brief discussion, but not disclose their name or contact details. I have provided detailed information and consent forms for the parent and would be very grateful if you could please pass these on to them.

If the parent agrees to their details being passed to me, I can then discuss the research with them further by phone. I will then follow through any further contact and liaison with them, but will keep you fully informed.

I would not be assessing the student or re-evaluating their needs, and will assure parents that no new concerns have been raised about their child.

What next?
If consent to take part is gained from the parent and student, the research will involve some interviews. The student will be asked to give their views about their worries and how schools have worked with them to support them with this. I will interview the parent, separately, to gain their views on this.

I would also like to ask a staff member who works with the student the most at school (e.g. Teaching Assistant, Learning Mentor, SENCo or Teacher) to tell me about the student’s needs and what support is provided to help them with anxieties/worries that they have had at school.

What is found from discussions with the student, parent and staff member will be used to highlight needs in this area and good practice within schools in supporting these needs.

There is no obligation to take part in the research, but I hope you will agree that this research is worthwhile and will allow your students and staff to take part. It will be a good opportunity for schools to show the positive practice that they have put in place. I am aware that this is a sensitive area and I can assure that it will be handled carefully, during the interviews and in subsequent feedback.

Any support your school can give in contacting the parent and in taking part will be very much appreciated. I have provided an information sheet with further details about the research for the staff members who would be likely to take part.

I will contact you again in a few days to see if you have had the opportunity to look at the information and/or contact the relevant parent. However, if you have any questions in the mean time, please do not hesitate to contact me by email at XXXX or phone on XXXXXXX.

Thank you for taking the time to read this.

Yours sincerely,

Dawn Menzies
Dear Colleague

Re: Exploring Needs and Provision for Students with Autism Spectrum Conditions who Display Signs of Anxiety within the Mainstream School Setting

I am writing to ask if you might be willing to assist in supporting my thesis research study for the Doctorate in Child and Educational Psychology.

The overall aim of research will be to extend knowledge of how to support students with Autism Spectrum Conditions (ASC) who display signs of anxiety within the mainstream high school environment. The research aims to consider perceived need, current effective practice, and barriers to meeting need, in order to inform practice within this area.

The research will be focused upon:
- Understanding the needs of this specific group of students within the particular setting
- Exploring what works for these students and how perceived effective practice has been beneficial in addressing their needs
- Gathering of information to inform best practice to improve support in mainstream secondary school for students with ASC and signs of anxiety

The hope is that the information gained from the evaluation can be used to guide further work in this area.

As SENDO’s and Specialist Teachers have regular involvement with schools, it seems that you would be in an ideal position to help identify young people who might be suitable to take part in the research, and this is where I am seeking your support. As part of this process I am asking colleagues to identify any mainstream secondary students with ASC who have shown signs of anxiety or worry at high school, but whose needs in this area are currently being met satisfactorily in school.

If you are not aware of the specific needs of individual students, you may be aware of certain high schools that are known to implement good practice in this area. If so, I would be grateful if you could bring these schools to my attention.
The students should be considered to be likely to meet the attached criteria, which in short would be students who:

- Have a formal diagnosis of an ASC that would deem them to be considered as ‘high-functioning’
- Have displayed signs of anxiety/worry during their time at high school, but are not currently in a critical phase with this (e.g. there are no current ongoing concerns about how to manage this)
- Are of statutory secondary school age
- Are currently functioning at or above national curriculum levels for their age/stage.

I would be grateful if you would consider the criteria and whether there are any students within the secondary mainstream schools that you visit who might meet this criteria.

If this is the case, you may be asked to aid me in making contact with the student’s school regarding potential participation in the research prior to their details being released to me. Detailed information and consent forms will be provided to all potential participants. Due to issues of confidentiality, at this stage you would only be able to raise the young person with me for brief discussion, but not disclose their name or contact details.

If the student, parents and school consent to their details being passed to me and to receiving further information about the research, I will then follow through any further contact and liaison with them.

Initial liaison prior to the students’ details being released once consent has been gained will be the only role you will be asked to carry out and any further discussion and information provision will take place by me as the researcher.

I appreciate how busy you all are, but if you are able to support the identification of these young people it would very much aid the recruitment process for this research and potentially help with the identification of need and effective practice in this area.

Ethical approval has been gained from the University of Manchester and recruitment of participants is now in process. I would be grateful if you could contact me if you have identified any potential participants as soon as possible. Time is tight for completion of the research and therefore your help with getting back to me as quickly as possible would be greatly appreciated.

Please contact me on my work email / phone XXXXXX, email me at XXXXXX, or call into the 3rd floor of XXXX (XXXXX team) to see me.

If you have any questions, please do not hesitate to contact me. Thank you for taking the time to read this information and considering assisting with my research.

Kind regards

Dawn Menzies
APPENDIX K: Initial Information/Consent Letter for Parents

Dawn Menzies, Trainee Educational & Child Psychologist
Educational Support & Inclusion
School of Education, Ellen Wilkinson Building
The University of Manchester
Oxford Road
Manchester, M13 9PL
Email: XXXXXXX
Tel: XXXXXX

Dear Parent/carer

My name is Dawn Menzies. I am a Trainee Educational Psychologist at Manchester University, carrying out my training with XXXXX Inclusion and Disability Support Service. As part of this I am carrying out a research project looking at the needs of young people with autism spectrum conditions who have struggled with their worries.

Through my past and current work, I have become aware of a group of young people with high-functioning autism and Asperger’s syndrome who show some signs of worry at, or about, school. This particularly seems to show once they begin attending secondary school.

As part of the initial stages of my research I am trying to find young people who attend mainstream secondary school within the XXXXX area, who have a diagnosis of an autism spectrum condition (ASC) and who might have shown some difficulties with worry about school.

Young people with ASC often find some activities or situations hard to cope with. At school they may have struggled with worrying about things like dealing with peers or busy corridors, or they might not like getting things wrong or losing. For some young people with ASC, these kinds of worries may have become a problem, perhaps leading to refusal to go to school or lessons, insisting on strict routines or showing behaviours when faced with situations they worry about.

Some signs of these anxieties can be things such as:
- Talk of frequent worries about day-to-day things
- Often needing to exit situations (such as lessons or social situations)
- Talking regularly about negative thoughts
- Experiencing ‘melt downs’
- Difficulty concentrating, irritability, and/or complaining of headaches, stomach pains or sickness etc.

I am interested in seeing how young people with ASC have coped with these worries and how schools have worked with them to support them with this, so that we can find out what has been most helpful for them in coping with worry and anxiety.

I have asked schools to let me know of any mainstream secondary school students who may possibly have had these types of worries, as the student and you as their parents may be able to help with this research. They may not still have worries, or their worries may now be less. It is how they have been helped to manage these that I am interested in.
How can you help?
At this stage, your child’s name and details have not been passed to me, but the school has raised with me that there might be a young person at their school who could perhaps take part in this research.

I would like your permission to find out a bit more about your child, to see if they might be suitable for taking part in this research. I would do this by looking at school records and speaking to the SENCo. I would not be assessing your child or re-evaluating their needs, and no new concerns have been raised about your child. I will just be finding out some initial information about what worries they had and when this was, as well as what diagnosis they have and whether the school feel they would be able to give their views.

This will help me to see if they might be a young person who could take part in the research and who might like to share their experiences.

What next?
If your child appears to be suitable for taking part in the research, I will write to you with more detailed information about this and some information for your child, to see whether you would definitely like your child to take part. However, in short, those young people who take part will be asked to give their views about school. They will meet with me and be asked about what has been good about school, what was not so good about school that made them worry, and about what helped them when they had these worries.

I would also be asking the staff member who works with them the most at school (e.g. Teaching Assistant, SENCo or teacher) to tell me about your child’s needs and what support is given to help them with worries they have had about/at school. I would also like to ask you, as a parent/carer to tell me your views on what your child’s needs are in relation to worries about/at school and about what helps with this.

The aim is that what is found from discussions with the young people, their parents and teachers will be used to help develop support in mainstream secondary school for students with ASC and signs of anxiety.

If you agree that I can gain further information about your child to see if they could take part, please complete the enclosed consent form and return to the school as soon as possible or call me on one of the numbers below if you would like to discuss this further.

There is no obligation to take part in the research by agreeing for me to look at your child’s background information at this stage. If after this, you do not wish your child to take part, all information gained by looking at their files will be confidentially disposed of.

If you have any questions about this, please do not hesitate to contact me by phone on XXXXXXX or email at XXXXXXXXXXXXXXXX.

Thank you for taking the time to read this.

Yours sincerely,

Dawn Menzies
Exploring Needs and Provision for Students with Autism Spectrum Conditions who Have Displayed Signs of Anxiety within the Mainstream School Setting

Consent form for parents/carers

Please complete and return by

If you are willing for me to discuss your child with the school and to gain further information about their needs, please tick the box and complete and sign below:

I agree that Dawn Menzies can gain further information about my child to find out more about their needs. This in no way obligates my child or me to take part in any further research unless we so wish.

☐

Your child’s name: __________________________________________________________

Your child’s school: _________________________________________________________

Your name: ___________________________________________________________________

Your signature: __________________________________________________________________

Your contact phone number: ___________________________ Date: ________________

Please return to Dawn Menzies, Trainee Educational Psychologist, at XXXX Educational Psychology Service, XXXXXXXX
APPENDIX L: Second Parent Consent Letter, Consent Form and Information Sheet re Taking Part in the Research

Dawn Menzies, Trainee Educational & Child Psychologist
Educational Support & Inclusion
School of Education, Ellen Wilkinson Building
The University of Manchester
Oxford Road
Manchester, M13 9PL
Email: XXXXXXX
Tel: XXXXXX

Date:

Dear Mr/Mrs/Ms XXXXX

I contacted you recently to ask if you were willing for me to find out more about your child to see whether they might be a suitable participant for research I am carrying out. After considering information provided by the school, it seems that XXXXX would be suitable to take part in the research.

The research will be looking at the needs of students with Autism Spectrum Conditions (ASC) who have shown signs of anxiety during their secondary school education (such as worry about day-to-day things, having negative thoughts, experiencing ‘melt downs’ etc.)

The research aims to consider their needs, current effective practice, and barriers to meeting their need. I intend to use the information gained from the research to help develop good practice in this area.

I am writing to ask if you would be willing for your son/daughter to take part in this research by giving their views. I will ask for their views during a 30 minute informal interview with me to feed back their experiences about their needs and the support they have received.

Before you decide whether your son/daughter should take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the enclosed information carefully and ask if there is anything that is not clear, or if you would like more information. Once you have read the information, if you decide you’d like to go ahead please talk to your son/daughter about the research and see if they would like to take part, as they may not want to.

I will contact you on XXXXXXX so that if you have any questions I can answer them and to see if you and your child would like to take part.

I have enclosed some information for your son/daughter as well. Please take some time to decide whether or not this is suitable for your son/daughter. If they would like to take part and you agree with this, please complete and return the consent slip by XXXXXXX.

Thank you for taking the time to read this.

Yours sincerely,

Dawn Menzies
Consent form for parents/carers

Please complete and return by X date

Exploring the Needs of Students with Autism Spectrum Conditions who Display Signs of Anxiety within the Mainstream School Setting

If you would agree to you and your son/daughter taking part in the research being carried out regarding the needs of young people with ASC showing signs of anxiety, please tick all the boxes and complete and sign below.

☐ I agree to_________________________________ (your son/daughter’s name) taking part in this research and that they have also agreed to this themselves.

☐ I confirm that I have read the attached information sheet on the research and have had the opportunity to consider the information, ask questions if required and had these answered satisfactorily.

☐ I agree to take part in the research myself through interview with the researcher.

☐ I agree that my child’s records can be viewed by the researcher and that they can carry out an interview the school staff regarding my child’s needs.

☐ I understand that during the interviews our voices will be audio recorded.

☐ I understand that activities my child does during the interview (such as drawing) may be photographed, but no photos of my child will be taken and no names will be in sight on the photos of their activities.

☐ I understand that my and my child’s participation in the research is voluntary and that I and they are free to withdraw at any time without giving a reason.

☐ I agree that the information that I and my child provide can be used anonymously in the research, including the use of anonymous quotes.

Your child’s name:______________________________________________________________
The name of your child’s school: _______________________________________________
Your name:_________________________________________________________________
Your signature:_____________________________________________________________
Your contact phone number/s:_________________________________________________
Date:_____________________________________________________________________

Please return this form to the school SENCo or to Dawn Menzies, Trainee Educational Psychologist, at XXXXXXXXXXXXXXX.
Information Sheet for Parents/Carers

Exploring Needs and Provision for Students with Autism Spectrum Conditions who Display Signs of Anxiety within the Mainstream School Setting

You and your child are being invited to take part in a research study as part of a student’s research toward a Doctorate in Child and Educational Psychology qualification.

Before you decide whether you and your child should take part, it is important for you to understand why the research is being carried out and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish, before deciding whether or not you want your child to take part. You can make contact by email or phone if there is anything that is not clear or if you would like more information.

The aims of the research are to look at:
- What the specific needs are of students with Autism Spectrum Conditions (ASC) who have shown signs of anxiety within mainstream secondary schools
- What works for these students within mainstream secondary schools
- How school staff can best support these students with their worries within the school setting

Who is doing the research?
Dawn is working as a Trainee Educational Psychologist (EP) at XXXXX Education Authority Inclusion and Disability Support Service. Before becoming a trainee EP, she worked with children and adults with ASC for over 18 years. She is currently in the 3rd and final year of her Doctoral studies as a trainee EP. As part of the research, she has been looking at the signs and impact of anxiety for young people with ASC and the ways that are thought to help in supporting them with these difficulties.

Why has my child been chosen?
Your child has been chosen as they have a diagnosis of an Autism Spectrum Condition and they have shown some signs of worry during their time at secondary school. As the research is aimed at finding out about the needs of students with ASC who have shown signs of worry, it will be helpful to get their views to find out about the needs of these students and what helps them when they have had these difficulties.

It does not mean that any new concerns have been raised by the school about your child and no re-assessment of their needs will take place. The interest in their views on this topic is based upon past concerns that were raised about your child’s anxiety or worries which the school would have discussed with you at the time. Your child will not be receiving any new support or intervention as part of this research, but what is found in the research may be used to inform schools about other things that might help your child.

What will happen?
Your child will take part in an interview/interviews to give their views about their needs and the support they have had for this at school. They will spend 30 minutes to 1 hour talking confidentially to Dawn about things such as: what has caused them worry and what helped with this; what is good and bad about school; what helps and what doesn’t help, and what advice they would give to other students with ASC and those supporting them.

Dawn will use visual materials in the interview so that it is easier for your child to speak to a new person, and as it is known that these can help students with ASC in giving their views. Please be assured that Dawn has a lot of experience of working with students with ASC and has taken a great deal of care in planning how she will prepare for and carry out the interviews so that they do not cause your child any additional worry. She can explain to you how she will do this.
You will also be asked to meet with Dawn to share your views about your child’s needs. This will be for 45 minutes to 1 hour at a time and place convenient for you. You will be asked about when and how your child has shown signs of worry during their secondary school education and what helped with this. Dawn will also ask you about things that will help to put your child at ease during their interview. The school have also been asked to provide a staff member who can talk about their work with your child. They will be asked similar questions to you.

The interviews will be recorded using a digital recorder so Dawn can listen to these again to get all the important details. Dawn will also look over the information in your child’s files to find out more about the times when they have shown signs of worry and to see what was done to help with this.

What will happen to the information collected from the research?
The information will be kept in a secure place (a locked cabinet and/or secure encrypted data storage) and will need to be kept for at least 5 years. Written materials will be shredded after that and taped conversations and interviews will be carefully destroyed.

How will what we say be kept confidential?
All details such as names and places will be changed or taken out so that they do not identify you, your child or any of the school staff. All information will be stored in line with the Data Protection Act.

Dawn will be getting the views of several students and parents, and these will be pulled together to provide general themes about the needs and support for students with ASC who show signs of worry. Therefore your individual views would not be able to be identified by the school or local authority.

How long will the research last?
The interviews will take place during April 2012 at a time that is good for you and your child. The interviews with your child will take approximately half an hour to 45 minutes, but more than one might be needed depending upon how much they want to say. Dawn will speak to your child’s school to make sure that support will be given to help them catch up on any school work they may miss whilst taking part in the interview/s.

Dawn will feed back to you, your child and the school once she has gone over the interviews to check that all of your views are shown correctly.

Where will the research take place?
The interviews with your child will take place in your child’s school or at your home, depending upon which you feel is best. The interview with you can be arranged at the school, your home or the local authority education offices.

What happens if my child does not want to take part or changes their mind?
It is up to your child and you whether or not they take part. If they decide to take part they will be given information and asked to sign a form to say they want to take part. However, they will still be free to withdraw at any time without needing to give a reason and without causing any problems for them or the school. You and the school staff member can also withdraw at any time.

Will what has been found be published?
What Dawn finds from the interviews will be written as part of her thesis at Manchester University. Once it has been marked the thesis will be available in the university library, but all details such as names, address or other things that might identify you, your child or the school will not be mentioned.

Criminal Records Check
Dawn has had a criminal records check and has an ‘enhanced disclosure’ from the Criminal Records Bureau which will be available to look at if you ask.
What now?
If you and your child are willing to take part in the research, please complete the enclosed form as soon as possible (but before the end of May) and return it to the school or to Dawn. Both you and your child should complete a form. Dawn will then get in touch with you and the school to arrange times to speak to you and your child. If you do not want to take part you can let the school or Dawn know by phone or email.

Contact for further information
If you want more information, please contact Dawn on telephone XXXXXXXX or email at XXXXXXXXXXX. She will be very happy to talk to you, tell you more about the research and answer any question you might have about it.

If there were to be any problems with the research, your first point of contact should be XXXX. If you want to make a formal complaint about the research you should contact the Head of the Research Office, Christie Building, University of Manchester, Oxford Road, Manchester, M13 9PL.

Thank you for taking the time to read this information and thinking about taking part in this research.
APPENDIX M: Information / Assent Letters for Older Students

Information for students

You’re probably reading this leaflet because someone has asked you if you would like to take part in some research. Hopefully this information will answer some of your questions about this.

There is a trainee Educational Psychologist who visits schools in this area, called Dawn Menzies. This is Dawn and she will be doing the research. Educational Psychologists work in different schools. They have been trained to understand about how students think, feel, behave, and get on with others.

What is the research about?
Sometimes research is about finding out about things and getting people’s views. Sometimes it is about investigating if something works or not, then writing about it afterwards.

This research is about getting views of people, and investigating about worries for students with autism or Asperger’s syndrome. Sometimes students at school have anxiety and worries. Dawn wants to try to find out about whether students with a diagnosis of autism or Asperger’s syndrome have ever felt anxious or worried at school, or about going to school. If they have she wants to find out what has helped them with this.

Why have I been chosen?
It is because people at school or at home (such as your teachers, and Mum or Dad) think that you would be good at giving your views. They thought you might like to tell someone what you think about these things, and that your experiences might be useful for Dawn to hear about.

What are the aims of the research?
The aims of the research are to try to find out about what things students with autism or Asperger’s syndrome worry about at school, and what can help them with this so their worries are less. Dawn hopes that what she finds out will let people in schools know what is helpful and not helpful, so they can help other students like you in the best way in future.

What would I be asked to do if I did this?
You would be asked to meet with Dawn, and she will talk to you about high school and how it has been for you. She might ask you about what has been good and not so good at school, and will try to find out about what helps when things haven’t been so good. She will talk to you to find out about how you feel, and what works and doesn’t work with managing worries at school.

Dawn might show you some photos and ask you about them, and will ask you some questions. This will give you the chance to:

- Give your views about your experiences at school
- Look back at how you have felt
- Say what helps and doesn’t help

The meeting is informal and Dawn will try to make you feel comfortable, but you will be talking about things that have worried you in the past, which might be a bit hard. Dawn is trying to find out about good things too though (like what helps and what makes you feel good), so there will be lots of chances to talk about things that you like and positive things as well.
Dawn will check how you are feeling in the meeting, and she will take great care to try to make sure it isn’t hard for you and will end the meeting if you don’t want to carry on. You can drop out at any time without needing to give a reason.

Dawn will need to record the meeting with a digital recorder (a bit like the one here on the left) to help her remember what you said. However, all that you tell her will stay between her and you unless she is worried that you are being hurt or in danger. Dawn will use information from what you tell her in her research, but it will not say your name or any details that would let someone know who has said it.

How long will it last?
Dawn would meet with you for 30 to 45 minutes at school on 1 to 3 times. How many times will depend upon how much you want to tell her. If you just have a bit to say, you might only meet with Dawn once for 30-45 minutes, but if you have a lot more you want to say you might meet Dawn up to 3 times (for 30 minutes each time) to tell her your views. Dawn will arrange dates and times with you that are best for you.

Where will it happen?
It will happen at your school in a room that is private from other people, or at home.

What will happen to the information collected from the sessions for the research?
Once the meetings have all finished, the information will be kept in a secure place (a locked cabinet) and will need to be kept for at least 5 years. After this it will be shredded, and things you recorded on the digital recorder will be carefully destroyed so no-one else can see or listen to them.

How will I know that no-one knows that it is me being talked about in the research? All things that could show it is you, such as names and places, will be changed or taken out so that no-one could know it is you or your school that are being talked about.

What happens if I do not want to take part or change my mind?
It is up to you if you take part, but if you do, you are still able to drop out at any time without needing to give a reason, and without XXXX or your school being upset with you.

Will the research be published?
What Dawn found out by doing the research will be published as part of her thesis for the Doctorate in Educational and Child Psychology at the University of Manchester. A thesis is a bit like writing a book about the research. All names, and anything that might show who you are, will have been changed or taken out, though.

Who can I contact if something goes wrong?
If there are any problems with the research, you should tell Dawn, or XXXXX (SENCo) or your parents who can make sure Dawn knows. Your parents know how to make a complaint if they need to.

What happens next?
If you would like to try giving your views to Dawn, please talk to your Mum or Dad and XXXXX first. If you have any questions, XXXXX can arrange for you to speak to Dawn about it or ask Dawn the questions for you. If you would like to take part, you can let your Mum or Dad and XXXXX know, and they will tell Dawn and arrange this. Dawn will want to check that you have agreed to this yourself, and check that you have understood this information.

Thank you for taking the time to read this.
Assent form for students

If you would like to take part in this research, please tick the boxes and complete and sign below:

- I have read the attached information and talked to my parents about the research and have had the chance to ask questions if needed. □

- I agree to take part in the research and agree that the information I provide can be used anonymously in the research. □

- I understand that my voice will be audio recorded during the meeting that I have with the researcher. □

- I understand that taking part is voluntary and I am free to withdraw at any time without giving a reason. □

Your name:__________________________________________________________

Signature:__________________________________________________________

Name of your school: ________________________________________________

Name of the person you have talked about this with (e.g. your mum or dad):

______________________________________________________________

Your home phone number:________________________ Date:______________

Please pass this form to your parent to return with their form.

Thank you
APPENDIX N: Information / Assent Letters for Younger Students

Information for younger students

Someone at home or school has asked you if you would like to talk to a lady called Dawn for some research.

This is Dawn. She is doing the research. She is a trainee Educational Psychologist who works in different schools. She has been trained to understand how students think, feel, behave, and get on with others.

What is the research about?

Sometimes research is about finding out about things and getting people’s views (listening to what they think about things). Sometimes it is about investigating if something works or not, then writing about it afterwards.

This research is about finding out what students with autism or Asperger’s syndrome think about school.

Sometimes students at school have worries. Dawn wants to try to find out if students with autism or Asperger’s syndrome have ever felt worried at school, or about going to school. If they have, she wants to find out what has helped them with this.

Why have I been chosen?

It is because people at school or at home (like your teachers and Mum or Dad) think you would be good at telling Dawn about school and what helps you with it. They think you might like to tell someone what you think, and that your experiences will be useful for Dawn to hear about.

What is the research trying to find out?

The research is to try to find out about what sort of things students with autism or Asperger’s syndrome worry about at school, and what can help them with this so their worries are less. Dawn hopes that what she finds out will let adults in schools know what is helpful and not helpful, so they can help other students like you in the best ways in future.

What would I be asked to do if I did this?

You would be asked to meet with Dawn. She will talk to you about high school and how it has been for you. She might ask you about what has been good and not so good at school, and will try to find out about what helps when things aren’t so good. She will talk to you to find out about how you feel, and what works and doesn’t work with managing worries at school.

Dawn might show you some photos and ask you about them, and will ask you some questions. This will give you the chance to:

- Tell her what you think about your experiences at school
- Look back at how you have felt
- Say what helps and doesn’t help

The meeting is informal and Dawn will try to make you feel comfortable, but you might be talking about things that have worried you in the past which could be a bit hard. Dawn is trying to find out about good things too, though (like what helps and what makes you feel good). So there will be lots of chances to talk about things that you like and good things too.
Dawn will check that you are okay in the meeting and will be careful to try to make sure it isn’t hard for you, and will stop the meeting if you don’t want to carry on. You can stop at any time without needing to give a reason.

Dawn will need to record the meeting with a digital recorder (a bit like the one here on the left) to help her remember what you said. All that you tell her will stay between her and you though, unless she is worried that you are being hurt or are in danger. XXXX will use what you tell her in her research, but it will not say your name or any anything that would let someone know who had said it.

**How long will it last?**
Dawn would meet with you for 30 to 45 minutes at school on 1 to 3 times. If you just have a bit to say, you might only meet with Dawn once for 30 to 45 minutes, but if you have a lot more you want to say you might meet Dawn up to 3 times (for 30 minutes each time). Dawn will set up dates and times that are best for you.

**Where will it happen?**
It will happen at your school in a room that is private from other people, or at home.

**What will happen to the information from the meetings?**
Dawn will look at and listen to what you said, and write down all the important things you said. After this, the recordings and anything you wrote will be kept in a secure place (like a locked cabinet). They will need to be kept for at least 5 years. After that, things that were written will be shredded and things you recorded on the digital recorder will be carefully destroyed so no-one else can see or listen to them.

What Dawn finds out by meeting with you and your parents will be written as part of her thesis for her Doctorate at the University of Manchester. A thesis is like writing a big book to pass some exams at university.

**How will I know that no-one knows that it is me being talked about in the research?**
All things that could show it is you, like names and places, will be changed or taken out so that no-one could know it is you or your school that are being talked about.

**What happens if I do not want to take part or change my mind?**
It is up to you if you take part, but if you do, you are still able to drop out at any time without needing to give a reason and without Dawn or your school being upset with you.

**Who can I contact if something goes wrong?**
If there are any problems with the research, you should tell Dawn, or XXXX (SENCo) or your parents who can make sure Dawn knows.

**What happens next?**
If you would like to try to tell Dawn about what you think, please talk to your Mum and Dad and XXXX first. If you have any questions XXXX can ask Dawn to speak to you about it or ask Dawn the questions for you. If you would like to take part in the sessions you can let you Mum and Dad and XXXX know and they will tell Dawn and sort this out. Dawn will want to check that you have agreed to this yourself and check that you have understood this information.

Thank you for taking the time to read this.
Form for students

If you would like to take part in this research, please tick the boxes, complete the details below and sign the form:

- I have read the information and talked to my parents about the research and have had the chance to ask questions if needed. [☐]
- I agree to take part in the research and agree that the information I provide can be used anonymously (without my name and details) in the research. [☐]
- I understand that my voice will be audio recorded during the meeting that I have with the researcher. [☐]
- I understand that taking part is voluntary (I don't have to do it) and I can stop at any time without giving a reason. [☐]

Your name: __________________________________________________________

Signature: ______________________________________________________________

Name of your school: ______________________________________________________

Name of the person you have talked with about this (such as your mum or dad):

______________________________________________________________________

Your home phone number: __________________________ Date: _____________________

Please pass this form to your parent to return with their form.

Thank you
Criteria for School Practitioner Inclusion in the Research

Once a student has been identified and consent has been gained, educational practitioner participants will be sought as follows:

- A school practitioner working for the LA who works directly with the identified student within the school. The practitioner must know the student well and be able to comment upon their needs and what support is/has been provided to the student in relation to this.

- Ideally it would be the practitioner who works closely with the student relating to pastoral matters and/or the practitioner who plans and implements support for this.

- These practitioners might include a SENCo, Form Teacher, Pastoral Teacher, Learning Mentor, Teaching Assistant, Specialist Teacher, or similar.

- The practitioners’ workload should allow for them to take up to one hour from their work for interview participation and additional limited time if required to aid with setting up an interview for the student (e.g. passing over information to the researcher regarding the student’s needs in relation to interviewing them, booking rooms etc).

If these criteria are met, the practitioner will be provided with information and asked if they are willing to consent to taking part in the research.
APPENDIX P: Information/Consent Letter for Practitioners

Exploring Needs and Provision for Students with Autism Spectrum Conditions who Display Signs of Anxiety within the Mainstream School Setting

A student you work with is being invited to take part in a research study as part of a student’s thesis research toward a Doctorate in Child and Educational Psychology. As part of this research it would also be helpful to gain your views.

Before you decide whether to take part, it is important for you to understand why the research is being carried out and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish, before deciding whether or not you want to take part. You can make contact by email or phone if there is anything that is not clear or if you would like more information.

The aims of the research are to look at:
- What the specific needs are of students with ASC who have shown signs of anxiety within mainstream secondary schools
- What works for these students within mainstream secondary schools
- How school staff best support these students with their anxiety within the school setting

Who is conducting the research?
Dawn Menzies is working as a Trainee Educational & Child Psychologist at XXXXXXXXX Education Authority XXXXXXXXX Service. She has a particular interest in working with this group of young people as, before becoming a trainee Educational Psychologist (EP), she worked with individuals with ASC for over 18 years and has a Post Graduate Diploma in autism studies. She is currently in the 3rd and final year of her Doctoral studies as a trainee EP and she is supervised in this through the University of Manchester and the local authority. As part of the research, she has been looking at the signs and impact of anxiety for young people with ASC and the approaches that are deemed to be effective in supporting them with these difficulties.

Why have I been chosen?
You have been chosen to take part as a student you work with has a diagnosis of an Autism Spectrum Condition and they have shown some signs of anxiety during their time at secondary school. As the research is aimed at finding out about the needs of students with ASC who show signs of anxiety, it will be helpful to get their views to find out about the needs of these students and what has helped them when they have had these difficulties. It is also important to get the views of those who work with them at school to find out more about the student’s needs, and about effective strategies and support that have been put into place for them. As you have worked closely with the student, you would be in a good position to share this information.

What would be required?
You should be willing to take part in an interview to give your views about the child’s needs and the support they have received for this. You will spend a maximum of 1 hour talking confidentially to Dawn about the student’s needs and the support that has been implemented for this.

The student and their parent will also be interviewed and will have given permission for them to be involved in the research and for information to be shared about them.

Dawn will use visual materials in the interview with the student so that it is less daunting for them to speak to a new person and to help them with expressing their views. Dawn will not try to find problems or dwell on negatives but talk about what helps them in school.
The interviews will be recorded using a digital audio recorder and then looked over by XXXX. She will also look at the information in the student's files to find out more about the times when they have shown signs of anxiety.

What will happen to the information collected from the research? The information will be kept in a secure place (a locked cabinet and/or secure encrypted data storage) and will need to be kept for at least 5 years. Written materials will be shredded after that and taped conversations and interviews will be carefully destroyed.

**How will confidentiality be maintained?**
All details such as names and places will be changed or taken out so that they do not identify you, the student or any of the school staff. All information will be stored in line with the Data Protection Act. Therefore your individual views would not be able to be identified by the school, local authority or anyone else.

**What is the duration of the research?**
The interviews will take place during April 2012 at a time that is good for you and the student. The interviews with you will take up to 1 hour on one occasion and the interviews with the student will take half an hour, but more than one might be required depending upon how much the student wants to share. Dawn may ask you to help organise a time and room for the interview/s with the student.

Dawn will feed back to you and the student once she has gone over the interviews to check that your views are shown correctly.

**Where will the research be conducted?**
The interviews with you and the student will take place in your school at your convenience.

**What happens if I don't want to take part or change my mind?**
It is up to you whether or not you take part. If you decide to take part you are still free to withdraw at any time without needing to give a reason and without detriment to you or the school. It is possible that another staff member who knows the child may be asked to take part instead.

**Will the outcomes of the research be published?**
What Dawn finds from the interviews will be written as part her thesis at Manchester University. Once it has been marked the thesis will be available in the university library, but all details such as names, address and identifying features will remain confidential and your, the school's and the student's names or details will not be mentioned.

**Criminal Records Check**
XXXX has had a criminal records check and has an ‘enhanced disclosure’ from the Criminal Records Bureau which will is available to look at if you ask.

**What do I do now?**
If you are willing to take part in the research, please complete the enclosed form as soon as possible and return to Dawn in the envelope provided. Dawn will then make contact with you and the student’s parents to arrange suitable times to speak to you and the student. If you do not wish to take part you can let Dawn know by phone or email.

**Contact for further information**
If you want more information, please contact Dawn on phone XXXXXXXXXXX or email at XXXXXXXXXXXX. If there are any problems with the research, your first point of contact should be XXXX. If you want to make a formal complaint about the research you should contact the Head of the Research Office, Christie Building, University of Manchester, Oxford Road, Manchester, M13 9PL.

Thank you for taking the time to read this information and considering taking part in this research.
Exploring the Needs of Students with Autism Spectrum Conditions who Display Signs of Anxiety within the Mainstream School Setting

Consent form for school practitioners

Please complete and return by XXXXX

If you are willing to take part in the research being carried out regarding the needs of young people with ASC showing signs of anxiety, please tick the boxes and complete and sign below:

☐ I __________________________ (your name) agree to taking part in this research.

☐ I confirm that I have read the attached information sheet on the research and have had the opportunity to consider the information, ask questions if required and had these answered satisfactorily.

☐ I understand that during the interviews our voices will be audio recorded.

☐ I understand that my participation in the research is voluntary and that I am free to withdraw at any time without giving a reason.

☐ I agree that the information that I provide can be used anonymously in the research, including the use of anonymous quotes.

Your name:_________________________ Signature:_________________________

The name of your school: _________________________________________________

The name of the student concerned: _________________________________________

Your contact phone number:__________________ Date: ___________________

Please return to Dawn Menzies, Trainee Educational Psychologist, at XXXXXXXXXXXXXXXX Educational Psychology Service
APPENDIX Q: Interview Schedule and Questions for Practitioners

Introduction:
Re-introduce myself and my role e.g.
- As I said in my letter, these interviews are part of a project I am carrying out which contributes to my doctorate course at the University of Manchester.

Explain purpose of the interview – guidance regarding what we are there to discuss and not discuss, to make boundaries clear e.g.
- The interviews are about any stresses or worries that students with autism or Asperger's may have had in school and how schools help them with these.
- If the young person is settled and happy in school the interviews will not try to dwell on problems, but focus on how the school is supporting him successfully.

Right to withdraw, make time frames clear at the start & how many questions there will be e.g.
- This interview will last around forty five minutes to one hour.
- There are 7 main questions and 4 activities where I will ask you to look at some cards and sort them into those that are true or not true for the student.
- It is important for us to stick to the particular questions where possible so that we can cover everything in the time we have.
- Some questions may be a bit difficult to answer, but there are no right or wrong answers. I am not looking for particular answers, but am just keen to hear about different people’s opinions and experiences.
- Please ask for clarification if there is anything that I ask that you are not sure about.
- You have the right to withdraw from the interview if you wish to or to decline to answer any question that you do not wish to answer.

Check that tape recording and making notes will be ok e.g.
- I will need to record this interview as described in the information I sent. Is that ok with you? I will keep the recordings in a locked cabinet and will destroy them five years after the completion of the research.
- This means that we will both need to speak clearly at a good volume so that the recorder can pick up our voices.
- It might also mean that I don't acknowledge what you are saying how I normally might, with verbal responses. This doesn't mean I'm not interested or am not listening, just that I don't want to interrupt your voice on the recording. I will try to acknowledge what you are saying non-verbally with nodding etc.
- It would be great if you have a mobile it you could turn it off as even if it is on silent the frequency can interfere with the audio recorder.

Mention confidentiality but duty of care e.g.
- Any information you discuss in the interview will remain confidential and will only be used anonymously. However, if there is anything that comes up that is considered to be harmful or illegal I would need to raise this with the relevant people, but I would let you know about this at the time.

Clarify anonymity (won't use names, male/female, places, identifying factors etc) e.g.
- Following the interviews, I will write to you with a short written summary of what was discussed. You will be able to check that it represents your views correctly and you will have the chance to ask me to change anything if needed.
- In my thesis, I will take care not to provide any information which allows individual schools, children, parents or teachers to be identified.

The interviews carried out with the young people will be different from those carried out with you and will have more practical activities. I aim to ensure that they are not made to feel uncomfortable. Again he/she will be able to withdraw from the interview or refuse to answer any questions that he / she does not wish to.
Warm up question - tell me about XXXXX? What is he/she like at school?

1. Sometimes young people with ASC get stressed or anxious during their time at school or about going to school and I believe this has been the case with XXXXX. Can you tell me a bit about this?

- Ensure they know what ‘anxious’ means - explore this as required
- Prompt as required: When about was it that they started showing these signs? ….. How long did it go on for? Prompt with notes from file if required e.g ‘I noticed there was a meeting on X date…’

2. What signs did XXXX show when he/she was anxious?

Possible prompts e.g.
- Children with ASC don’t always show anxiety or worry in the same way as other people. Can you describe some of the ways you knew that he/she was anxious.
- May need to prompt re behaviour/presentation from file e.g. ‘I see in the referral notes from the time that XXXX was…… Can you elaborate on this?’

Signs card sort 1: ‘here are some signs that young people with ASC might show when they are anxious/worried. Please look carefully at what is written on each card. If X has shown these signs put it in the yes box, if X hasn’t shown these signs, put it in the no box. If there are any you are unsure about you can put them aside.’

- Discuss the responses. When? In response to what event? Tell me a bit more about what happened? Can you give me an example?

3. Are there particular things that seemed to make XXXX feel like this?

- Prompt if needed e.g. certain lessons, times, places, people…

Contributing factors card sort 2: ‘here are some things that might make young people with ASC anxious/worried. Please look carefully at what is written on each card. If what is written on the card is something that has made X anxious or worried, put it in the yes box, if it hasn’t made X worried or anxious, put it in the no box. If there are any you are unsure about you can put them aside.’

- Discuss the responses, e.g. When? In response to what event? Tell me a bit more about what happened? Can you give me an example?

4. What was the impact of X's anxiety? How did it affect X day to day?

Impact card sort 3: ‘here are some things that can happen when young people with ASC are anxious/worried. Please look carefully at what is written on each card. If what is written on the card is something that happened when X was anxious or worried, put it in the yes box, if it wasn’t something that happened when X was worried or anxious, put it in the no box. If there are any you are unsure about you can put them aside.’

- Discuss the responses e.g. When? In response to what event? Tell me a bit more about what happened? Can you give me an example?
5. What things seemed to help XXXXX with his/her anxiety/worry? What worked?

Prompts if needed e.g.
- What did you/the school do to help? Prompt with who? What? When?
- How did you know that this helped XXXXX? Prompt to consider change in behaviours, what the child said, demeanour etc
- Did anyone or anything else help at that time? E.g. prompt to consider external agencies, resources etc.
- How have things changed?

What works card sort 4: “here are some things that are said to help young people with ASC when they are anxious/worried. Please look carefully at what is written on each card. If what is written on the card is something that seemed to help when X was anxious or worried, put it in the yes box. If it wasn’t something that helped, put it in the no box. If it wasn’t something that was tried with X, put it in the ‘not tried’ box. If there are any you are unsure about you can put them aside.

Prompts if needed e.g.
- Tell me a bit about how they have helped. Can you give me an example? Who is involved? What do they do? Why do you think it helps?

6. Were there any barriers to getting this support for XXXXX or for the support working for XXXXX?

- Discuss the responses e.g.. Why do you think that? Tell me a bit more about what happened? Can you give me an example?

7. Can you tell me what you are most pleased with about what XXXXX has achieved in his/her time at this school?

Then prep for child’s interview:
- Can you tell me anything that might help me interview him/her.
  - What is s/he interested in?
  - What kind of things will make him/ her more relaxed when I am talking to him/her?
  - Is there anything I should avoid doing or saying?
  - Do you think using visuals (e.g. pictures, photos) help him/her to do his/her interview?
- Is there anything that would help me when interviewing X’s parents?
- Is he/she aware of his/her diagnosis?
- Does he/she have a preferred terminology for Autism/Asperger’s or do they prefer it if this is not referred to directly?

Closure
- Ask if there is anything else they would like to say, or if they have any questions.
- Thank them for their time. Arrange further time if not completed.
APPENDIX R: Interview Schedule and Questions for Parents

Introduction etc. as per those for practitioners.

Warm up question - tell me about XXXXX? What is he/she like?

1. Sometimes young people with ASC get stressed or anxious during their time at school or about going to school and I believe this has been the case with XXXXX. Can you tell me a bit about this?
   - Ensure they know what ‘anxious’ means - explore this as required
   - Prompt as required e.g. When about was it that they started showing these signs? …..How long did it go on for? Prompt with notes from file if required e.g ‘I noticed there was a meeting on X date…’

2. What signs did XXXX show when he/she was anxious?
   - Prompt if needed e.g.
     - Children with ASC don’t always show anxiety or worry in the same way as other people. Can you describe some of the ways you knew that he/she was anxious.
     - May need to prompt re behaviour/presentation from file e.g. ‘I see in the referral notes from the time that XXXX was…… Can you elaborate on this?’

   Signs card sort 1: “here are some signs that young people with ASC might show when they are anxious/worried. Please look carefully at what is written on each card. If X has shown these signs put it in the yes box, if X hasn’t shown these signs, put it in the no box. If there are any you are unsure about you can put them aside.”
   - Discuss the responses e.g. When? In response to what event? Tell me a bit more about what happened? Can you give me an example?

3. Are there particular things that seemed to make XXXX feel like this?
   - Prompt if needed e.g. certain lessons, times, places, people…

   Contributing factors card sort 2: “here are some things that might make young people with ASC anxious/worried. Please look carefully at what is written on each card. If what is written on the card is something that has made X anxious or worried, put it in the yes box, if it hasn’t made X worried or anxious, put it in the no box. If there are any you are unsure about you can put them aside.”
   - Discuss the responses e.g. When? In response to what event? Tell me a bit more about what happened? Can you give me an example?

4. What was the impact of X’s anxiety? How did it affect X day to day?
   - Impact card sort 3: “here are some things that can happen when young people with ASC are anxious/worried. Please look carefully at what is written on each card. If what is written on the card is something that happened when X was anxious or worried, put it in the yes box, if it wasn’t something that happened when X was worried or anxious, put it in the no box. If there are any you are unsure about you can put them aside.”
   - Discuss the responses e.g. When? In response to what event? Tell me a bit more about what happened? Can you give me an example?
5. What things seemed to help XXXXX with his/her anxiety/worry? What worked?

Prompt if needed e.g.
- What did you/the school do to help? Prompt with who? What? When?
- How did you know that this helped XXXXX? Prompt to consider change in behaviours, what the child said, demeanour etc
- Did anyone or anything else help at that time? E.g. prompt to consider external agencies, resources etc.
- How have things changed?

What works card sort 4: “here are some things that are said to help young people with ASC when they are anxious/worried. Please look carefully at what is written on each card. If what is written on the card is something that seemed to help when X was anxious or worried, put it in the yes box. If it wasn’t something that helped, put it in the no box. If it wasn’t something that was tried with X, put it in the ‘not tried’ box. If there are any you are unsure about you can put them aside.

Prompt if needed e.g.
- Tell me a bit about how they have helped. Can you give me an example? Who is involved? What do they do? Why do you think it helps?

6. Were there any barriers to getting this support for XXXXX or for the support working for XXXX?

- Discuss the responses e.g. Why do you think that? Tell me a bit more about what happened? Can you give me an example?

7. Can you tell me what you are most pleased with about what XXXXX has achieved in his/her time at this school?

Then prep for child’s interview:
- Can you tell me anything that might help me interview him/her.
  - What is s/he interested in?
  - What kind of things will make him/ her more relaxed when I am talking to him/her?
  - Is there anything I should avoid doing or saying?
  - Do you think using visuals (e.g. pictures, photos) help him/her to do his/her interview?
- Is there anything that would help me when interviewing X’s parents?
- Is he/she aware of his/her diagnosis?
- Does he/she have a preferred terminology for Autism/Asperger’s or do they prefer it if this is not referred to directly?

Closure
- Ask if there is anything else they would like to say, or if they have any questions.
- Thank them for their time. Arrange further time if not completed.
APPENDIX S: Interview Schedule and Questions for Students

Introduction:

Re-Introduce myself and my role e.g.
- As I said in my letter, these interviews are part of a project I am carrying at the University of Manchester.
- I have made sure that your teachers know where you are and you won’t miss your break or lunchtime.

Explain purpose of the interview – guidance regarding what we are there to discuss and not discuss, to make boundaries clear, make time frames clear at the start & how many questions there will be e.g.
- This meeting will last about 30 minutes – we will talk about whether you want to carry on or not when we get to 30 minutes if we haven’t finished
- As I said in my letter, I am going to ask you some questions and we’ll do some activities. I will be asking you about any worries that you might have felt in school and about what helped you with this.
- There are some main questions and 4 activities where I will ask you to look at some cards and sort them into those that are true or not true for you.
- There are no right or wrong answers to the questions that I will ask you. I want to get different views of students and want to hear what you think, not what your teachers, parents or other students might think.
- If you do not understand the question you can tell me or point to the card. Don’t guess the answer or make one up if you don’t understand.
- It is important for us to stick to the particular questions where possible so that we can cover everything in the time we have.

Right to withdraw etc.
- If you don’t want to answer a question you don’t have to, just let me know.
- If you don’t want to carry on for any reason, you can tell me and go back to your lesson.

Check that tape recording and making notes will be ok e.g.
- As I said in my letter, I will be recording this meeting as this will help me with my work. Is that still ok with you? If not, please tell me now.
- This means that we will both need to speak clearly at a good volume so that the recorder can pick up our voices.
- I will keep the recording locked away when I am not using it and I will destroy the recording after the work is finished.

Mention confidentiality but duty of care e.g.
- I will not tell anyone else your answers. I will keep them private. But if I am concerned about your safety, I’ll need to talk to someone about this to try to help you. If I am going to do this, I will talk to you about it first.

Clarify anonymity (won’t use names, male/female, places, identifying factors etc) e.g.
- When I have met with the other students, parents and teachers, I’ll then write about what everyone has said. When I am writing about what has been said, I’ll make sure that people reading it can’t tell which teacher, parent or student said the things, or what school I am writing about.
- Once I have listened to the recording many times I will make a list of the main things you said. I will then send this to you for you to check that it is right and that it says what you think. If anything is not what you said, you can ask me to change it.
Warm up questions:
- How long have you been at this school?
- What are your favourite things?
- What do you like doing best at school (which subjects or activities)?
- What is a good day at school like?
  - Prompt to consider lessons, people, places, activities etc. Use of photos to prompt as required
- Have you ever had days at school that are not so good?
  - It doesn't matter whether they answer 'yes' or 'no' or elaborate or not – this is to lead into the next question
- Sometimes kids get stressed, worried or anxious at school, or about going to school. What does ‘anxious’ mean to you?
  - Prompt to explore this as required - use of visuals and body outline to explore how it might look/physically feel
- Have you ever felt anxious about school?
  - If answer ‘no’ prompt with reference to periods/events that have been discussed by practitioner/parent
- What did you feel like when you were anxious?
  - Use faces and body visuals to prompt discussion and expression of emotional and physical feelings if needed.
  - Verbal prompts if needed, such as: What were you thinking in your head? What sensations and feelings did you have in your body?
- Signs of anxiety card sort 1: “Here are some signs that young people might get when they are anxious/worried. Please look carefully at what is written on each card. If it is something that happened to you when you have been anxious or worried put it in the yes box. If it is not something that happened to you, put it in the no box. If there are any you are unsure about you can put them to the side.”
  - Discuss the responses e.g. Can you give me an example? Such as…? What specifically? Tell me a bit more about what that felt like inside?
- What things made you feel anxious or worried?
  - Prompt if needed with photos, timetable, reference to the said periods/events etc (e.g. certain lessons, times, places, people…)
- Contributing factors card sort 2: “here are some things that might make young people anxious/worried. Please look carefully at what is written on each card. If what is written on the card is something that has made you anxious or worried, put it in the yes box, if it hasn’t made you worried or anxious, put it in the no box. If there are any you are unsure about you can put them to the side.”
  - Discuss the responses e.g. When? In response to what event? Tell me a bit more about what happened? Can you give me an example?
• Sometimes when people are anxious or worried, this can affect how they feel about things or how they behave. It might mean that they do things they might not normally do, or avoid doing other things, or they may think certain things. Can you think of any changes in your behaviour or feelings because of your worries?

➤ Prompt if needed. For example, they might not want to go to school, or they might get angry at other people

Impact card sort 3: “here are some things that can happen when young people are anxious/worried. Please look carefully at what is written on each card. If what is written on the card is something that happened when you were worried, put it in the yes box, if it wasn’t something that happened when you were worried, put it in the no box. If there are any you are unsure about you can put them to the side.”

➤ Discuss the responses e.g. What specifically? Tell me a bit more about what happened? Can you give me an example?

• What did you do that helped you feel better when you were anxious or worried? What worked for you with this?

➤ If no answer or ‘don’t know’, prompt with examples from parent/practitioner and explore what of these worked and didn’t work

• What did other people do that helped you feel better? Who? What?

➤ Prompt with photos of the resources used and reference to strategies that practitioners/parents referred and explore if anything about these worked (e.g. what worked with this approach? What didn’t work with this approach?)

➤ Ask e.g. Please explain a bit about what XXXXXXX did and how that helped you. Prompt to go through the stages, materials used, when, where etc.

What works card sort 4: “here are some things that might help young people when they are anxious/worried. Please look carefully at what is written on each card. If what is written on the card is something that seemed to help when you were worried, put it in the yes box. If it wasn’t something that helped, put it in the no box. If it wasn’t something that was tried, put it in the ‘not tried’ box. If there are any you are unsure about you can put them to the side.”

Prompt if needed e.g.

➤ What else do you think might have helped with….. (concerns/feelings that they mentioned in response to previous questions)? What could have made it better?

*Warning about this being the last question and about how long is left:

• It sounds like you are doing well now and your worries are less. What is the best thing about school for you now?

Closure

• Ask if there is anything else they would like to say, or if they have any questions.
• Pre-arranged preferred activity after the interview.
• Thank them for their time and arrange a further time if needed/agreed.
APPENDIX T: Examples of Completed Card Sort Mats
# APPENDIX U: Card Sort Exercise Prompts

## Student card sort 1:

**What did you feel like when you were anxious?**

| |  
|---|---|
| I was thinking or worrying about my problems a lot | I would act differently or show differences in my body or facial expressions |
| I would get pains, feel tense or have changes in my body | I would make sounds out loud or would talk differently |
| I felt sad inside |  

## Student card sort 2:

**What things made you feel anxious or worried?**

|  
|---|
| Things around me in my surroundings | High expectations |
| Difficulty in following ‘social rules’ and understanding what other people expected of me | Trying to understand and deal with the way I was feeling |
| Things changing | Times when nothing was planned |
| Being excluded, teased or bullied by other students | Adults not understanding me and my needs |
| Being aware of the things I find harder | Moving schools/classes or going to new places |

## Student card sort 3: Impact

**What sort of things happened when you were worried or anxious?**

|  
|---|
| I would take myself away from other people, or avoid others | I had difficulty in getting on with people or spending time with others |
| I found it hard to pay attention and concentrate | I didn’t do as well at school as I might have |
| I sometimes had outbursts or got angry at others | I didn’t feel good about myself |
| I would do certain actions over and over | I wasn’t sleeping or eating properly |
| I needed to get medical help with how I was feeling (from a doctor, clinic or hospital) |  

## Student card sort 4: what works

**What helped when you were anxious or worried?**

|  
|---|
| Teachers knowing about my needs and how to teach me in the best ways for this | Being helped to understand my worries and how to deal with them |
| Communication and instructions being clear and understandable for me | Sensory, artistic or creative activities |
| Learning about social and communication skills | Telling people about my needs and being involved in deciding what would help me at school |
| Practising and trying out the strategies I had learned to help me | Being included and accepted at school |
| Doing more of the things that I’m good at or interested in | Having a person or place that I could go to when I was worried |
| Other people helping and supporting me | Having clear routines, structure and order |
| Getting rewards, or praise | Changes being made to the classes I was in |
| Getting extra help and information before I moved to high school |  

---

267
**Parent/Practitioner card sort 1:**
*What signs did he/she show when he/she was anxious?*

<table>
<thead>
<tr>
<th>Particular thought patterns</th>
<th>Verbal clues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reports of emotional sadness</td>
<td>Non verbal clues</td>
</tr>
<tr>
<td>Physical symptoms</td>
<td></td>
</tr>
</tbody>
</table>

**Parent/Practitioner card sort 2:**
*Are there particular things that seemed to make him/her anxious?*

<table>
<thead>
<tr>
<th>Sensory and environmental factors</th>
<th>Aspirations / expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social difficulties</td>
<td>Understanding and managing his/her feelings</td>
</tr>
<tr>
<td>Change</td>
<td>Unstructured times</td>
</tr>
<tr>
<td>Feeling excluded, teased or bullied by other students</td>
<td>Lack of adult understanding of AS / autism</td>
</tr>
<tr>
<td>Increased self awareness</td>
<td>Transitions</td>
</tr>
</tbody>
</table>

**Parent/Practitioner sort 3:**
*What was the impact of his/her anxiety?*

<table>
<thead>
<tr>
<th>Withdrawal</th>
<th>Social and peer relationship difficulties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased repetitive or compulsive behaviours</td>
<td>Lower self esteem</td>
</tr>
<tr>
<td>Problems with attention and concentration</td>
<td>Eating and/or sleeping problems</td>
</tr>
<tr>
<td>Adverse behaviour</td>
<td>Not reaching potential at school</td>
</tr>
<tr>
<td>Severe emotional or mental health needs (needing medical input)</td>
<td></td>
</tr>
</tbody>
</table>

**Parent/Practitioner sort 4:**
*What things seemed to help him with his anxiety?*

<table>
<thead>
<tr>
<th>Staff knowledge, understanding and approach</th>
<th>Helping him/her to identify and manage physical and emotional feelings and thoughts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptations to aid communication and understanding</td>
<td>Sensory, artistic or creative activities</td>
</tr>
<tr>
<td>Social skills approaches</td>
<td>Involving him/her in planning for his needs</td>
</tr>
<tr>
<td>Practise and/or generalisation</td>
<td>Inclusive approaches</td>
</tr>
<tr>
<td>Strengths, talents and specific interests</td>
<td>Having a specific person or place to go to</td>
</tr>
<tr>
<td>Involvement of others</td>
<td>Structure and routine</td>
</tr>
<tr>
<td>Reward / reinforcement</td>
<td>Considering environmental factors</td>
</tr>
<tr>
<td>Support at transition to high school</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX V: Card Sort Exercise Process

During the interviews, card sort exercises were presented to participants to aid the collection of data.

The exercise materials were made as follows:

- Four mats cut from an inexpensive durable material (door mats), to approximately 40cm length and 30cm height each
- Cards made from coloured card with statements printed in size 14 Calibri font on each card as shown in Appendix U. All cards were of equal size (approximately 8cm length by 3cm height). Statements for the four questions were printed on different coloured card for each question
- Cards with each question were also printed from the same colour card as the statement cards.
- Cards specifying which participant and which question (e.g. ‘Parent/Practitioner sort 3’) were printed in size 12 Calibri font on a corresponding colour card
- Two white cards with ‘yes/I agree’ and ‘no/I don’t agree’ were printed using Calibri size 48 font
- White ‘choice’ cards with ‘I’d like to stop’, ‘I need a break’, ‘I don’t understand’, ‘I’m not sure’ and ‘I don’t know’ were printed in Calibri size 48 font with relevant clip art pictures to convey each concept
- Each card had small pieces of self adhesive Velcro hook tape on the back.

The layout of the mats is shown in Appendix U and is described as follows:

- A corresponding question was in place at the top centre of the mat
- The card specifying the question number and participant was placed at the top right of the mat
- The ‘yes/I agree’ card was placed at the top left of the mat (at a level under the question card) and the ‘no/I don’t agree’ at the top right (at a level under the question card)
- The ‘choice’ cards were laid out to the right side of the mat.

The following describes the process of using the card sort exercises:

- A suitable space was found at the start of the interview where the mats could be easily presented to the participants during the course of the interview. The mats were set up in advance and were kept in a case until each was required
- The ‘choice’ cards were laid out at the start of the interviews so that they could be used during the open-ended questions or card sort exercises. These were used
only for the student participants (due to their communication needs), and at the start of the interview it was explained that the students could use these if/as required

- Following each main open-ended question (there were four main questions in each interview) as shown in Appendices Q, R and S, a mat was presented to the participant with corresponding statement cards (as shown in Appendix U) velcroed to the bottom in a random order.

- The participant was asked to place the cards under the yes or no cards depending on whether they agreed or disagreed with the statement. They were reassured that there were no right or wrong answers and that they could leave any cards to the side or in the middle that they were unsure about. Participants were able to choose cards in any order on each mat.

- Participants were encouraged to discuss and expand upon their decisions verbally with prompts by the researcher, e.g. to explain why they chose ‘yes’ or ‘no’ and to give examples.

- The mats were kept intact as completed by the participants and photographed by the researcher at the end of each interview session.
## APPENDIX W: Interview Details for Student Participants

<table>
<thead>
<tr>
<th>Student 1: Ali (pilot interview)</th>
<th>Student 2: Matthew</th>
<th>Student: Ryan</th>
<th>Student 4: Megan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location of Interview</td>
<td>School</td>
<td>Home</td>
<td>Home</td>
</tr>
<tr>
<td>Number of Interviews</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total Length of Interview/s</td>
<td>36 minutes</td>
<td>63 minutes</td>
<td>33 minutes</td>
</tr>
</tbody>
</table>
## APPENDIX X: Interview Details for Parent and School Practitioner Participants

<table>
<thead>
<tr>
<th>Student</th>
<th>Parent Interview Location</th>
<th>Parent Interview Length</th>
<th>Practitioner Interview Location</th>
<th>Practitioner Interview Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1: Ali</td>
<td>School</td>
<td>30 minutes</td>
<td>School</td>
<td>82 minutes</td>
</tr>
<tr>
<td>Student 2: Matthew</td>
<td>Home</td>
<td>56 minutes</td>
<td>School</td>
<td>56 minutes</td>
</tr>
<tr>
<td>Student 3: Ryan</td>
<td>Home</td>
<td>81 minutes</td>
<td>School</td>
<td>57 minutes</td>
</tr>
<tr>
<td>Student 4: Megan</td>
<td>Home</td>
<td>58 minutes</td>
<td>School</td>
<td>54 minutes</td>
</tr>
</tbody>
</table>
APPENDIX Y:  Example of Visuals Used to Support Student Interviews

Student 4: body outline to help the student with describing how they felt when anxious
APPENDIX Z: Example of Visuals to Aid Students During Interviews

STUDENT 1
APPENDIX AA: Visual Cards for Students to Indicate Needs in Interviews

- STOP
  I’d like to stop

- I need a break

- I don’t understand

- I’m not sure

- I don’t know
APPENDIX BB: Template for Research Diary

Research Diary

**Memos:**
- Write after visit / interview.
- Include chronology of events
- Jot down catchwords or phrases

<table>
<thead>
<tr>
<th>Descriptive sequences</th>
<th>Theoretical notes:</th>
<th>Planning notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts of activities</td>
<td>Clarifying a concept or idea</td>
<td>Alternative courses of practical action</td>
</tr>
<tr>
<td>Descriptions of events</td>
<td>Making connections between various accounts and other bits of information</td>
<td>What was forgotten and how to address it next time</td>
</tr>
<tr>
<td>Reconstructions of dialogues</td>
<td>Identifying surprising or puzzling situations worth following up</td>
<td>What has to be thought through more carefully.</td>
</tr>
<tr>
<td>Gestures/facial expressions</td>
<td>Connecting my experience to the concepts of an existing theory</td>
<td></td>
</tr>
<tr>
<td>Description of a place/facilities</td>
<td>Formulating a new hypothesis</td>
<td></td>
</tr>
<tr>
<td>Exact quotations (record words that are typical of a person, group or the school)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Interpretive sequences**
- Feelings
- Speculations
- Ideas
- Hunches
- Explanations of events
- Reflections on assumptions and prejudices
- Development of theories.

**Theoretical notes:**
- Observations and reflections on research strategy
- Methods and activities as the research unfolds.
- Issues of methodological critique and ideas for alternative methods and procedures, which may help improve the quality of the research project and competence of the researcher.
APPENDIX CC: Sample of use of Comment Boxes for Coding

Each document or transcript was analysed to generate codes as per stage 2 of the data analysis process described in table 3.5.

Codes were assigned to relevant extracts using Microsoft Word comment boxes to highlight relevant data/quotes for each code. Samples are shown from an interview transcript and statement of SEN from documentary analysis.

Sample coding of a transcript:

<table>
<thead>
<tr>
<th>Researcher</th>
<th>Practitioner 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>What sort of things? Would he say certain things?</td>
<td>Very subtly I think but it was obviously just that, he hadn’t done something or he couldn’t do something or excuses or whatever. You could just see that he wasn’t coping.</td>
</tr>
<tr>
<td>And you would see more of that when he was anxious?</td>
<td>Yes when he was anxious you got more of that. Again physical symptoms yes to a certain extent but he was sort of – he just became more closed. You had to know him to realise that he was different. He was obviously quite shy about his body weight. He didn’t like physical stuff and he also, he just became more closed in.</td>
</tr>
<tr>
<td>When he was anxious would he ever complain himself of physical symptoms then or not?</td>
<td>Not particularly that I’m aware of. I mean he would complain about the behaviour of the other boys in the changing room in PE, again that’s like a verbal clue I suppose.</td>
</tr>
<tr>
<td>So the physical was more how he presented maybe?</td>
<td>In his body language yes. I’m not aware of any particular thought patterns. I mean I have other Autistic’s children who have had all sorts of strange thought patterns and I’ve not particularly seen it in Matthew that I’m aware of. It’s quite hard to separate it all out really.</td>
</tr>
<tr>
<td>I know it can depend.</td>
<td>So you didn’t know?</td>
</tr>
<tr>
<td>Again you see when he was stressed he wasn’t particularly communicative so he didn’t report that he was particularly sad or upset about anything. He went through a lot of difficult things at home but he didn’t share it with us.</td>
<td>It was internalised I think a lot with Matthew.</td>
</tr>
<tr>
<td>So he was maybe feeling sadness but he didn’t say that, he didn’t make that known?</td>
<td>No.</td>
</tr>
<tr>
<td>Okay so if we leave that one in the middle then. Is that okay?</td>
<td>Is there anything else that you want to add in terms of thinking about how he presented when he was anxious?</td>
</tr>
<tr>
<td>Yes.</td>
<td>Other than what I’ve already mentioned about the lack of being able to organise himself. Organisation when he was stressed was a major problem.</td>
</tr>
</tbody>
</table>
Sample coding of documentary evidence:

**Teaching/Curriculum:**

<table>
<thead>
<tr>
<th>Provision for Objective 1</th>
<th>A structured social skills programme to be delivered within a small group (maximum 6 pupils) on a weekly basis by an experienced member of staff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision for Objective 2</td>
<td>A programme should be in place to develop fine and gross motor skills as advised by the relevant professionals. This should be delivered in school, by a Teaching Assistant, three times a week, in a group of not more than 6 pupils.</td>
</tr>
<tr>
<td>Provision for Objective 3</td>
<td>Daily opportunity to have access to a learning mentor (or named member of staff) to support Matthew in taking responsibility for his own learning. This would ideally be in the form of 10 minutes’ 1:1 at a specified point during the school day.</td>
</tr>
<tr>
<td>Provision for Objective 4</td>
<td>Opportunity on a weekly basis for Matthew to work in a small group (maximum 6 pupils) to develop flexibility of thought/understanding the needs of others through role play/social stories or other alternative strategies.</td>
</tr>
<tr>
<td>Provision for Objective 5</td>
<td>Daily opportunity to have access to a learning mentor (or named member of staff) to support Matthew in developing an understanding of everyday situations which he finds difficult. This would ideally be in the form of 10 minutes’ 1:1 at a specified point during the school day.</td>
</tr>
</tbody>
</table>

**Staffing**

The following staffing is considered necessary to supplement existing staffing available in a mainstream school to provide for Matthew’s needs:

- **Support/Advice from a teacher with experience and expertise in teaching pupils with:**
  - ASD (Autistic Spectrum Disorder, ASD), or difficulties consistent with ASD.

The specialist teacher input should be a minimum of 1 hour per term and should include:

- Attendance at and contribution to the Target Setting meeting and subsequent review meetings.
- Advice to Matthew’s teachers and Teaching Assistant as to the appropriate strategies and resources to meet Matthew’s needs.
- Advice to ensure that individual programmes (see above) are in place.
APPENDIX DD: Sample of Table of Emerging Themes across Data Sources

The follow table shows the process by which codes were collated and sorted into possible themes as described in stage 3 of the data analysis process described in table 3.5 within the text and as follows:

- Codes were collated into tables from each document or transcript for a specific case using the Word ‘cut and paste’ function.
- Data from each source was collated in an individual column (e.g. data from documentary analysis, data from parental interview, data from practitioner interview, data from student interview an data regarding that case from the research diary).
- Emerging basic themes from the codes were grouped within in the final column based around the research questions.
- Some similar codes were amalgamated into one basic theme that suitably encompassed them all.
- In the final column of collated emerging themes the source of each theme is attributed to that sources as follows:
  - D = from documentary evidence for that case
  - P = from the parent interview for that case
  - SP = from the school practitioner interview for that case
  - S = from the student interview for that case
  - RD = from extracts from the research diary regarding that case

- The process was repeated for each case individually.

<table>
<thead>
<tr>
<th>Presentation of Need (Student 2 codes from documents)</th>
<th>Presentation of need (Parent 2 codes)</th>
<th>Presentation of need (Practitioner 2 codes)</th>
<th>Presentation of need (Student 2 codes)</th>
<th>Presentation of need (research diary codes re student 2)</th>
<th>Collated codes for themes - Presentation of need for student 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Looks tired</td>
<td>Withdraws</td>
<td>Tearful</td>
<td>Became quiet</td>
<td>None specific to this case</td>
<td>Tearful (SP, P)</td>
</tr>
<tr>
<td>Makes noises when anxious</td>
<td>Becomes quieter at home</td>
<td>Visibly upset</td>
<td>Stopped talking</td>
<td></td>
<td>Reports of stomach ache (P)</td>
</tr>
<tr>
<td>Covers his head</td>
<td>Crying easily</td>
<td>Visibly uptight</td>
<td>Sit alone and inactive</td>
<td></td>
<td>Tiredness (P, D)</td>
</tr>
<tr>
<td>Looks ‘down’</td>
<td>Reports of stomach ache</td>
<td>Visible clues</td>
<td>In a corner</td>
<td></td>
<td>Comfort eating (P)</td>
</tr>
<tr>
<td></td>
<td>Comfort eating</td>
<td>Became withdrawn</td>
<td>Constant feelings</td>
<td></td>
<td>Drinking from a sports bottle (P)</td>
</tr>
<tr>
<td></td>
<td>Drinking from a sports bottle</td>
<td>Withdrawal from group work</td>
<td>Feeling ‘down’</td>
<td></td>
<td>Nocturnal enuresis (P)</td>
</tr>
<tr>
<td></td>
<td>Nocturnal enuresis</td>
<td>Uncommunicative</td>
<td>Looked gloomy</td>
<td></td>
<td>Looked gloomy (S)</td>
</tr>
<tr>
<td></td>
<td>Tiredness</td>
<td>Became more closed</td>
<td>Mood swings in class</td>
<td></td>
<td>Fidgeting (S)</td>
</tr>
<tr>
<td></td>
<td>Negative thought patterns</td>
<td>More disorganised</td>
<td>Felt frustrated</td>
<td></td>
<td>Repetitive actions (S)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Less self organised</td>
<td>Fidgeting</td>
<td></td>
<td>Making noises (D)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Saying he couldn’t do things (defeatist?)</td>
<td>Repetitive actions</td>
<td></td>
<td>Many feelings constantly (S)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Subtle verbal clues</td>
<td></td>
<td></td>
<td>Mood swings in class (S)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Frustration (S)</td>
</tr>
<tr>
<td>Factors contributing to need (Student 2 codes from documents)</td>
<td>Factors contributing to need (Parent 2 codes)</td>
<td>Factors contributing to need (Practitioner 2 codes)</td>
<td>Factors contributing to need (Student 2 codes)</td>
<td>Factors contributing to need (research diary codes re student 2)</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
<td>----------------------------------------</td>
<td>----------------------------------------</td>
<td>----------------------------------------</td>
<td>----------------------------------------</td>
<td></td>
</tr>
</tbody>
</table>
| • Changes in routine
  • Organisational demands of high school
  • Tasks where there is no specific right answer
  • Recording work in writing
  • Emotional underdevelopment
  • Lack of ability to perspective take
  • Worry about getting tasks wrong
  • Homework
  • Possessions being moved by other students
  • Over attention to detail
  • Perfectionism
  • Teasing by peers
  • Worry about communicating with unknown people
  • Worry about partnering for group work | • Anything new
  • New subjects
  • New teachers
  • Unfamiliar classrooms
  • New ways of doing things
  • Learning new things
  • Unknown situations
  • Doing things in different ways
  • Transition high school
  • New school being bigger
  • Change
  • Extra-ordinary events at school
  • Worry about not reaching his potential
  • Difficulty in expressing his worries
  • Developing a self identity
  • Cyberbullying
  • Reported bullying
  • Being treated as different by peers | • Change in timetable
  • More group work
  • Working with peers he didn't know
  • Working with peers who didn't understand him
  • Lack of friends when he started at the school
  • Difficulty making friends
  • Relationships/interactions with peers at lunch times
  • Verbal taunting and commenting by peers
  • Not coping with taunting
  • Standing out as being different
  • Being alone
  • Behaviour of peers
  • Not performing to his standards
  • Striving to be the best
  • Difficulty articulating his worries
  • Lack of understanding of his emotions
  • Not sharing when sad or upset
  • Problems not being dealt with immediately
  • Embarrassment of getting upset
  • His parent's actions and more | • Moving to high school
  • Differences between primary and secondary school
  • Orientating himself around the school
  • Lessons that he found harder
  • Constantly thinking about everything
  • Constant feelings and emotions
  • Constant confusion
  • Constantly seeking to understand
  • Worry about getting things wrong
  • Pessimism
  • Lack of future motivators
  • Life seeming gloomy
  • Internalising feelings
  • Feelings building up inside
  • Teaching methods that didn't suit him
  • Different teaching methods from primary school
  • Performance anxiety
  • Lack of acceptance by peers
  • Lack of understanding from others
  • Exclusion and bullying by | • None specific to this case |

Collated codes for themes - Factors contributing to need (for student 2)

• Transition to secondary school (S, D, P, SP)
• Lack of friends when he started (SP)
• Orientating himself (S)
• Differences from primary (S)
• Organisational demands (D)
• Size (P)
• Different teaching methods (S)
• Changes in routine/timetable (D, SP)
• Unknown situations (P)
• New teachers (P)
• New subjects (P)
• Anything new (P)
• Unfamiliar classrooms (P)
• New ways of doing things (P)
• Learning news things (P)
• Extra-ordinary events at school (P)
• Constant thoughts, feelings and emotions (S)
• Internalising feelings (S)
• Difficulty expressing his worries and feelings (P, SP)
• Lack of understanding of his emotions (SP, D)
• Perfectionism/striving to be the best (D, SP)
• Worry about not reaching his potential (P)
• Performance anxiety (D, S)
• Worry about getting things wrong (S)
• Doing tasks with no right answer (D)
• Worry about the validity of his
<table>
<thead>
<tr>
<th>Perceived difficulties (Student 2 codes from documents)</th>
<th>Perceived difficulties (Parent 2 codes)</th>
<th>Perceived difficulties (Practitioner 2 codes)</th>
<th>Perceived difficulties (Student 2 codes)</th>
<th>Perceived difficulties (research diary codes re student 2)</th>
<th>Collated codes for themes - Perceived difficulties (for student 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Difficulty socially integrating with peers comments</td>
<td>• Some adults not understanding him Dynamics at home Self awareness of his differences Perceived that he was treated unfairly Having to conform to others ways of doing things Understanding the need to do things that others ask Homework</td>
<td>peers Feeling like a burden to peers Not fitting in Differences to peers Different levels of functioning to peers Worry about the validity of his contributions in classes Worry about getting things wrong Fitting in with social ‘codes’ Interacting with new people Behaviour of other students in class Peer interaction Family circumstances Being questioned about school at home</td>
<td>peers Feeling like a burden to peers Not fitting in Differences to peers Different levels of functioning to peers Worry about the validity of his contributions in classes Worry about getting things wrong Fitting in with social ‘codes’ Interacting with new people Behaviour of other students in class Peer interaction Family circumstances Being questioned about school at home</td>
<td>peers Feeling like a burden to peers Not fitting in Differences to peers Different levels of functioning to peers Worry about the validity of his contributions in classes Worry about getting things wrong Fitting in with social ‘codes’ Interacting with new people Behaviour of other students in class Peer interaction Family circumstances Being questioned about school at home</td>
<td>peers Feeling like a burden to peers Not fitting in Differences to peers Different levels of functioning to peers Worry about the validity of his contributions in classes Worry about getting things wrong Fitting in with social ‘codes’ Interacting with new people Behaviour of other students in class Peer interaction Family circumstances Being questioned about school at home</td>
</tr>
<tr>
<td>Perceived difficulties (Student 2 codes)</td>
<td>Perceived difficulties (Parent 2 codes)</td>
<td>Perceived difficulties (Practitioner 2 codes)</td>
<td>Perceived difficulties (Student 2 codes)</td>
<td>Perceived difficulties (research diary codes re student 2)</td>
<td>Collated codes for themes - Perceived difficulties (for student 2)</td>
</tr>
<tr>
<td>Retreats into his interests</td>
<td>Comfort eating or selective eating Withdrawal</td>
<td>Internalisation of his thoughts Becoming more withdrawn Withdrawal from group situations More difficulty with homework Difficulty with attention and concentration</td>
<td>Easily distracted Lack of focus in class Not completing homework Lack of focus on what’s going on around him Stopped participating Stopped engaging in group activities Thinking about everything</td>
<td>None specific to this case</td>
<td>None specific to this case</td>
</tr>
<tr>
<td>Underprepared for exams and tests</td>
<td>More reliance upon routines</td>
<td></td>
<td></td>
<td></td>
<td>None specific to this case</td>
</tr>
<tr>
<td>Getting behind with school work</td>
<td>Low self esteem</td>
<td></td>
<td></td>
<td></td>
<td>None specific to this case</td>
</tr>
</tbody>
</table>
### Perceived effective practice (Student 2 codes from documents)

- Gaining cues from observing peers
- Additional staff support for work experience placement
- Teachers allocating him to groups/partners in afternoon
- Teachers being vigilant of peer actions toward him
- Informing him of

<table>
<thead>
<tr>
<th>Perceived effective practice (Parent 2 codes)</th>
<th>Perceived effective practice (Practitioner 2 codes)</th>
<th>Perceived effective practice (Student 2 codes)</th>
<th>Perceived effective practice (research diary codes re student 2)</th>
<th>Collated codes for themes - Perceived effective practice (student 2 codes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gaining cues from observing peers</td>
<td>A safe place at lunch and break times</td>
<td>Making a group of friends with similar needs and interests</td>
<td>EP suggestions have on the whole been addressed within strategies</td>
<td>Daily routines and structure (P, SP)</td>
</tr>
<tr>
<td>Additional staff support for work experience placement</td>
<td>Activities at lunch times</td>
<td>Mutual support with friends who had similar experiences</td>
<td>Staff knowledge of the child to understand</td>
<td>Differentiated planner with clear targets and goals (SP)</td>
</tr>
<tr>
<td>Teachers allocating him to groups/partners in afternoon</td>
<td>Bonding with similar peers</td>
<td>Sharing coping strategies with friends with similar needs</td>
<td></td>
<td>Work being broken down (S)</td>
</tr>
<tr>
<td>Teachers being vigilant of peer actions toward him</td>
<td>Having a group identity</td>
<td>Friends to be with at lunch times</td>
<td></td>
<td>Specific feedback from teaching staff (S)</td>
</tr>
<tr>
<td>Informing him of</td>
<td>Having peers to spend time with</td>
<td>Friends who he doesn’t stand out with</td>
<td></td>
<td>Teaching approaches accounting for his ASC (S)</td>
</tr>
<tr>
<td></td>
<td>A positive and supportive SENCo</td>
<td>Somewhere ‘safe’ to go with friends</td>
<td></td>
<td>Teachers using more understandable language (S)</td>
</tr>
<tr>
<td></td>
<td>Good liaison and communication between the SENCo and teaching staff</td>
<td></td>
<td></td>
<td>Creative and practical teaching activities (S)</td>
</tr>
<tr>
<td></td>
<td>School being creative with the resources to support</td>
<td></td>
<td></td>
<td>Building independence by gradually decreasing support (SP)</td>
</tr>
</tbody>
</table>

### Perceived effective practice (Research diary codes re student 2)

- EP suggestions have on the whole been addressed within strategies
- Staff knowledge of the child to understand
- Daily routines and structure (P, SP)
- Differentiated planner with clear targets and goals (SP)
- Work being broken down (S)
- Specific feedback from teaching staff (S)
- Teaching approaches accounting for his ASC (S)
- Teachers using more understandable language (S)
- Creative and practical teaching activities (S)
- Building independence by gradually decreasing support (SP)
- Gaining in depth information from the
<table>
<thead>
<tr>
<th>actions taken</th>
<th>him</th>
<th>information to staff as he progressed through school</th>
<th>the signs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult support to know when work is a good enough standard</td>
<td>A close school community</td>
<td>Regular memos and updates to staff about his needs</td>
<td>EP recommendations have on the whole been addressed within strategies (RD)</td>
</tr>
<tr>
<td>Friendship with ASC peers</td>
<td>Staff approach and understanding</td>
<td>Improving the staff skill set re ASC</td>
<td>Pen portrait (re needs and strategies) to all staff (SP)</td>
</tr>
<tr>
<td>Mutual homework support with ASC peers</td>
<td>Good school to home communication</td>
<td>Whole school training re ASC</td>
<td>Regularly updated information for staff (SP, S)</td>
</tr>
<tr>
<td></td>
<td>Implementing strategies from school at home</td>
<td>Staff understanding</td>
<td>Whole school training re ASC (SP)</td>
</tr>
<tr>
<td></td>
<td>School involving the parent in decision making</td>
<td>Staff getting to know him</td>
<td>Improving staff understanding and knowledge (SP)</td>
</tr>
<tr>
<td></td>
<td>Being explicit with him about the reality of life</td>
<td>Specialist teacher advice, strategies and feedback</td>
<td>The SENCo making things happen (S)</td>
</tr>
<tr>
<td></td>
<td>Drama classes</td>
<td>Specialist teacher attending meetings and reviews</td>
<td>Positive and supportive SENCO (P)</td>
</tr>
<tr>
<td></td>
<td>Nurture group</td>
<td>Adaptations and specialist support in PE lessons</td>
<td>Good liaison and communication between the SENCo and teaching staff (P, S)</td>
</tr>
<tr>
<td></td>
<td>Online friends</td>
<td>TA support at registration time</td>
<td>Good pastoral support (P)</td>
</tr>
<tr>
<td></td>
<td>Practice of work experience skills</td>
<td>Proactive support and scheduling (e.g. arranging alternatives for subjects he worried about)</td>
<td>Specialist teacher advice, strategies and feedback (SP)</td>
</tr>
<tr>
<td></td>
<td>Being involved in the gifted and talented initiative</td>
<td>TAs recognising signs of his anxiety</td>
<td>Specialist teacher attending meetings and reviews (SP)</td>
</tr>
<tr>
<td></td>
<td>Using his strengths and talents</td>
<td>TA and SENCo liaison to develop strategies</td>
<td>TA and SENCo liaison to develop strategies (SP)</td>
</tr>
<tr>
<td></td>
<td>School addressing bullying issues</td>
<td>Routine</td>
<td>Staff approach and understanding (P)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TA support with being in the right place at the right time</td>
<td>Recognition of his views, needs and concerns by staff (S)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Differentiated planner with clear targets and goals</td>
<td>Open access to trusted SEN staff to discuss his concerns confidentially (SP, S, P)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TA support with self organisation</td>
<td>Compassionate people who listen (S)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TA support with organisation of homework</td>
<td>Reassurance (SP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Regular reviewing of homework</td>
<td>Immediate and obvious response to concerns/informing him of response (SP, D)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teacher liaison with home re homework</td>
<td>Specific feedback on reasons for rewards (S)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teaching strategies to him in a repetitive manner</td>
<td>TA support at registration times (SP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gaining in depth information</td>
<td>TA support with self organisation (SP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A safe space to go when anxious</td>
<td>TA support with planning and reviewing homework (SP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lunch time group</td>
<td>TA support to know when work is good enough (D)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Something to look forward to during the day</td>
<td>Specialist teacher support (S, SP)</td>
</tr>
<tr>
<td>From the primary school prior to transition</td>
<td>Supporting younger students with similar needs</td>
<td>Disclosing ASC to peers and teachers (S)</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>----------------------------------------------</td>
<td>--------------------------------------</td>
<td></td>
</tr>
<tr>
<td>• Provision of in depth information to staff prior to him starting the school</td>
<td>• Younger students looking up to him</td>
<td>• Bonding with similar peers (SP, S, D)</td>
<td></td>
</tr>
<tr>
<td>• Full access to SEN staff support as concerns arise</td>
<td>• Specific feedback from teaching staff</td>
<td>• Nurture group identity (SP, P)</td>
<td></td>
</tr>
<tr>
<td>• Availability of adult support at unstructured times</td>
<td>• Specific feedback on why rewards have been given</td>
<td>• Mutual support with friends with similar experiences (SP, S)</td>
<td></td>
</tr>
<tr>
<td>• Having trusted adults to talk to</td>
<td>• Social and communication skills work</td>
<td>• Friends to be with at unstructured times (S, SP, D)</td>
<td></td>
</tr>
<tr>
<td>• Reassurance from adults about his worries</td>
<td>• Lessons on body language and conversation</td>
<td>• Online friends (P)</td>
<td></td>
</tr>
<tr>
<td>• Building independence by gradually decreasing support</td>
<td>• Learning ways to relax</td>
<td>• Careful selection for class group work (SP, D)</td>
<td></td>
</tr>
<tr>
<td>• Gradually building his ability to self organise</td>
<td>• Liaison between home and school about concerns</td>
<td>• Small group rather than whole class activities (S)</td>
<td></td>
</tr>
<tr>
<td>• Immediate response to concerns</td>
<td>• Support from his mum</td>
<td>• A safe place and activities at lunch and break times (SP, P)</td>
<td></td>
</tr>
<tr>
<td>• Constant restorative work and conflict resolution</td>
<td></td>
<td>• Additional practise/support with work experience skills (P,D)</td>
<td></td>
</tr>
<tr>
<td>• Specific staff members to prioritise his concerns</td>
<td></td>
<td>• Social and communication/interpersonal skills work (S, SP)</td>
<td></td>
</tr>
<tr>
<td>• Making it obvious that his concerns were being dealt with</td>
<td></td>
<td>• Gaining cues from observing peers (D)</td>
<td></td>
</tr>
<tr>
<td>• Awareness of home related stressors</td>
<td>• Teaching problem solving skills (SP)</td>
<td>• Lessons on body language and conversation (S)</td>
<td></td>
</tr>
<tr>
<td>• Clear guidance for home in his planner</td>
<td>• Work on friendship skills (SP)</td>
<td>• Teaching problem solving skills (SP)</td>
<td></td>
</tr>
<tr>
<td>• Staff knowledge and support with de-stressing strategies</td>
<td>• Reparative work and conflict resolution regarding friendships and bullying (SP, P)</td>
<td>• Work on friendship skills (SP)</td>
<td></td>
</tr>
<tr>
<td>• Staff support to identify and manage his thoughts and feelings</td>
<td>• Staff being vigilant to peer actions toward him (D)</td>
<td>• Reparative work and conflict resolution regarding friendships and bullying (SP, P)</td>
<td></td>
</tr>
<tr>
<td>• Teaching problem solving skills</td>
<td>• Supporting younger students with similar needs in his areas of strength (S, SP)</td>
<td>• Staff being vigilant to peer actions toward him (D)</td>
<td></td>
</tr>
<tr>
<td>• Social and interpersonal skills work</td>
<td>• Being a role model to younger students (S, SP)</td>
<td>• Using his strengths and talents (P)</td>
<td></td>
</tr>
<tr>
<td>• Teaching about the complexities of social</td>
<td></td>
<td>• Focusing upon things to look forward to during the day (S)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Staff support to identify and manage his thoughts and feelings (SP)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Recognition of signs and triggers by key staff (R, SP)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Awareness of home related stressors</td>
<td></td>
</tr>
<tr>
<td>Barriers to effective practice (Student 2 codes from documents)</td>
<td>Barriers to effective practice (parent 2 codes)</td>
<td>Barriers to effective practice (Practitioner 2 codes)</td>
<td>Barriers to effective practice (Student 2 codes)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>None noted</td>
<td></td>
<td>Keeping a statement as his needs improve so the support can continue</td>
<td>None presented</td>
</tr>
<tr>
<td>How has it proved effective (Student 2 codes from documents)</td>
<td>How has it proved effective (Parent 2 codes)</td>
<td>How has it proved effective (Practitioner 2 codes)</td>
<td>How has it proved effective (Student 2 codes)</td>
</tr>
<tr>
<td>Is developing a sense of humour</td>
<td>Not letting ASC stop him in life</td>
<td>He has made great progress</td>
<td>Conversation has become easier</td>
</tr>
<tr>
<td></td>
<td>Academic achievements</td>
<td>Good academic results</td>
<td>Social situations are easier</td>
</tr>
<tr>
<td></td>
<td>Getting through life</td>
<td>Him completing school with his head held high</td>
<td>Disclosing his ASC has changed teachers approaches for the better</td>
</tr>
<tr>
<td></td>
<td>That he has developed an understanding of his ASC</td>
<td>He established ways to cope</td>
<td>His social and communication skills have improved</td>
</tr>
<tr>
<td></td>
<td>The student developing a change of mind set</td>
<td>He has learned to articulate his concerns</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The student uses negative</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other comments of interest (Student 2 codes from documents)</td>
<td>Other comments of interest (Parent 2 codes)</td>
<td>Other comments of interest (Practitioner 2 codes)</td>
<td>Other comments of interest (Student 2 codes)</td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
<td>-------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>• Building self-esteem recommended by EP</td>
<td>• None specifically noted</td>
<td>• Probably wouldn't have reached potential if anxieties hadn't been managed</td>
<td>• It took time for positive change</td>
</tr>
<tr>
<td>• Adult support to develop understanding of everyday situations recommended by EP</td>
<td></td>
<td>• It took time for supports to take effect</td>
<td></td>
</tr>
<tr>
<td>• Small group social skills programme recommended by EP</td>
<td></td>
<td>• SENCo also adapting for parent needs</td>
<td></td>
</tr>
<tr>
<td>• Small group work to develop flexibility of thought recommended by EP</td>
<td></td>
<td>• Congruence between school and student responses are good</td>
<td></td>
</tr>
</tbody>
</table>

- Experiences positively
- Has developed a skills set and experience to help him
- He is more sociable now
- He is more expressive now
- He has more self worth now
- He has achieved well academically
- Improved after getting learning support input
- Positive change when he disclosed his ASC
- Over time
- Parent very positive about all that the school does
- He has made great progress
- Him completing school with pride (SP)
- He has established ways to cope (SP)
- He has learned to articulate his concerns (SP)
- He has developed a skill set and experience to help him (SP)
- Conversation and social situations are easier (S)
- Disclosing his ASC has changed teachers approaches for the better (S)
- His social and communication skills have improved (S)
- He is more sociable now (S)
- He is more expressive now (S)
- He has more self worth now (S)
- Student’s self awareness seems to have developed over time (RD)
- It took time for positive change
- It took time for supports to take effect
- SENCo also adapting for parent needs
- Congruence between school and student responses are good
- Time positive change (S)
- Time for supports to take effect (S)
APPENDIX EE: Sample Table of Quotes and Data Extracts for Emerging Themes

The potential themes from the codes were refined as per stage 4 of the data analysis process shown in table 3.5 within the main text and as follows:

- Basic and organising themes remained grouped under temporary global themes based upon the research questions.
- The basic themes (bullet pointed themes within the table) were grouped into possible organising themes (marked ‘OT’).
- The basic themes were then cross-referenced with the sources of data for each case with possible themes being checked for relevance and consistency by referring back to the highlighted sections.
- Excerpts from the data for the themes were collated in tables from the highlighted sections of the text, again using the ‘cut and paste’ function.
- Emerging themes that did not have strong enough evidence were removed. For instance, if a theme has only one piece of evidence it may be remove, and themes for which extracts did not sum up or evidence the theme effectively have been removed.
- If an emerging theme was evidenced as particularly strong by the source (e.g. emphasised by them as particularly important), is repeated by the source or is evidenced by more than one source it would remain.
- Quotes THEMES where there is a lack of clarity regarding whether they are linked to the student’ anxiety have been removed.
- The research questions were revisited to ensure relevance of the themes and data extracts and naming of the themes was refined.
- As per the previous table, the codes for the source of each theme are as follows:
  
  D = documentary evidence
  P = parent interview
  SP = school practitioner interview
  S = student interview
  RD = extracts from the research diary
  
- ‘R’ at the start of a line refers to the researcher speaking.
- This process was carried out for each case separately.
<table>
<thead>
<tr>
<th>Student 2- Collated Themes and Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global theme - Presentation of need</strong></td>
</tr>
<tr>
<td><strong>OT: Emotional expression</strong></td>
</tr>
<tr>
<td>Tearful (SP, P)</td>
</tr>
<tr>
<td>Upset (SP)</td>
</tr>
<tr>
<td>Uptight (SP)</td>
</tr>
<tr>
<td>Acted differently (S, SP)</td>
</tr>
<tr>
<td>better term required?</td>
</tr>
<tr>
<td>He at times got tearful. SP2</td>
</tr>
<tr>
<td>and he would get teary for the least thing...that's how he dealt with what was going on with tears, which sometimes with children with Autism that doesn't always happen but he was more sensitive so he would cry a lot. P2</td>
</tr>
<tr>
<td>you could see he was upset. You could see that he wasn’t happy. SP2</td>
</tr>
<tr>
<td>He just gets very…you can see he’s very uptight. SP2</td>
</tr>
<tr>
<td>Even though I didn’t quite show it much of the time people knew that I was having different feelings about things just by how I was acting, my facial expressions, tone of voice etcetera. S2</td>
</tr>
<tr>
<td>You could just see that he wasn’t coping. SP2</td>
</tr>
<tr>
<td><strong>OT: Physiological signs</strong></td>
</tr>
<tr>
<td>Reports of stomach ache (P)</td>
</tr>
<tr>
<td>He would say his tummy would hurt or I’m tired those are the main ones. P2</td>
</tr>
<tr>
<td><strong>OT: Withdrawn (SP, P, S)</strong></td>
</tr>
<tr>
<td>Becomes quieter/stops talking / uncommunicative (P, S)</td>
</tr>
<tr>
<td>just lack of communication, just very withdrawn and not communicating with you, SP2</td>
</tr>
<tr>
<td>being quiet. P2</td>
</tr>
<tr>
<td>Well when I was anxious usually people would know that I was anxious because I would usually not talk, I wouldn’t really look at anything just look at the floor and things like that. S2</td>
</tr>
<tr>
<td>He just became more closed. You had to know him to recognise that he was different…he just became more closed in. SP2</td>
</tr>
<tr>
<td><strong>Global theme - Factors contributing to need</strong></td>
</tr>
<tr>
<td><strong>OT: Change</strong></td>
</tr>
<tr>
<td>Transition to secondary school (S, D, P, SP)</td>
</tr>
<tr>
<td>Unfamiliar classrooms (P)</td>
</tr>
<tr>
<td>New subjects (P)</td>
</tr>
<tr>
<td>New people (P, S) inc teachers (P)</td>
</tr>
<tr>
<td>Unfamiliar and knew experiences (P)</td>
</tr>
<tr>
<td>Lack of routine (SP)</td>
</tr>
<tr>
<td>New ways of doing things (P)</td>
</tr>
<tr>
<td>Learning new things (P)</td>
</tr>
<tr>
<td>Changes in the timetable (D, SP)</td>
</tr>
<tr>
<td>S2: The whole experience of actually moving to high school was quite traumatising to me.</td>
</tr>
<tr>
<td>R: Okay in what ways? What made that so difficult? You’ve mentioned a few things but…</td>
</tr>
<tr>
<td>S2: Well it was a new area so first I didn’t know where everything was so it was kind of confusing and a bit embarrassing to ask people where things were. There wasn’t really a map anywhere except for in some areas of the school.</td>
</tr>
<tr>
<td>R: So like finding your way about then that was hard?</td>
</tr>
<tr>
<td>S2: Yeah and it was just new people. Half the people which were there I had no interaction with before.</td>
</tr>
<tr>
<td>He did show when he started to transition to high school a little worried that it was a bigger school and the kids were a lot older and he did tell me he was just a little worried there. P2</td>
</tr>
<tr>
<td>New clothes and also going into different classrooms and stuff like that. Oh yeah definitely on that. P2</td>
</tr>
<tr>
<td>And in school when some event comes up like a school play or any changes to…yeah. P2</td>
</tr>
<tr>
<td>or something new in English or doing something new in IT, anything to do with something new he would get stressed on, something he’s not known or done</td>
</tr>
</tbody>
</table>
Extra-ordinary events at school (P) before. Like venturing into the unknown really he don’t like. He likes to know stuff beforehand but anything that he’s taught, if anything is given new and even if it’s taught he will still worry, say ‘Oh, oh’ because he would have his own fixation on what is and what isn’t. P2

That’s one thing he didn’t like, the going into the unknown, anything new. P2

Just being in a new school, new teachers and new subjects and things all to do with newness. Change. P2

He wasn’t very great at change, I’m trying to think back to when he was younger, collapsing the timetable, doing cross curricula days; he liked his routine. SP2

when they were learning something new in any of his subjects he used to get a bit worried on that, going from his way of doing something to doing something new he was supposed to be doing in maths. P2

Orientating himself (S)

What organising theme can this go with? Doesn’t necessarily fit with the one above

S2: Well it was a new area so first I didn’t know where everything was so it was kind of confusing and a bit embarrassing to ask people where things were. There wasn’t really a map anywhere except for in some areas of the school.

R: So like finding your way about then that was hard?

S2: Yeah and it was

Peer attitude
Cyberbullying (P)
Bullying (P, S, SP, D)
Teasing (SP)
Lack of acceptance and understanding by peers (S, SP)
Excluded (S, SP)
Behaviour of peers in class (S, SP)
Treated as different by peers (P, SP)

Yeah in my first days which I actually started high school it was all downhill like I was bullied a lot. S2

Yeah there was particular instances where there wasn’t like one constant person who was doing it, it was just everyone picking on me because I was like the smart kid in the class and I was all reclusive. S2

I was never included in anything and the times which I was included they never really wanted to talk to me….I just got used to it and it was like saddening for me and for them they were just thinking that I was a bit of a burden to them. S2

R: You say you felt isolated, were there any other feelings?

S2: A bit of depression and anxiety, all the basic acceptance things.

All the people from the year which I joined in they all came from similar schools like X and other places similar to that and they all had like a code in a way which if you acted like that people would acknowledge you as like quite good and I wasn’t like that at all, I was quite reclusive, didn’t talk much with people, didn’t have much social skills to them and they just didn’t really pick me up at points, just ignored me or bullied me in some cases. S2

sadly throughout his high school life he has been a victim to bullying, which wasn’t supposed to be because…but he was kind of different. Sometimes he would tell me about those issues and sometimes he didn’t. P2

Well one incident when he went to his first school disco someone actually filmed him at the disco doing something and they put it to You Tube. P2

Thankfully some of the older kids well they all left eventually and it all stopped the cyber bullying on Facebook. P2

He was also very much a loner, drifted around school on his own and therefore we feel that because he was on his own and obviously a little different he was a target for the bullies and whilst there wasn’t a huge amount of physical bullying there was a lot of verbal taunting, which he found very difficult to cope with because he couldn’t understand why people would say things like. SP2

Certainly as an individual with no apparent friends that was one of the problems he had in year 7 was his inability to make friends but so standing out on his own as a singleton and there’s the ones who are quick with the comments and the clever comments, the laddish lads and they made his life quite difficult. SP2
so standing out on his own as a singleton and there’s the ones who are quick with the comments and the clever comments, the laddish lads and they made his life quite difficult. SP2

Well standing out as being on his own and different. SP2

He also got probably some teasing from the other boys because they were probably jealous of his ability in maths. He was very, very good, very quick, very quick to understand things that were happening particularly with numbers. He’s been on the maths challenge team and things like that so in a way he was probably identified as a bit of a geek by the others.

R: And was he conscious of that do you think?
SP2: Not all the time but there were times when the comments did get through to him and he didn’t feel comfortable with it and that’s when he would be more stressed.

there was one time where a person and pushed the table and tried to crush me but I managed to push them back. S2

OT: Difficulty with social interaction and understanding others – is this theme heading too long?
- Difficulty interacting socially with peers (D, S)
- Making friends (SP)
- Interacting with unknown people (S, SP, D)
- Working with others (S, SP, D)
- Difficulty with perspective taking (S, SP)
- Difficulty understanding situations (S)
- Difficulty understanding teachers (S)
- Being understood by others (S) amalgamate these last 3?

you don’t know everyone’s opinion so you wouldn’t know whether the words that you’re thinking of are going to be thought of as correct by other people. S2

I felt isolated from the rest of the class when I was in the situations because it’s like only me who could actually think about how I was normally feeling. S2

like always confused about things and trying to understand. Like locked up in a cage and stuff like that. S2

Yeah there was like when in primary school everything was quite easy to understand and the teaching there was quite simple. Whilst I went to high school it was all confusing. The ways they teach was like quite primitive in ways, like olden days when it was like they put it on the board and they’ll tell you what to do. Very few classes were actually quite easy to understand, like the English one that was quite simple but things like citizenship. S2

no one could really understand me and when I was talking they couldn’t really understand at any point whatsoever because when I talked it’s usually quite complex and intuitive but they were all like relaxed and stupid in a way, using basic language and things like that. S2

Well social difficulties yes definitely. SP2

if there was group work you could feel that he was finding it difficult. SP2

The social and peer relationships. The nurture group was never an easy ride if you like in that it was constantly, even within that group, patching and repairing. They’d fall out, somebody would have done something or said something that upset somebody within the group so the lady that was running the group was constantly repairing friendships within the group and leading them through how to make friends and keep friends. SP2

Certainly as an individual with no apparent friends that was one of the problems he had in year 7 was his inability to make friends. SP2

Had a lot of difficulties explaining what the problems were. You could see there was a problem but he wasn’t very good at articulating. SP2

SP2: sometimes the way he did things was not the way the teacher was teaching it. He was getting the same answer in a different way but what he couldn’t understand was why they wanted him to do it their way and not his way.

R: That was a cause of a bit of stress then?
SP2: Yeah because he was quite happy with his way.

The most difficult thing was getting him to do things that he didn’t see the point of, you know? SP2
His ability to express himself in English is not very good, he struggles to empathise and those sort of skills in English. I think certainly in the early days he found that difficult. SP2

<table>
<thead>
<tr>
<th>OT: Difficulty processing and managing feelings</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Constant thoughts and worry (S)</td>
</tr>
<tr>
<td>• Internalising feelings (S)</td>
</tr>
<tr>
<td>• Difficulty expressing his worries and feelings (P, SP)</td>
</tr>
<tr>
<td>• Lack of understanding of his emotions (SP, D)</td>
</tr>
<tr>
<td>• Mood swings in class (S)</td>
</tr>
<tr>
<td>• Build up of feelings (S, P)</td>
</tr>
</tbody>
</table>

Had a lot of difficulties explaining what the problems were. You could see there was a problem but he wasn’t very good at articulating. SP2

R: Trying to understand and deal with the way you were feeling that was a worry for you so you were thinking about that a lot?
S2: Yeah. The more I thought about it the more I was worried. It was kind of like an endless loop of worrying.

all my feelings were there all the time and when it was the beginning of school it was all quite frantic, all the feelings, like different mood swings in classrooms. S2

R: You say you were thinking or worrying about your problems a lot. Did you think about those over and over or was it just sometimes?
S2: It was all the time when I was in class just hypothesising about different things

Yeah all the bad things that happened to me I just put them away and they were all building up to a point where I just couldn’t take any more. S2

R: Would he tell you about those things, would he say that that made him feel a certain way?
SP2: No. you could see he was upset. You could see that he wasn’t happy.

I wouldn’t really know my son was worried because he wouldn’t know how to tell me he was worried. P2

If it was allowed to lie it would become a bigger anxiety for him. SP2

Well I felt it was like inner feeling as in all the feelings which I had from most of the other times at schools they were all building up inside and I was bottling it up for most of it. S2

He at times got tearful, which for a big boy was quite embarrassing for him I think. SP2

you see when he was stressed he wasn’t particularly communicative so he didn’t report that he was particularly sad or upset about anything. SP2

It was internalised I think a lot with Matthew. SP2

It’s an understanding of yourself isn’t it and he’s just not always been in tune with all his emotions as such. SP2

that made me more frustrated, that frustration went to school, it just got worse and worse, just kept building up. S2

I was like this face now where I’m trying to think of stuff, I’m always like I’m hypothesising in my face when I started. S2

<table>
<thead>
<tr>
<th>OT: Negative thinking (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pessimism (S)</td>
</tr>
<tr>
<td>• Performance anxiety (D, S)</td>
</tr>
<tr>
<td>• Worry about getting things wrong (S, D)</td>
</tr>
<tr>
<td>• Felt treated unfairly (SP)</td>
</tr>
<tr>
<td>• Internalising thoughts (SP, S)</td>
</tr>
<tr>
<td>• Self blame (S)</td>
</tr>
</tbody>
</table>

all the things which I had about all the bad things that was just making me feel as if I was the reason why it was bad and that just made me pessimistic about everything I did. S2

I was quite pessimistic in the start of school. S2

Well basically quite a lot I would agree he would show like emotions. Particularly thought patterns go into that. P2

Yeah. I was always down when I was in classrooms because there was nothing to look forward to. S2
because he would say 'I'm useless, I'm thick, I'm no good' all the time and that was normally at the time when he was experiencing problems and even though I would reassure him 'No you're not thick, stupid' blah-blah-blah he would be saying that as him being negative and down about something. P2

Still hasn't managed to put pictures on his art book as he is worried about getting it wrong (has trouble with this kind of open task). Liaison notes for S2

Lack of understanding. If he was treated exactly the same as everybody else sometimes he would feel that perhaps that wasn't fair… SP2

R: You say you were thinking or worrying about your problems a lot. Did you think about those over and over or was it just sometimes?
S2: It was all the time when I was in class just hypothesising about different things which I was like doing to see if that was like making people do stuff to me....yeah I was always thinking that it was something I was doing that was making them do it.

I'd be worrying about that because usually I’d feel like I wasn’t really committing to the class much, the times which I did commit I usually didn’t think that it actually helped with the class that much. S2

I felt like it was everyone against me. S2

**OT: Home circumstances (S, SP)**
- Parental illness (S)
- Being questioned about home at school (S)
- Dealing with his parent’s approach (SP)

R: Are there any other things that used to make you feel anxious or even still do?
S2: It was how it would happen after school, what would happen at home and how I would interact with things which I do at school like at the time my mum was like really ill and acting all stressed because of all the things happening in the family and that was like putting forward until when I was at school.
R: You’d worry about that at school?
S2: Yeah and feelings that I’d have from family, that were kind of interlinked with conversations where I was always quite nervous and thinking about how at home it was all gloomy and how at school it was the same, there was no way for it to have actually stopped.

Mum is very domineering and dominant and mum will very often say some quite strange things but also is very much on her own agenda and I've noticed Matt has found her embarrassing and he’s not known how to handle that. Fortunately it's been in the privacy of this room and there's been myself and mum and perhaps one other adult and Matthew and I’ve seen Matthew afterwards and assured him that you know, ‘Don't worry’, I've just sort of said, ‘Mums are always anxious about how you perform and what you're going to achieve, don't worry about it, we know what we're doing’ and sort of put his fears to rest but you can see he is anxious about her approach and has found her quite embarrassing at times. SP2

The things which were happening at school I usually had to hide it away from my mum and that would make my mum question me all the time and that made me more frustrated, that frustration went to school, it just got worse and worse, just kept building up. S2

**OT: Academic pressures**
- Striving to be the best (D, SP)
- Not reaching his potential (P)
- Doing homework (SP, D)

I think there's pressure obviously from home, from his teachers that he is an academic student, he will go onto sixth form and university hopefully and there was this pressure that his English had to allow him to take that step so it was a stress and a pressure. SP2

I don't think he wanted the other boys to ever think that he couldn’t do something so I suppose there was some level of --, I'm just trying to think like with tests and things he always wanted to be up there at the top, he wouldn’t have been happy with the others seeing him having not achieved something. SP2

Those, not reaching potential will make him feel low and worry which will then link to feeling depressed. P2

What he was good at he was very, very good at like the sciences and the maths he'd be up for it and he'd be doing it and then you would see the stresses in the areas where he wasn't so comfortable. SP2

SP2: Aspirations and expectations; there were times when perhaps say take maths for example…in the early, early days there were areas of maths that he was exceptional with but then there was new maths that was taught that perhaps he wasn’t quite so quick on the uptake and I think that bothered him because he
didn't want to lose his-- he felt that he was very good at maths and he didn't want to lose that

Yeah, usually I'd like think in my head that I could have done better and it would just like kept me for the rest of the class. S2

He needs someone sat next to him when he is doing homework as he gets so bogged down in detail e.g. measuring boxes to the millimetre when doing a poster to ensure they are the same size. Went through 100 pictures rather than just selecting one as he has difficulty making a decision and needs an adult to help him select one quickly, he kept selecting and erasing them over and over again. Liaison notes for S2

he would vaguely tell me what was going on and he used to do it via homework issues because he used homework and not wanting to do it because he would say ‘I’m useless, I’m thick, I’m no good’ all the time. P2

<table>
<thead>
<tr>
<th>Global theme - Perceived difficulties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OT: Impact upon emotional wellbeing</strong></td>
</tr>
<tr>
<td>• Mental health needs (P, S)</td>
</tr>
<tr>
<td>• Low mood (S)</td>
</tr>
<tr>
<td>• ‘Breakdown’ (S)</td>
</tr>
<tr>
<td>Yeah there was a point where I actually didn’t really want to go to school, I had like a mental breakdown and some of my friends actually helped. S2</td>
</tr>
<tr>
<td>There was some times where I just fully broke down. S2</td>
</tr>
<tr>
<td>He would become quite frequently withdrawn but at the period of anxiety which would link to severe emotional and mental health issues. P2</td>
</tr>
<tr>
<td>Yeah. I was always down when I was in classrooms because there was nothing to look forward to. S2</td>
</tr>
<tr>
<td>Those, not reaching potential will make him feel low and worry which will then link to feeling depressed. P2</td>
</tr>
<tr>
<td>At the time in school when it was like in the down part, my face was like always gloomy instead of like joyful. S2</td>
</tr>
<tr>
<td><strong>OT: Poor self perception</strong></td>
</tr>
<tr>
<td>• Low self esteem (P)</td>
</tr>
<tr>
<td>• Low self concept (P)</td>
</tr>
<tr>
<td>because he would say I’m useless, I’m thick, I’m no good’ all the time. P2</td>
</tr>
<tr>
<td>Because he would think he was stupid which will then lead to low self esteem. P2</td>
</tr>
<tr>
<td><strong>OT: Difficulty with concentration and attention (SP,S)</strong></td>
</tr>
<tr>
<td>• Easily distracted (SP,S)</td>
</tr>
<tr>
<td>• Retreats into his interests (D)</td>
</tr>
<tr>
<td>• Fidgeting (S)</td>
</tr>
<tr>
<td>he had problems with attention and concentration, if he was in an anxious state then that’s what would have been impacted. SP2</td>
</tr>
<tr>
<td>I was probably worried and frustrated about all the things which were happening to me. Usually I would have focused on work but it was kind of hard to focus when those other things I had to think about like trying to avoid other peoples’ confetti and stuff that they’ll throw around classrooms and stuff like that. S2</td>
</tr>
<tr>
<td>I couldn’t focus in class, I wasn’t getting homeworks done, not good. It was just generally bad. S2</td>
</tr>
<tr>
<td>Yeah, usually I’d like think in my head that I could have done better and it would just like kept me for the rest of the class. S2</td>
</tr>
<tr>
<td>my eyes were everywhere and I wasn’t really looking at the board and just trying to think of other times which I was actually quite worried. S2</td>
</tr>
<tr>
<td>I’d fidget in class all the time. S2</td>
</tr>
<tr>
<td>Yeah. If you’d see me in crowds everyone would be like talking and I’d just be there silenced and in a sense of doing nothing...It wouldn’t literally be away from people it would be just me thinking about everything else without actually focusing on what’s around me. S2</td>
</tr>
</tbody>
</table>
I’d constantly just look at everything else besides what I’m supposed to be looking at, so like in a classroom I’d look at the screen they’d just look somewhere else which is like a magnet to my eyes, like aiming at one thing but they’d just fly off somewhere else. S2

I’m easily distracted by things, like if there’s something going on I usually focus on that instead of what I’m actually supposed to focus on. S2

He’ll get very obsessed with Yugioh. Head full of facts and spending lots of his free time researching all the different cards. Liaison notes for S2

OT: Difficulty with social participation - social participation or just participation?

- Not participating in group activities (SP, S)
- Lack of participation in class (S)
- Withdrawal (P, SP, S)
- Wariness of others (P)
- Reluctance to develop friendships (P)
- Lack of trust in others (P) – does this belong here or is it more about thinking?
- Lack of attention to the social world (S) – does this theme fit in this organisating theme?

Being more withdrawn, in certain lessons perhaps not getting involved in, you know subjects like perhaps history or geography. SP2

I was bothered all the time but eventually it just came to the point where I just didn’t really care about it and I never participated. S2

There was a tendency from all of them in the group that if somebody did something wrong well that was it, they’d really blotted their copy book and getting them to reaccept somebody back into the group or something like that it had to be managed. It did have an impact. SP2

The ways that I acted when teachers were around was kind of weird because they (peers) were acting all mischievous and stuff like that, I was just sat at the table and I’d only interact with a teacher when they asked me to so people usually think I’ve be the quiet person in the room. S2

Yeah. If you’d see me in crowds everyone would be like talking and I’d just be there silenced and in a sense of doing nothing...It wouldn’t literally be away from people it would be just me thinking about everything else without actually focusing on what’s around me. S2

by the point before they picked me up I was rarely talking in class until like when the teacher pointed me out and asked me to answer a question. S2

Like in playgrounds I was usually sitting in the corner just holding my bag and just not doing anything. S2

He would become quite frequently withdrawn. P2

he would get very quiet and withdrawn. P2

I’d be worrying about that because usually I’d feel like I wasn’t really committing to the class much, the times which I did commit I usually didn’t think that it actually helped with the class that much. S2

I wasn’t very social so when I was in activities which required me to actually get on with people I wasn’t really the type of person to help. Usually in a group I would just sit there, whenever people asked me I’d just give it them and just pushed them off away. S2

Being more withdrawn, in certain lessons perhaps not getting involved in, you know subjects like perhaps history or geography if there was group work you could feel that he was finding it difficult. SP2

Well one incident when he went to his first school disco someone actually filmed him at the disco doing something and they put it to You Tube ever since then he went a bit closed and very wary about all the pupils. They’ve actually kind of lessened but sadly because he became wary of the other pupils he didn’t make too many friends and when he does form friendships he is a lot more careful on how he does that. P2

OT: Difficulty controlling emotional responses

- Frustration (S)
- Using his strength against

There’s been a few times where I’ve spiked out and just hit someone. Like once in drama club it was an activity where we were all following each other and everyone was trying to follow me to try and get me agitated I just literally pushed everyone out the way and just left the classroom. S2

I’d equal them in like strength and like try and push them back and away. S2
<table>
<thead>
<tr>
<th>OT: Physiological manifestations</th>
<th>OT: Absence from school</th>
<th>OT: Sub optimal performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Nocturnal enuresis (P)</td>
<td>- Reluctance to attend school (S, SP, P)</td>
<td>- Completing work (D)</td>
</tr>
<tr>
<td>- Altered eating and drinking habits (P)</td>
<td>- Returning home when very anxious (P)</td>
<td>- Disorganisation (SP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Difficulty with homework (S, S)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Difficulty decision making (D)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Over attention to detail (D)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Lowered aspirations (P) does this fit here?</td>
</tr>
</tbody>
</table>

there was one time where a person and pushed the table and tried to crush me but I managed to push them back. S2

…usually try and block out everything and when someone like hit me, like if a ball was coming my way and it would just hit me in the head or something I’d probably just throw it back to them, act as if it never happened and just go back to my world. S2

I felt like it was everyone against me and it just made me frustrated and just spiked out. S2

P2: Yes. He would have like bad behaviour and reactions.
R: What sort of things would that be?
P2: He would just go from being all hyper one minute and then not the next.

on some occasions he did bed wet when it got really bad. P2

Also another thing he used to do when he was anxious he would comfort eat and also he would only eat one particular thing in comfort eating and he would eat it all the time and when I would give him something of a change to eat he wouldn’t eat it and he would only then drinks wise it would only be one particular drink and it used to be in like a sports bottle thing. P2

some occasions he didn’t want to go to school and then he would worry so much that the school would phone and I would have to go and get him. P2

We had a couple of days, not protracted periods of time but there were days when he refused to come to school. Mum would ring and explain that he was stressed or something had happened and he didn’t feel he could come into school. SP2

Aspirations yeah they faltered when he became anxious. P2

I think if the anxiety hadn’t of been dealt with I think it would have seriously impacted on his achievement but because he’s at the other end of it he’s not still in that state of anxiety, it’s hopefully not going to have had an impact on his achievement. SP2

Thinking back to the year 7 and he was very disorganised. If he was stressed the disorganisation became greater. SP2

lack of being able to organise himself. Organisation when he was stressed was a major problem. SP2

I couldn’t focus in class, I wasn’t getting homeworks done, not good. It was just generally bad. S2

He needs someone sat next to him when he is doing homework as he gets so bogged down in detail e.g. measuring boxes to the millimetre when doing a poster to ensure they are the same size. Went through 100 pictures rather than just selecting one as he has difficulty making a decision and needs an adult to help him select one quickly, he kept selecting and erasing them over and over again. Liaison notes for S2

Homework was a problem always in the early years at school. If he was stressed homework became an even bigger problem. SP2

Still hasn’t managed to put pictures on his art book as he is worried about getting it wrong (has trouble with this kind of open task). Liaison notes for S2

he gets so bogged down in detail e.g. measuring boxes to the millimetre when doing a poster to ensure they are the same size. Went through 100 pictures rather than just selecting one as he has difficulty making a decision and needs an adult to help him select one quickly, he kept selecting and erasing them over and over again. Liaison notes for S2
• Increased ritualistic behaviour (P)

also he would have little rituals as well going on too like he had a little ritual of getting up and going to bed as well.  P

Global theme - Perceived effective practice

OT: Structure, planning and predictability (D, S, SP)
• Planning for transition (SP)
• Daily routines and structure (P, SP)

definitely, structure and routine.  SP2

The one thing that does help is structure and routine.  P2

the worries were presented to us by primary school so they had existed in primary. We had transition meetings for him, they gave us a lot of pre-entry information. SP2

Oh yes and the worries were presented to us by primary school so they had existed in primary. We had transition meetings for him, they gave us a lot of pre-entry information. SP2

OT: Support with organisational strategies
• TA support with self organisation (SP)
• TA support with planning and reviewing homework (SP)
• Differentiated planner with clear targets and goals (SP)

We had some TAs who supported him, not a lot in class but it was more to support his organisation...he did need some support to help him to make sure that he then wasn’t in trouble for not doing homework, he wasn’t in trouble for being in the wrong place at the wrong time, all those sort of things.  SP2

We have the school planners, which are very difficult for ASD children to manage because they’re a bit of a blank page really and they have to organise themselves through that planner so we created our own special planners. Some are based around behaviours, some are based around homework and organisation and Matt used the homework organisation one so if they’re on that particular planner it’s the TA or the teacher’s job to record the homework it’s not Matt’ job so they hand that in, the teacher will record the homework so that it’s legible and there’s some proper instructions so at home if they have support at home with homework, mum/dad whoever has got some idea of what they’re supposed to be doing. There’s also much clearer tick boxes for when they’re going to do it, when they’ve done it and when they’ve got to hand it in. It’s like a structure for the organisation so yes he used one of those.   SP2

somebody to help with the organisation in form time and registration.  SP2

Matt needed the support around his learning not to do with his learning so he had a regular TA who probably badgered him (laughing tone) and bullied him into getting more organised, as in constant repetitive checking up on homework that was set, was it done, where was it, had he put it in his bag, when was it going to be handed in? It was almost like a PA do you know what I mean?  SP2

gradually helping him to take more responsibility for his own organisation and then it would all go wrong and so he’d have to rebuild it all again but all the time stepping back because what I always say is that we can’t wrap them in cotton wool for their entire five years here because at the end of five years they don’t have a personal assistant to move out into the next stage of life and they’ve got to be able to work out for themselves how to get on.  SP2

they did like a homework thing.  S2

there’s a homework bit which can help with studying and stuff like that.  S2

He needs someone sat next to him when he is doing homework… Liaison notes for S2

OT: Social and life skills (P, SP)
• Social and communication/interpersonal skills work (S, SP)
• Lessons on body language and conversation (S)

R: …so what things seemed to help him with his worry or anxiety?
SP2: Yeah so social skills approaches definitely.

R: What sort of things did it help you to learn about then?
S2: How to talk with people mostly because beforehand I wasn’t really a talkative person but now I’m willing to talk with people...like how to speak normally and how body language can help, even though body language is not really that good for me because I’m not good at showing via a body
• Additional support with work experience skills (P, D)
• Problem solving skills (SP)
• Work on friendship skills (SP)

They did workshops. Well at first they did about getting to know them so it was like development as they grow up. P2

P2: But in the last year of high school they did what you call job related stuff to apply for jobs, interviews, ringing up to speak employers and also help on like job applications and also other forms like applications like sixth form colleges or whatever. In fact how to fill out application forms for general purposes like knowing personal details and stuff like going to banks and also filling out online things too. They did all of that like filling out online applications also talking about when you go into, if you want to go to work how would you approach wanting to go to work and they did exercises and also they did like pretend, like the kids were like employers and they did like role play in personal development classes so social skills approaches are appropriate to their age.

R: And that’s been helpful to Matthew?
P2: That’s helped him; he’s done okay on those.

SP2: Social skills approaches definitely, structure and routine.

R: Were there any particular social skill approaches you used?

SP2: In the nurture group compromise, learning to compromise, learning to be perhaps a little bit more flexible because he’s quite rigid sometimes, conflict resolution, how to work through a problem, getting on with people, you don’t have to like somebody but you can get on with them.

R: And that’s been helpful to Matthew?
P2: That’s helped him; he’s done okay on those.

SP2: The complexities of social communication and understanding how to get through it with a degree of comfort I suppose without it becoming a major worry.

OT: Peer support networks
• Bonding with similar peers (SP, S, D)
• Group identity (SP, P)
• Mutual support with friends with similar experiences (SP, S)
• Friends to be with at unstructured times (S, SP, D)
• Shared coping strategies (S)
• Online friends (P)

R: And you: all helped each other?
S2: Yeah, even though they didn’t have like Asperger’s they still had similar experiences in school
He's got some really good friends from school, he's also got some good friends he's made online too because he uses his experience of it, the bullying and certain things, he uses them when he's like gaming too. P2

Both boys are becoming good friends and giving each other a lot of support. Liaison notes for S2

We quite quickly got together a nurture group. There were other boys in the year as well, we'd got Matthew but there was other boys, some with ASD statements, others who were clearly struggling with the social interaction and they bonded as a group of singletons. SP2

You wouldn't call them friends as in how you would expect friendships to be like a two way interaction, but on their own little parallel tracks they created a group and they interacted as a group and because they attended nurture together as a group they started to hang out together, perhaps on the yard. SP2

This group have continued right through from year 7 to year 11 to attend those groups and that I think was the key to relieving some of the stresses because bullies don't go for groups of people they go for people on their own and taking away that. Interestingly they started to look out for each other, so he was able to provide some support for others in the group and there was never a time when they were all stressed so within the group whoever was having a bad time would get support from the rest of the group in their own little way. SP2

Definitely the nurture group. I really feel that that has been key to the success of not just Matthew but quite a few of those sort of emotional/social difficulties. The taking away the being a single person and giving them a place in a group, a group identity. SP2

Re social communication group he attends out of school:

Yeah there's some other people there who help with like coping with stuff and we like to chat a lot about things which we've been doing throughout the week. S2

We've always run a lot of lunchtime activities, which is there really as providing a safe place so like we do a games club and they play connect four, draughts, chess, that sort of game, which actually was the sort of thing that Matt liked doing because he was with adults, he was in a safe place and he wasn't getting picked on. SP2

Having a safe place to go. SP2

not having to be on the yard at breaks and lunchtimes and therefore having to get on with all the kids around you, having places to go. SP2

S2: I do that at lunch with learning support which I was invited to very early on.

R: What's learning support? I know a little bit about it but tell me a bit more.

S2: It's a group which was set up by the SEN team at school for all people who have like got special needs and other sorts of things. It's like where people can meet up and collaborate with each other. There's two different parts of it, there's like a games bit where they can just relax and there's a homework bit which can help with studying and stuff like that.

until I got picked up by a learning support it all got uphill from there...It got worse until I managed to get picked up by a person who's in my form room, one of the people from the SEN team was the former tutor helper and she noticed that it was all like bad for me so she picked me up and told me about this group I could visit at lunchtimes. S2

Re the lunch club: Yeah it helps me cope with school because if it's like in the morning I'm more focused, when it's at lunch I can just breeze it all away. S2

Well initially the breakthrough which actually helped with that was when the person from the SEN team came to me and said that there was a place I could actually go and get rid of all the anxiety and from then on it was like gradually everything was helping. S2
And again seeking out adult security; being constantly around the games club, the nurture group, wanting to have that safety net. In a way we've kept that in place and Matt has attended the games club right through. I mean it's ostensibly there for like the year 7s on transition in year 8 and we expect them to move on and out of there as they become comfortable in school. Matt 'til the day he went on stand down for exams in year 11 has been a regular at the games club and he's not on his own, he's not the only year 10/11 student, their nurture group has sort of continued if you like as this little pod of people.

<table>
<thead>
<tr>
<th>OT: Positivity and acceptance (S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Disclosing ASC to peers and teachers (S)</td>
</tr>
<tr>
<td>• Supporting younger students with similar needs in his areas of strength (S, SP)</td>
</tr>
<tr>
<td>• Being a role model to younger students (S, SP)</td>
</tr>
<tr>
<td>• Using his strengths and talents (P)</td>
</tr>
<tr>
<td>• Use of rewards and reinforcement (P, SP, S)</td>
</tr>
<tr>
<td>• A close school community (P)</td>
</tr>
</tbody>
</table>

Basically they have a very good communication network. The community as a whole at the school is very good, it's very family and pastoral like.

They pride themselves that they are like family, like the head teacher they can regard their head teacher as like their daddy figure and like something of the sort. They don't want to regard themselves as teachers all the time, they are like family, they can be like their mums, dads or aunts and uncles.

I joined the same group, it was me who actually included myself more into it and that was the thing which resulted in me being accepted by people.

S2: Mostly I think most of the teachers were actually briefed beforehand that they knew that I had the Autism but they didn’t know what type it was, that was until about a year ago when I actually told the PD teacher that I had Asperger’s and then everything changed.

R: And that was about a year ago you said?

S2: Yeah. We were doing topics about mental disorders and I just came out saying that I had Asperger’s and everything changed.

R: How did it change?

S2: Everyone acted different towards me because they researched about what Asperger’s was and they all started being more friendly and the bullying literally just stopped there.

R: When you say ‘they’ do you mean other kids in the class?

S2: Yeah the people who originally did bully me they now knew what I actually had and it just stopped.

R: Right that’s good, so maybe having that understanding for those other students actually helped them to get you and be nicer to you.

S2: Yeah. Beforehand everyone was just getting equally just like merits that was just pointless but now the teachers they was like specifically saying how things were good for people, it was different from like primary school where they were all like joyful but this one it was more mature in terms of praise.

R: They would give you praise that was specific to you?

S2: Yeah like if you got a question right they would develop it and say how it was truly right.

R: They’d give you feedback?

S2: Mm and even if it was bad they would give us ways to help us get better.

What helps his anxiety? Rewards and enforcement.

We’ve tried to give them a role in games club to help the younger ones, sort of be good role models, try and always go on the positive, you’ve had difficulties, you’ve found certain things difficult, child x, child y whoever can you just give them – use them as peer supporters…I mean occasionally I’ve had a child who’s perhaps struggling with maths homework and I’ve said ‘Matt can you help so and so to do their maths?’ and I’ll make a joke of it like ‘I’m really busy’ or ‘I can...
never remember how to do that can you help him’ and he’s always willing and he’s always quite happy to do that. SP2

S2: people in the lower years they were easier to talk to because they were a year below so anything I experienced I could pass onto them.
R: You were like helping them as well then?
S2: Yeah.
Yeah strengths talents and specific interests is one as well because using his strengths and talents...when he gets to university and he’ll just be like one of many because you’re quirky and you’re different, you know he has a gift, he has a talent and the more he can narrow down...SP2

OT: Adapted teaching approaches

- Teachers using more understandable language (S)
- Creative and practical teaching activities (S)
- Teaching approaches accounting for his ASC (S)
- Strategies given in a repetitive manner (SP)
- Building independence by gradually decreasing support (SP)
- Specific feedback from teaching staff (S)

Yeah the ways of teaching. In most of the lessons it’s quite fun and have some activities which can help make us learn better without having to be too stressed out with it. S2

S2: Like in music I was doing more musical things like composing random songs and playing guitar.
R: And did that help you stop feeling as stressed do you think?
S2: Yeah it stopped me feeling stressed because at least I was doing something creative and it kept my mind off school

S2: They were briefed about how Asperger’s actually works and they changed their ways of teaching.
R: The ways that they changed can you remember what changed?
S2: Before it was like quite basic where they’d just put it on the boards, just stuff but afterwards there was more activities like fun games to do that would actually make us more together and work for the class and there was also like the groups in different areas of the room just to discover different parts of something.

S2: Yeah. The teachers started to talk more in our language instead of like complex language.
R: What’s ‘our’ language, what do you mean by that?
S2: Things that teenagers would be able to understand not like words which we wouldn’t have learnt yet and like they spoke in different terms that we’d understand like their behaviours they were more relaxed and chilled out when they were talking. Like beforehand they were all strict and straight to the point but now it’s more relaxed and talking like a teenager in a way.

changes from it being just put things on board and we have to copy it down and that’s changed to activities instead. S2

Yes I think and again it’s yes and it’s repetitive learning of strategies to do with organisation and to do with social skills, you don’t just teach them and expect them to learn it it’s repeating it and being prepared to go over it again and again and again and no it’s not that we told you last week or last month and it’s happened again, that’s okay, it’s just you need a reminder. SP2

gradually helping him to take more responsibility for his own organisation and then it would all go wrong and so he’d have to rebuild it all again but all the time stepping back because what I always say is that we can’t wrap them in cotton wool for their entire five years here because at the end of five years they don’t have a personal assistant to move out into the next stage of life and they’ve got to be able to work out for themselves how to get on. SP2

S2: Yeah like if you got a question right they would develop it and say how it was truly right.
R: They’d give you feedback?
S2: Mm and even if it was bad they would give us ways to help us get better.

When I said that I had Asperger’s everything just changed in the ways of teaching. S2

OT: Quality and use of staff support

- A range of supports (S)

There was nurture group, there was learning support, there was like the buddy of friends circle. S2

I found people at learning support and everything got better. S2
- TA support at registration times (SP)
- Good communication between the SENCo and teaching staff (P, S)
- Adaptations and specialist support in PE lessons (SP)
- School being creative with the resources to support him (P)
- Supportive SENCO (P)
- Good SEN support (P)

Can these be shortened/amalgamated?

- somebody to help with the organisation in form time and registration. SP
- Matt needed the support around his learning not to do with his learning. SP
- they’d tell teachers how it was bad and how she would pass on the things that I said to teachers. S
- Miss X (SENCo) she was the main person who actually helped because everything was passed onto her and she was the one who made everything happen. Yeah if there was anything bad I could just go to her or the SEN team in general, anyone there. S
- At the school they have a fantastic SENCO Department. P
- We did put TA support in to registrations for him, you would normally expect your TAs to be supporting in class. SP
- We supported in PE, for the last number of years we’ve employed a PE specialist TA. What that’s enabled us to do, because they do quite a lot of sport here at this school, is to create in those PE lessons a group of boys, of which Matthew would be part of, who could access some PE at their level so they weren’t seen to get away with doing no PE, they did some. We have also very carefully made arrangements that like the games lesson which is your full on – your rugby, your cross country – all the things that are typically a nightmare for this child, he wasn’t allowed to do because he had a meeting or catch up session so we manipulated his timetable. SP
- when they have trouble with getting fundings on the statementing they find whatever they have to find within themselves to give the need to my kid...Whatever, even if my son Matthew wasn’t allocated all the funding they made do within their own school. P
- Basically there’s nothing really bad about the school…It’s a beautiful mix of everything. P
- we recognised that Matt would not survive in school without some support. SP

OT: Staff knowledge and understanding (SP, P)
- Pen portrait to all staff (SP)
- Regularly updated information for staff (SP, S)
- Whole school training re ASC (SP)
- Staff understanding (P)
- Specialist teacher advice and support (SP, S)

they regularly do assessments and checks within school to make sure everyone knows what they're doing and where they're at
the longer we had him here the more we got to know him, the more staff understood who he was, where he was coming from they got used to treating him as an individual more and therefore it relieved his anxieties because they would take account of his needs. SP

Staff knowledge understanding and approach definitely…When the boys come in year 7 I do a pen portrait in quite a lot of depth for anybody who I've got a lot of information for, so your statemented children. All staff whether they would teach him or not would have that because obviously in high school you get cover or in those days teaching staff were covering so you might turn up to your maths lesson and it's not your teacher but it might be somebody who if they know some of your needs can de-stress the situation…probably about a side of A4 with some understanding of his difficulties, some useful strategies… and it goes to all staff. SP
then as they go through if something happens or like in Matt' case he got the diagnosis of Asperger's we do updates so they'll be memos on the staff system. SP
The specialist teacher who ran the nurture groups and she gave us a lot of advice, feedback, suggestions, strategies, attended meetings, reviews, she was I think very pivotal in helping us as a school. SP

P2: Staff acknowledgement if that's in a school setting.
R: So staff knowledge and understanding in approach would help?

P2: Yeah.

Matt came into this school as one of a group, a year group with other children with ASD statements and it was like we’d had one or two somewhere vaguely on the spectrum but we’d got three or four in that year and as a school we felt that we needed to improve our skill set enormously because we’d got all these children to deal with so we did. We actually did a staff inset in September and we got somebody in to come and give us some training on Asperger’s so we had whole school training not specifically to Matthew but specifically what is ASD, how does it affect children, what can you do? SP2

The specialist teacher who ran the nurture groups and she gave us a lot of advice, feedback, suggestions, strategies, attended meetings, reviews, she was I think very pivotal in helping us as a school. SP2

OT: Staff recognising and supporting anxiety management

- Staff support to identify and manage his thoughts and feelings (SP)
- Recognition of signs and triggers by key staff (RD, SP)
- Awareness of home related stressors (SP)
- Open access to trusted SEN staff to discuss his concerns confidentially (SP, S, P)
- Compassionate people who listen (S)
- Reassurance (SP)
- Immediate and obvious response to concerns/informing him of response (SP, D)

Can these be shortened/amalgamated?

R: Did anybody specifically help him with that? Do any work with him to manage his feelings?

P2: He had what we call an SSA with him at first, a support tutor who would help him with that and also at dinner times when they did like workshops too like group and nurture…like doing group and nurture group.

If anything did happen that was to upset him that if he sought help from any of the—, and he did learn that teachers are busy and this is something that is quite difficult in schools, they can’t always just drop things and instantly deal with that child’s problem but if there’s somebody in school who has that facility, that time, perhaps it’s a TA, perhaps in my case as my role as SENCO, if I wasn’t teaching and Matt had a problem I would prioritise his problem before a phone call or filling a form in or whatever because knowing that it was being dealt with and being dealt with straight away would get him back on track quite quickly. SP2

we needed to be aware of certain things that were happening in the home background and therefore be aware that if Matthew was stressed for any reason it may well be part of that. SP2

R: So staff knowledge and understanding in approach would help?

P2: Yeah.

Matt came into this school as one of a group, a year group with other children with ASD statements and it was like we’d had one or two somewhere vaguely on the spectrum but we’d got three or four in that year and as a school we felt that we needed to improve our skill set enormously because we’d got all these children to deal with so we did. We actually did a staff inset in September and we got somebody in to come and give us some training on Asperger’s so we had whole school training not specifically to Matthew but specifically what is ASD, how does it affect children, what can you do? SP2

The specialist teacher who ran the nurture groups and she gave us a lot of advice, feedback, suggestions, strategies, attended meetings, reviews, she was I think very pivotal in helping us as a school. SP2

OT: Staff recognising and supporting anxiety management

- Staff support to identify and manage his thoughts and feelings (SP)
- Recognition of signs and triggers by key staff (RD, SP)
- Awareness of home related stressors (SP)
- Open access to trusted SEN staff to discuss his concerns confidentially (SP, S, P)
- Compassionate people who listen (S)
- Reassurance (SP)
- Immediate and obvious response to concerns/informing him of response (SP, D)

Can these be shortened/amalgamated?

R: Did anybody specifically help him with that? Do any work with him to manage his feelings?

P2: He had what we call an SSA with him at first, a support tutor who would help him with that and also at dinner times when they did like workshops too like group and nurture…like doing group and nurture group.

If anything did happen that was to upset him that if he sought help from any of the—, and he did learn that teachers are busy and this is something that is quite difficult in schools, they can’t always just drop things and instantly deal with that child’s problem but if there’s somebody in school who has that facility, that time, perhaps it’s a TA, perhaps in my case as my role as SENCO, if I wasn’t teaching and Matt had a problem I would prioritise his problem before a phone call or filling a form in or whatever because knowing that it was being dealt with and being dealt with straight away would get him back on track quite quickly. SP2

we needed to be aware of certain things that were happening in the home background and therefore be aware that if Matthew was stressed for any reason it may well be part of that. SP2

OT: Good home-school liaison

- Good home school communication (P, S)

the communication at the school has been absolutely fantastic too where the SEN people liaise with all the teachers all the time. P2

then of course we have once a year annual meetings where they discuss his progress. P2

302
**Global theme – Barriers to effective practice**

| OT: Keeping a statement as his needs improve so support can continue (SP) | speech and language were no longer involved so there was this pressure to remove the statement. SP2 |

<table>
<thead>
<tr>
<th>Global theme – How support has proven to be effective</th>
</tr>
</thead>
</table>

| OT: Improvements and progress (R, P) | This seems to be the most insightful interview yet. He was able to clarify and give examples as to how he felt and the supports that worked, yet his social communication needs are obvious. He seems to have made exceptional progress from what was recorded in earlier documentation and how he was described from earlier school years. R diary re S2 |

- He has got a lot better. I’m now trying to think back to Matthew when he first came and the boy that we’ve got now or the young man that’s leaving school is very different and he can articulate and he can explain quite a lot of things now so he’s been on quite a journey. SP2

- Also my grades in a way because I’ve got better at the grades which I was doing like in maths I’m now top of the class, in English I’m quite good and science I’m one of the best. S2

| OT: He has developed a skill set and experience (SP) | Well I’m just proud of Matthew because he’s completed his five years of statutory education here with his head held high, he’s going to get good results hopefully, he’s gone out there, he’s represented the school at things like the maths challenge, I always find him a very pleasant young man, I think we’ve seen him, it’s very hard to quantify a measure of his improvement socially, it’s not like doing a maths test but I think he’s made great progress and he’ll always have difficulties perhaps in that area and moving into the world of work he’s going to find as a challenge but he has got a skill set and he’s got experiences hopefully he’ll draw on from school that he can move into the world of work. SP2 |

| OT: More positive thinking and less worry (P) | he’s now overcome all the issues and he’s got the upper hand and he’s now staying on to do sixth form at that school because he’s got the mindset that he’s in sixth form and he’s going to be bigger than all the others. P2 |

| OT: Better self awareness (P) | I’m proud that he has achieved great in his grades and he’s done absolutely fantastic. I’m also proud that he has understood his Asperger’s and Autism and realises that will not get in the way of what he wants to do in his life. P2 |

| OT: Increased confidence in social interaction (S) | Well before I came to this school I was quite nervous and I didn’t talk much but now I’m more expressive and I talk a lot. S2 I’m more social with other people. S2 |

| Other comments of interest |

| Congruence between school and student views especially (RD) | There seems to be a good congruence between the student and practitioner perspectives. They seemed to have developed very good understanding of him over the years and he was able to articulate his experiences well. Although the parent did also agree with many of the factors brought up by the student and practitioner, she was not as articulate in expressing these clearly to the topic and did not express as much as the student and practitioner. R diary for S2 |
APPENDIX FF: List of Refined Themes

A list of themes was refined for each case as per stage 5 of the data analysis process shown in table 3.5 within the main text and as follows:

- Those themes not relating well enough to the research questions were removed.
- Sub themes were refined (bullet pointed in the table below), organising themes were finalised (in bold and marked ‘OT’ in the table below) were finalised and sub themes were rearranged for best fit with these accordingly.
- Final global themes were identified from the basic and organising themes and stemming from the research questions (these are emboldened and highlighted in grey in the table below)
- Themes which were particularly pertinent were marked with a star. This was based upon particular emphasis by participants within excerpts, identification across sources of data within the case, and/or repetition of the theme within the case by one of more sources identified by the excerpts.

<table>
<thead>
<tr>
<th>Student 2 final themes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global theme - Factors contributing to need</strong></td>
</tr>
<tr>
<td><strong>OT: <em>Change</em></strong></td>
</tr>
<tr>
<td>Transition to secondary school (S, D, P, SP)</td>
</tr>
<tr>
<td>New people (P, S)</td>
</tr>
<tr>
<td>Unfamiliar and new experiences (P)</td>
</tr>
<tr>
<td>Changes in the timetable (D, SP)</td>
</tr>
<tr>
<td>Unfamiliar classrooms (P)</td>
</tr>
<tr>
<td><strong>OT: <em>Negative peer behaviour</em></strong></td>
</tr>
<tr>
<td>Cyberbullying (P)</td>
</tr>
<tr>
<td>*Bullying (P, S, SP, D)</td>
</tr>
<tr>
<td>Teasing (SP)</td>
</tr>
<tr>
<td>*Lack of acceptance and understanding by peers (S, SP)</td>
</tr>
<tr>
<td><strong>OT: <em>Social interaction and understanding others</em></strong></td>
</tr>
<tr>
<td>Difficulty with perspective taking (S, SP)</td>
</tr>
<tr>
<td>Difficulty making friends (SP)</td>
</tr>
<tr>
<td>Understanding social situations effectively (S)</td>
</tr>
<tr>
<td>*Working with others (S, SP, D)</td>
</tr>
<tr>
<td>*Socially interacting effectively with peers (D, S)</td>
</tr>
<tr>
<td><strong>OT: Processing and managing feelings</strong>*</td>
</tr>
<tr>
<td>*Constant thoughts and worry (S)</td>
</tr>
<tr>
<td>Mood swings in class (S)</td>
</tr>
<tr>
<td>Build up of feelings (S, P)</td>
</tr>
<tr>
<td>Internalising feelings (S)</td>
</tr>
<tr>
<td>*Difficulty expressing his worries and feelings (P, SP)</td>
</tr>
<tr>
<td>Lack of understanding his emotions (SP, D)</td>
</tr>
<tr>
<td><strong>OT: <em>Negative thinking (P)</em></strong></td>
</tr>
<tr>
<td>Pessimism (S)</td>
</tr>
<tr>
<td>*Performance anxiety (D, S)</td>
</tr>
<tr>
<td>Self blame (S)</td>
</tr>
<tr>
<td><strong>OT: Home circumstances (S, SP)</strong>*</td>
</tr>
<tr>
<td>Worry about home circumstances (S)</td>
</tr>
<tr>
<td>Being questioned about home at school (S)</td>
</tr>
</tbody>
</table>
• Dealing with his parent’s approach (SP)

**OT: Academic pressures**
• *Striving to be the best (D, SP)*
• Worry about not reaching his potential (P)
• Completing homework (SP, D)

**Global theme - Perceived needs and difficulties**

**OT: Outward emotional expression**
• Tearful (SP, P)
• Presented differently (S, SP)

**OT: Physiological manifestations**
• Reports of stomach ache (P)
• Reports of tiredness (P)
• Nocturnal enuresis (P)
• Altered eating and drinking habits (P)

**OT: Impact upon emotional wellbeing**
• Mental health needs (P, S)
• *Low mood (S)*
• ‘Breakdown’ (S)

**OT: *Poor self perception (P)**
• Low self esteem (P, S)
• Negative self concept (P)

**OT: Difficulty with social participation**
• Lack of attention to the social world (S)
• *Becomes withdrawn (P, SP, S)*
• Lack of participation in class and group activities (S, SP)
• *Becomes uncommunicative (S, P)*
• Wary of developing friendships (P)

**OT: Difficulty controlling emotional responses**
• Frustration (S)
• Physical outbursts (S)
• Extremes of behaviour (P)

**OT: Absence from school**
• Reluctance to attend school (S, SP, P)
• Returning home when very anxious (P)

**OT: Sub optimal performance**
• *Difficulty completing work (S, S, D)*
• Difficulty with decision making (D)
• Over attention to detail (D)
• Easily distracted (SP, S)
• Disorganisation (SP)
• Difficulty with concentration and attention (SP, S)

**OT: Increased repetitive and autistic behaviour (P)**
• Retreats into his interests (D)
• Fidgeting (S)

**Collated themes - Perceived effective practice**
• *Structure, planning and organisational support (D, S, SP)*
  • Daily routines and structure (P, SP)
  • Support with self organisation (SP)
  • Support with planning and reviewing homework (SP)
  • Differentiated planner with clear targets and goals (SP)

**OT: Planning for transition (SP)**

**OT: Social and life skills (P, SP)**
• *Social, communication and interpersonal skills work (S, SP)*
• Support with life skills (P, D)
• Problem solving skills (SP)
• *Work on friendship skills (SP)*
**OT: Peer support networks**
- Shared coping strategies (S)
- Mutual support of friends with similar experiences (SP, S)
- Bonding with similar peers (SP, S)
- Group identity (SP, P)
- Friends at unstructured times (S, SP, D)

**OT: A safe space**
- A safe place to go (S, SP)
- Activities at lunch and break times (SP, P)
- Adult support at unstructured times (SP)

**OT: Positivity and acceptance (S)**
- Disclosing ASC to peers and teachers (S)
- Being a role model to younger students (S, SP)
- Using his strengths and talents (P)
- A close school community (P)
- Use of rewards and reinforcement (P, SP, S)

**OT: Adapted teaching approaches**
- Teaching approaches accounting for his ASC (S)
- Creative and practical teaching activities (S)
- Strategies given in a repetitive manner (SP)
- Building independence by gradually decreasing support (SP)
- Specific feedback from teaching staff (S)

**OT: Quality and use of staff support**
- A range of supports (S)
- TA support at registration times (SP)
- Good communication between the SENCo and teaching staff (P, S)
- School being creative with the resources to support him (P)
- Supportive SENCO and SEN support (P, S)

**OT: Staff knowledge and understanding (SP, P)**
- Pen portrait to all staff (SP)
- Regularly updated information for staff (SP, S)
- Whole school training re ASC (SP)
- Developing staff understanding (P)
- Specialist teacher advice and support (SP, S)

**OT: Adult support with emotion management**
- Compassionate people who listen (S)
- *Open access to trusted staff to discuss his concerns (SP, S, P)
- Immediate and obvious response to concerns (SP, D)
- Recognition of signs and triggers by staff (R, SP)
- Reassurance (SP)
- Staff support to identify and manage his thoughts and feelings (SP)

**OT: Good home-school liaison**
- Good home school communication (P, S)
- Transferring strategies from school to home (P)

**OT: Barriers to effective practice**
- Keeping a statement as his needs improve so the support can continue (SP)

**OT: How support has proven to be effective**
- Better self awareness (P)
- Improvements and progress (RD, P)
- He has developed a skill set and experience (SP)
- More positive thinking and less worry (P)
- Increased confidence in social interaction (S)

**Other comments of interest**
- Congruence between school and student views especially (RD)
APPENDIX GG: Sample of a Visual Template of Thematic Networks

As described in stage 5 of the data analysis process shown in table 3.5 within the main text, a visual template was used to aid the development of the final themes and thematic networks for each case, as shown below.

An online tool called Text2Mindmap was used for this process.
APPENDIX HH:  Process of Collation of Cross Case Themes

As per stage 5 of the data analysis process shown in table 3.5 within the main text, a process of comparing, identifying and refining themes across cases took place.

- Tables were used to compare and contrast the data more easily in order to identify cross case themes.
- Each case was assigned a different colour text to allow easy identification of excerpts and themes for each case, as follows:
  
  Case 1 (Ali) = Brown
  Case 2 (Matthew) = Purple
  Case 3 (Ryan) = Green
  Case 4 (Megan) = Red

- Starred themes were particularly pertinent within a given case, this was based upon particular emphasis by participants from excerpts, identification across sources of data within the case, and/or repetition of the theme within the case by one of more sources identified by excerpts.
- Further checking across cases and refinement of cross case basic themes took place whereby themes from across cases were matched to lead to cross case basic themes.
- New/altered cross case organising themes or basic themes were devised based upon the range of similar themes from across the cases. For instance, student two had a basic theme of ‘performance anxiety’ which covered worry about not performing to his best ability, not being the best, making mistakes etc. Another student had a sub theme of ‘worry about making mistakes’ – therefore an overall cross case theme of worry about making mistakes was used, even though this might only show once in that row across all the students.
- A cross case basic theme would not necessarily need to have evidence from across all case to be included. It may have been in 2 or more cases, or even a particularly pertinent theme from one case. Data was referred back to where required to consider this.
- Some basic themes may have been linked with slightly different organising themes within the cross case final themes due to different amounts of basic themes and organising themes and slightly different emphasis of the basic themes within different cases.
- Some basic themes from individual cases were not included within the overall cross case themes due to lack of strength of within and across cases.
- The following table shows the process of cross case theme identification.
## Cross Case Theme Identification

### Recognising factors contributing to anxiety

<table>
<thead>
<tr>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
<th>Case 4</th>
<th>Cross case themes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OT:</strong> Managing change (D, P, SP, S)</td>
<td><strong>OT:</strong> Managing change (S, D, P, SP)</td>
<td><strong>OT:</strong> Managing change (D, P, SP)</td>
<td><strong>OT:</strong> Managing change (S, SP, D)</td>
<td><strong>OT:</strong> Managing change</td>
</tr>
<tr>
<td>- Transition to high school (S, SP)</td>
<td>- Transition to secondary school (S, D, P, SP)</td>
<td>- Change in routine/time table (P, S)</td>
<td>- Daily transitions (D, P)</td>
<td>- Transition to secondary school</td>
</tr>
<tr>
<td>- Change in routine (D, SP)</td>
<td>- New people (P, S)</td>
<td>- Class changes (S, P)</td>
<td>- Transition to high school (S, SP, P)</td>
<td>- Change or disruption to routine</td>
</tr>
<tr>
<td>- Change in environment (SP)</td>
<td>- Unfamiliar and new experiences (P)</td>
<td>- Transition between lessons (SP)</td>
<td>- Change of teachers or classes (S, SP, P, D)</td>
<td>- Change in classes/rooms</td>
</tr>
<tr>
<td>- Change of class/room (S SP)</td>
<td>- Changes in the timetable (D, SP)</td>
<td>- New or changed teachers (P, SP)</td>
<td>- New and unfamiliar experiences (S, D)</td>
<td>- New class</td>
</tr>
<tr>
<td>- Changes in staff (SP)</td>
<td>- Unfamiliar classrooms (P)</td>
<td>- Transition from primary school (P, SP, S)</td>
<td>- Changes in routine or timetable (SP, D, P)</td>
<td>- New and unfamiliar experiences</td>
</tr>
<tr>
<td>- <em>Worry about what will happen next (S)</em></td>
<td>- <em>Missing the bus (S, SP, P, D)</em></td>
<td>- New school years (P, D)</td>
<td>- Being late (P)</td>
<td>- Daily transitions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
<th>Case 4</th>
<th>Cross case themes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OT:</strong> Managing self-organisation and unstructured time (SP, P)</td>
<td><strong>OT:</strong> Managing unstructured time (P, SP)</td>
<td><strong>OT:</strong> Lack of structure (P, SP)</td>
<td><strong>OT:</strong> Unstructured time (P, SP, D, S)</td>
<td><strong>OT:</strong> Unstructured time</td>
</tr>
<tr>
<td>- What to do in unstructured time (S, SP)</td>
<td>- Unstructured lessons (SP)</td>
<td>- Lack of routine (SP)</td>
<td>- Unstructured times (SP, P, D, S)</td>
<td>- Unstructured time and lessons</td>
</tr>
<tr>
<td>- Self organisation (P)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
<th>Case 4</th>
<th>Cross case themes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OT:</strong> Environmental and sensory factors</td>
<td><strong>OT:</strong> Environmental and sensory factors</td>
<td><strong>OT:</strong> Environmental and sensory factors</td>
<td><strong>OT:</strong> Environmental and sensory factors</td>
<td><strong>OT:</strong> Environmental and sensory factors</td>
</tr>
<tr>
<td>- Certain smells (D, SP)</td>
<td>- Crowded and busy areas (P, SP, S)</td>
<td>- Noisy and busy places e.g. crowded corridors (P, D, SP)</td>
<td>- Crowd, noisy and busy places</td>
<td></td>
</tr>
<tr>
<td>- Fire alarms (SP)</td>
<td>- Queuing up (P)</td>
<td>- People touching/brushing past her (P)</td>
<td>- Noise sensitivity</td>
<td></td>
</tr>
<tr>
<td>- Busy times (SP)</td>
<td>- Oversensitivity to heating and lighting (SP)</td>
<td>- Using toilets at school (P, D)</td>
<td>- Being bumped into</td>
<td></td>
</tr>
<tr>
<td>- Being bumped into in the corridor (P, SP)</td>
<td>- Sensitivity to noise from electrical equipment (SP)</td>
<td></td>
<td>- Sensitivity to smells</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
<th>Case 4</th>
<th>Cross case themes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OT:</strong> Academic pressures</td>
<td><strong>OT:</strong> Academic pressures</td>
<td><strong>OT:</strong> Academic pressures</td>
<td><strong>OT:</strong> Academic pressures</td>
<td><strong>OT:</strong> Academic pressures and expectations</td>
</tr>
<tr>
<td>- Problems completing homework (D, P)</td>
<td>- <em>Striving to be the best (D, SP)</em></td>
<td>- Certain lessons e.g. maths (SP)</td>
<td>- Completing homework</td>
<td></td>
</tr>
<tr>
<td>- Worry about achievement (D)</td>
<td>- Worry about not reaching his potential (P)</td>
<td>- Exams (P)</td>
<td>- Exams</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Completing homework (SP, D)</td>
<td>- Reaching expectations/targets (S, SP, D)</td>
<td>- Own and others’ academic expectations</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Homework (D)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
<th>Case 4</th>
<th>Cross case themes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bullying (S, D, R)</strong></td>
<td><strong>Negative peer behaviour</strong></td>
<td><strong>OT:</strong> Negative peer behaviour</td>
<td><strong>OT:</strong> Negative peer behaviour</td>
<td><strong>OT:</strong> Negative peer behaviour</td>
</tr>
<tr>
<td>- <em>Peer teasing, swearing and exclusion (D, SP, P)</em></td>
<td>- Cyberbullying (P)</td>
<td>- Bullying (P, SP, S)</td>
<td>- Bullying</td>
<td></td>
</tr>
<tr>
<td>- Worry about getting hurt by peers (S, D)</td>
<td>- <em>Bullying (P, S, SP, D)</em></td>
<td>- <em>Name calling by peers (P, S, SP)</em></td>
<td>- Teasing and name calling</td>
<td></td>
</tr>
<tr>
<td>- Questioning why he is being bullied (S)</td>
<td>- Teasing (SP)</td>
<td>- Peers not including him (D)</td>
<td>- Being excluded by peers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Lack of acceptance and understanding by peers (S, SP)</em></td>
<td>- Peers taking his possessions (D, SP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OT: Social interaction and communication (SP)</td>
<td>OT: Social interaction and understanding others</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Interacting with others (P, SP, D)</td>
<td>Difficulty with perspective taking (S, SP)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactive work in class (SP)</td>
<td>Difficulty making friends (SP)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Understanding social situations effectively (S)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Working with others (S, SP, D)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*Socially interacting effectively with peers (D,S)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Social situations and peer interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not feeling understood by others (P, S, SP)</td>
</tr>
<tr>
<td>Difficulty understanding social situations and peers (P)</td>
</tr>
<tr>
<td>Difficulty making friends (S, SP)</td>
</tr>
<tr>
<td>Fear of social rejection (SP)</td>
</tr>
<tr>
<td>High social expectations of himself (P)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Social difficulties (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peers not following the rules (P, D)</td>
</tr>
<tr>
<td>Group work and team activities (D, SP)</td>
</tr>
<tr>
<td>Worry about communication and interaction with peers (P)</td>
</tr>
<tr>
<td>Worry about social etiquette (P)</td>
</tr>
<tr>
<td>Conflict between peers (P)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Social situations and interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty making friends</td>
</tr>
<tr>
<td>Working with others in lessons</td>
</tr>
<tr>
<td>Peer conflict</td>
</tr>
<tr>
<td>Peers not following the rules</td>
</tr>
<tr>
<td>Difficulty with social understanding</td>
</tr>
<tr>
<td>Socially interacting effectively with peers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Negative thinking (SP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worry about being reprimanded (SP, S, D)</td>
</tr>
<tr>
<td>Perfectionism (D)</td>
</tr>
<tr>
<td>Worry about everyday incidents (P)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Negative thinking (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance anxiety (D, S)</td>
</tr>
<tr>
<td>Self blame (S)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Negative thinking patterns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perfectionism</td>
</tr>
<tr>
<td>Self blame</td>
</tr>
<tr>
<td>Worry about making mistakes (P, SP, D)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Difficulty processing and managing feelings (R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating his feelings appropriately (D)</td>
</tr>
<tr>
<td>*Managing his feelings effectively (P, SP)</td>
</tr>
<tr>
<td>Difficulty understanding his feelings (R, S, P)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Difficulty processing and managing feelings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant thoughts and worry (S)</td>
</tr>
<tr>
<td>Mood swings in class (S)</td>
</tr>
<tr>
<td>Build up of feelings (S, P)</td>
</tr>
<tr>
<td>Internalising feelings (S)</td>
</tr>
<tr>
<td>*Difficulty expressing his worries and feelings (P, SP)</td>
</tr>
<tr>
<td>Lack of understanding his emotions (SP, D)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Difficulty processing and managing feelings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty understanding his feelings (SP, R)</td>
</tr>
<tr>
<td>Expressing his feelings appropriately (SP, R, P)</td>
</tr>
<tr>
<td>Managing his feelings effectively (P)</td>
</tr>
<tr>
<td>Internalising his feelings (SP)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Difficulty expressing and expressing feelings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overloaded by thoughts (S, P)</td>
</tr>
<tr>
<td>Difficulty expressing feelings (SP)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Difficulty understanding and expressing feelings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build up and overload of thoughts and feelings</td>
</tr>
<tr>
<td>Difficulty understanding their own feelings</td>
</tr>
<tr>
<td>Difficulty expressing worries and feelings</td>
</tr>
<tr>
<td>Internalising feelings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Becoming more self aware</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changes in adolescence (P)</td>
</tr>
<tr>
<td>Realising his differences (D)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Home circumstances (S, SP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worry about home circumstances (S)</td>
</tr>
<tr>
<td>Being questioned about home at school (S)</td>
</tr>
<tr>
<td>Dealing with his parent’s approach (SP)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Home circumstances (S, SP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worry about home circumstances (SP, S)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Home circumstances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worry about home circumstances</td>
</tr>
</tbody>
</table>

310
### Recognising the signs and impact of anxiety

<table>
<thead>
<tr>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
<th>Case 4</th>
<th>Cross case themes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OT: Physiological manifestations</strong></td>
<td><strong>OT: Physiological manifestations</strong></td>
<td><strong>OT: Physiological manifestations</strong></td>
<td><strong>OT: Physiological manifestations</strong></td>
<td><strong>OT: Physiological manifestations</strong></td>
</tr>
<tr>
<td>- Sweating (P)</td>
<td>- Reports of stomach ache (P)</td>
<td>- Reports of nausea (P, SP)</td>
<td>- Sweaty hands (S)</td>
<td>- <em>Sleep difficulties and tiredness</em></td>
</tr>
<tr>
<td>- Red faced (P)</td>
<td>- Reports of tiredness (P)</td>
<td>- Stiff hands (S)</td>
<td>- Nausea (P, SP)</td>
<td>- Nausea</td>
</tr>
<tr>
<td>- Feelings in stomach (S)</td>
<td>- Nocturnal enuresis (P)</td>
<td>- <em>‘Butterflies’ in her stomach (S)</em></td>
<td>- Nocturnal enuresis</td>
<td>- Nocturnal enuresis</td>
</tr>
<tr>
<td>- Shaky legs (S)</td>
<td>- Altered eating and drinking habits (P)</td>
<td>- Tiredness (SP)</td>
<td>- Stomach ache (P, SP)</td>
<td>- Altered eating habits</td>
</tr>
<tr>
<td>- Hot and restless hands (S)</td>
<td>-</td>
<td>- Headaches (S)</td>
<td>- Nausea (P, SP)</td>
<td>- Feel hot, perspire or go red</td>
</tr>
<tr>
<td>- Headaches (P, S)</td>
<td>- Unusual feelings in his head (S)</td>
<td>- Gets hot (SP)</td>
<td>- Shaky legs (S)</td>
<td>- Unusual internal feelings, aches and pains</td>
</tr>
<tr>
<td>- Unusual feelings in his head (S)</td>
<td>- Getting to sleep (S)</td>
<td>- <em>‘Poor sleep/tiredness (S, SP, D, P)</em></td>
<td>- Headaches (S)</td>
<td>- Shaky legs</td>
</tr>
<tr>
<td>- Getting to sleep (S)</td>
<td>-</td>
<td>- Nocturnal enuresis (SP)</td>
<td>- Tiredness (SP)</td>
<td>- Rashers and changes in skin tone</td>
</tr>
<tr>
<td><strong>OT: Outward emotional expression</strong></td>
<td><strong>OT: Outward emotional expression</strong></td>
<td><strong>OT: Outward emotional expression</strong></td>
<td><strong>OT: Outward emotional expression</strong></td>
<td><strong>OT: Outward emotional expression</strong></td>
</tr>
<tr>
<td>- Crying (D, P, SP, P)</td>
<td>- Tearful (SP, P)</td>
<td>- Sadness (SP)</td>
<td>- Crying (P)</td>
<td>- Crying</td>
</tr>
<tr>
<td>- Upset (D)</td>
<td>- Presented differently (S, SP)</td>
<td>- Crying (SP)</td>
<td>- ‘Uptight’ (P, SP)</td>
<td>- Sadness, upset or distress</td>
</tr>
<tr>
<td>- Distress (D)</td>
<td></td>
<td></td>
<td></td>
<td>- Presenting differently</td>
</tr>
<tr>
<td>- Visibly agitated (SP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OT: Difficulty controlling emotional responses</strong></td>
<td><strong>OT: Difficulty controlling emotional responses</strong></td>
<td><strong>OT: Difficulty controlling emotional responses</strong></td>
<td><strong>OT: Difficulty controlling emotional responses</strong></td>
<td><strong>OT: Difficulty controlling emotional responses</strong></td>
</tr>
<tr>
<td>- <em>Physical outbursts toward others (P, D, SP)</em></td>
<td>- <em>Frustration (S)</em></td>
<td>- Easily angered and frustrated (SP, S, D)</td>
<td>- Outbursts of behaviour at home (D, SP)</td>
<td>- Extremes of behaviour</td>
</tr>
<tr>
<td>- Loses control (P)</td>
<td>- Physical outbursts (S)</td>
<td>- <em>‘Outbursts of anger toward others (S, SP, P)</em></td>
<td><em>Outbursts of behaviour at home (D, SP)</em></td>
<td>- Easily angered or frustrated</td>
</tr>
<tr>
<td>- Frustration (P, D)</td>
<td>- Extremes of behaviour (P)</td>
<td>- Throwing items (SP)</td>
<td>- Physical outbursts toward others</td>
<td>- Physical outbursts toward others</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Slamming doors (SP)</td>
<td></td>
<td>- Outbursts of behaviour at home</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Running out of class (SP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OT: Impact upon emotional wellbeing</strong></td>
<td><strong>OT: Impact upon emotional wellbeing</strong></td>
<td><strong>OT: Impact upon emotional wellbeing</strong></td>
<td><strong>OT: Impact upon emotional wellbeing</strong></td>
<td><strong>OT: Impact upon emotional wellbeing</strong></td>
</tr>
<tr>
<td>- Verbalises low mood (D)</td>
<td>- Mental health needs (P, S)</td>
<td>- Sad and depressed (SP)</td>
<td>- Low mood (D)</td>
<td>- Low mood</td>
</tr>
<tr>
<td>- Feeling like he can’t cope (P)</td>
<td>- <em>‘Low mood (S)</em></td>
<td>- Unhappy (D, SP)</td>
<td>- Signs of depression</td>
<td>- Signs of depression</td>
</tr>
<tr>
<td></td>
<td>- ‘Breakdown (S)’</td>
<td></td>
<td>- Feeling unable to cope</td>
<td>- Feeling unable to cope</td>
</tr>
</tbody>
</table>

---

**Teacher approaches and responses**

- Supply teachers’ lack of understanding (S, R)
- Teachers not noticing problems (P)
<table>
<thead>
<tr>
<th>OT: Poor self perception</th>
<th>OT: Poor self perception (P)</th>
<th>OT: Poor self perception</th>
<th>OT: Poor self confidence (D)</th>
<th>OT: Poor self perception</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Poor self esteem (P)</td>
<td>• Low self esteem (P, S)</td>
<td>• Low self esteem (P, SP)</td>
<td>• Reluctant to answer questions (SP)</td>
<td>• Poor self confidence</td>
</tr>
<tr>
<td>• Negative self concept</td>
<td>• Negative self concept</td>
<td>*Negative self concept (P, SP)</td>
<td>Needs adult support nearby (D, SP)</td>
<td>Low self esteem</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Negative self concept</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Difficulty with social interaction</th>
<th>OT: Difficulty with social participation</th>
<th>OT: Interaction and social difficulties</th>
<th>OT: Changes in social interaction and communication</th>
<th>OT: Impact upon social interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>• *Increased difficulty with social and peer relationships (S, SP)</td>
<td>• Lack of attention to the social world (S)</td>
<td>• *Increased social withdrawal (P, S, SP)</td>
<td>• *Becomes withdrawn (P, SP)</td>
<td>• *Increased difficulty with social relationship (SP)</td>
</tr>
<tr>
<td>• Avoidance of others (P)</td>
<td>• *Becomes withdrawn (P, SP, S)</td>
<td>• Uncommunicative (SP)</td>
<td>• Uncommunicative (SP, P)</td>
<td>• Hiding away</td>
</tr>
<tr>
<td>• Withdrawal (P, S, SP)</td>
<td>• Lack of participation in class and group activities (S, SP, S)</td>
<td>• Refusal to work with others (D, P)</td>
<td>• Disengages in lessons (SP)</td>
<td>• *Becomes withdrawn (P, SP)</td>
</tr>
<tr>
<td>• Difficulty with reciprocal conversation (SP)</td>
<td>• *Becomes uncommunicative (S, P)</td>
<td>• Increased difficulty in social relationship (SP)</td>
<td>• Hiding away in small places (P)</td>
<td>• *Repetitive talk when anxious (P, D)</td>
</tr>
<tr>
<td>• *Repetitive questioning when anxious (P, D, SP)</td>
<td>• Wary of developing friendships (P)</td>
<td>• Intolerance of others (SP)</td>
<td>• Changes the topic (P)</td>
<td>• Difficulty with reciprocal conversation (SP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Curling up and hiding away (SP, P)</td>
<td>• Repetitive talk (P)</td>
<td>• Disengagement in lessons and group activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Reluctance to participate in class (P, D)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Repetitive actions (SP)</th>
<th>OT: Increased autistic behaviour (P)</th>
<th>OT: Increased repetitive actions (SP)</th>
<th>OT: Increased autistic behaviours</th>
<th>OT: Increased repetitive and autistic behaviours</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hyper vigilant (SP)</td>
<td>• Retreats into his interests (D)</td>
<td>• Pacing around (SP)</td>
<td>• More reliant on routines (P)</td>
<td>• More reliance on routine and ritualistic behaviour</td>
</tr>
<tr>
<td>• Repetitively looking at clock/watch (SP, D)</td>
<td>• Fidgeting (S)</td>
<td>• Rocking (SP)</td>
<td>• More reliant on interests (P)</td>
<td>• Pacing</td>
</tr>
<tr>
<td>• Pacing (SP)</td>
<td></td>
<td>• Hoarding items in his pockets (SP)</td>
<td>• Fidgets and fiddles (SP)</td>
<td>• Sensory responses</td>
</tr>
<tr>
<td>• Sensory responses (SP)</td>
<td></td>
<td>• Picking up bits of fluff (SP)</td>
<td></td>
<td>• Scratching and picking hands</td>
</tr>
<tr>
<td>• Scratching and picking hands (P)</td>
<td></td>
<td>• Fidgeting (R, SP, P)</td>
<td></td>
<td>• Hoarding items</td>
</tr>
<tr>
<td>• Fidgeting/fiddling (SP)</td>
<td></td>
<td></td>
<td></td>
<td>• More reliance upon interests</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Sub-optimal performance</th>
<th>OT: Sub-optimal performance</th>
<th>OT: Sub-optimal performance</th>
<th>OT: Sub-optimal performance</th>
<th>OT: Sub-optimal performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Not reaching his potential (SP)</td>
<td>• *Difficulty completing work (S, D)</td>
<td>• *Lack of independent decision making (D, SP)</td>
<td>• Not working to full potential (SP)</td>
<td>• Not working to full potential (D, SP)</td>
</tr>
<tr>
<td>• Keeping up with the pace (D)</td>
<td>• Difficulty with decision making (D)</td>
<td>• Lack of contribution to lessons (SP)</td>
<td>• *Lack of independent decision making (D, SP)</td>
<td>• Reluctance to contribute in class (P, D)</td>
</tr>
<tr>
<td>• Not completing tasks (P, D)</td>
<td>• Over attention to detail (D)</td>
<td>• *Difficulty with concentration and attention (S, SP, P)</td>
<td>• *Reluctance to contribute in class (P, D)</td>
<td>• Difficulties with concentration and attention (S, SP, P, D)</td>
</tr>
<tr>
<td>• Doing homework (P)</td>
<td>• Easily distracted (SP, S)</td>
<td>• Difficulty absorbing information (SP)</td>
<td>• Difficulties with concentration and attention (S, SP, P, D)</td>
<td>• Increased disorganisation</td>
</tr>
<tr>
<td>• *Distracted (D, S, PSP)</td>
<td>• Disorganisation (SP)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Confusion (P, SP)</td>
<td>• Difficulty with concentration and attention (SP, S)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Lack of attention (SP, P)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

312
<table>
<thead>
<tr>
<th>Perceived effective actions and strategies to address the anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Case 1</strong></td>
</tr>
<tr>
<td>OT: Transitions planning prior to high school (SP)</td>
</tr>
<tr>
<td>- Familiarisation visits (SP)</td>
</tr>
<tr>
<td>- Tour of the school (SP)</td>
</tr>
<tr>
<td>- Liaison with staff (SP)</td>
</tr>
<tr>
<td>OT: Structure, planning and organisational support (D, S, SP)</td>
</tr>
<tr>
<td>- Daily planner (S)</td>
</tr>
<tr>
<td>- Weekly planning and guidance for changes (SP)</td>
</tr>
<tr>
<td>- Planning for homework (SP)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>OT: Classroom strategies</td>
</tr>
<tr>
<td>- Own whiteboard (SP)</td>
</tr>
<tr>
<td>- Written instructions (SP)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>OT: Structure, planning and predictability (P)</td>
</tr>
<tr>
<td>- School refusal (P)</td>
</tr>
<tr>
<td>- At risk of exclusion (P)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>OT: Risk of lowered attendance and exclusion (P)</td>
</tr>
<tr>
<td>- Reluctance to attend school</td>
</tr>
<tr>
<td>- Returning home when anxious</td>
</tr>
<tr>
<td>- At risk of exclusion</td>
</tr>
<tr>
<td>OT: A safe space</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>*Taking a break from class (D, SP, S)</td>
</tr>
<tr>
<td>A safe quiet place to go (S, D, SP)</td>
</tr>
<tr>
<td>A place to go during unstructured times (D, SP)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Having a drink (S, SP)</td>
<td>» *Creative activities for redirection and distraction (SP, P)</td>
<td>» *Using relaxation strategies (deep breaths, squeezing hands, swimming) (S, P)</td>
<td>» 'Happy box' with sensory and tactile items (D, P)</td>
<td>Using creative activities and interests to redirect and distract</td>
</tr>
<tr>
<td>Lying down (S)</td>
<td>» *A card system for leaving class when anxious (S, SP, P)</td>
<td>» Using interests for redirection and distraction from worries (P, S)</td>
<td>» Lying down</td>
<td>A card system for leaving class</td>
</tr>
<tr>
<td></td>
<td>» Lying down (SP)</td>
<td>» Taking a break from class (D, SP)</td>
<td>» Using interests for redirection and distraction from worries (P, S)</td>
<td>» Having a drink</td>
</tr>
<tr>
<td></td>
<td>» Having a drink (SP)</td>
<td>» Time alone (P)</td>
<td>» Time alone (P)</td>
<td>» Using relaxation strategies</td>
</tr>
<tr>
<td></td>
<td>» Time alone (P)</td>
<td>» Comforters to de-stress him (P)</td>
<td>» Comforters to de-stress him (P)</td>
<td>» Access to favourite or comforting items</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Peer support</th>
<th>OT: Peer support networks</th>
<th>OT: Peer support networks</th>
<th>OT: Peer support networks</th>
<th>OT: Peer support networks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caring and nice peers (S)</td>
<td>» *Shared coping strategies (S)</td>
<td>» *Support from friends who understand (S, P, SP)</td>
<td>» Working with supportive peers (D, P)</td>
<td>» Mutual support from friends</td>
</tr>
<tr>
<td>An accepting class group (SP)</td>
<td>» Mutual support of friends with similar experiences (SP, S)</td>
<td>» Friends to be with at lunch times (P)</td>
<td>» *A supportive friendship group (D, SP, P)</td>
<td>» Friendships with similar peers</td>
</tr>
<tr>
<td></td>
<td>» Bonding with similar peers (SP, S, D)</td>
<td>» Group identity (S, P, SP)</td>
<td></td>
<td>» A group identity</td>
</tr>
<tr>
<td></td>
<td>» Group identity (SP, P)</td>
<td>» Developing friendships with similar peers (S, P, D)</td>
<td></td>
<td>» Friends to be with at unstructured times</td>
</tr>
<tr>
<td></td>
<td>» Friends at unstructured times (S, SP, D)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Support with social skills</th>
<th>OT: Social and life skills (P, SP)</th>
<th>OT: Social and communication skills development</th>
<th>OT: Social and communication skills supports</th>
<th>OT: Social skills supports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social scripts (SP)</td>
<td>» *Social, communication and interpersonal skills work (S, SP)</td>
<td>» Weekly small group social skills work with the specialist teacher (SP, P)</td>
<td>» Small group social and communication skills work</td>
<td>Using social scripts and visuals</td>
</tr>
<tr>
<td>Specialist teacher support with social and communication skills (S, SP)</td>
<td>» Support with life skills (P, D)</td>
<td>» Social Stories and Comic Strips (D)</td>
<td>» Use of social scripts and visuals</td>
<td>Friendship development support</td>
</tr>
<tr>
<td>Social experiences that allow positive peer modelling (P)</td>
<td>» Work on problem solving skills (SP)</td>
<td>» Support to understand others' perspectives (SP)</td>
<td>» Social Stories and Comic Strips (D)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>» *Work on friendship skills (SP)</td>
<td>» Role play (SP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>» Support to develop friendships</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guidance with problem solving (SP)</td>
<td>OT: Positivity and acceptance (S)</td>
<td>OT: Positivity and acceptance</td>
<td>OT: Positivity and acceptance</td>
<td>OT: Positivity and acceptance</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------------------------</td>
<td>------------------------------</td>
<td>------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>*Disclosure to peers and teachers (S)</td>
<td>*Mentoring younger students with similar needs (P, SP)</td>
<td>*Having a talent that is highly regarded (SP)</td>
<td>*Using strengths, talents and interests (SP)</td>
<td>Using strengths, talents and interests (SP)</td>
</tr>
<tr>
<td>Being a role model to younger students (S, SP)</td>
<td>Positive use of strengths and interests (SP)</td>
<td>Being accepted (P)</td>
<td>Positive use of strengths and interests (SP)</td>
<td>Disclosing ASC positively to peers and teachers</td>
</tr>
<tr>
<td>Using his strengths and talents (P)</td>
<td>Activities to build self esteem and recognition with peers (SP)</td>
<td>Being open about her ASC (P)</td>
<td>Activities to build self esteem and recognition with peers (SP)</td>
<td>Use of rewards and reinforcement</td>
</tr>
<tr>
<td>A close school community (P)</td>
<td>*Diagnosis brought understanding (P)</td>
<td>Reward systems to increase self esteem (P, D)</td>
<td>*Positivity and acceptance</td>
<td>Reward systems to increase self esteem (P, D)</td>
</tr>
<tr>
<td>Use of rewards and reinforcement (P, SP, S)</td>
<td>Feeling included (P)</td>
<td>Knowing she is understood (D, P, S)</td>
<td>Using strengths, talents and interests (SP)</td>
<td>Knowing she is understood (D, P, S)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Adult support with worry management</th>
<th>OT: Adult support with worry management</th>
<th>OT: Adult support with anxiety management</th>
<th>OT: Adult support with anxiety management</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Adult reassurance when worried (S, P, SP)</td>
<td>*Support with self awareness and understanding his ASC (SP)</td>
<td>Adult reassurance</td>
<td>Using strengths, talents and interests (SP)</td>
</tr>
<tr>
<td>*A familiar adult for regular discussion about worries (D, S, SP, P)</td>
<td>Specific understanding staff to go to (P)</td>
<td>Open access to trusted staff member to talk through anxieties (SP, D)</td>
<td>Mentoring younger students</td>
</tr>
<tr>
<td>Support to understand and manage his feelings (S, SP)</td>
<td>Support with objective thinking (SP)</td>
<td>*Support to express his worries and emotions (SP)</td>
<td>Disclosing ASC positively to peers and teachers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Staff availability and flexibility</th>
<th>OT: Quality and use of staff support</th>
<th>OT: Quality and use of staff support</th>
<th>OT: Staff approaches and support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discrete supervision (SP)</td>
<td>A range of supports (S)</td>
<td>Staff flexible to his needs (SP)</td>
<td>Adult availability at lunch and break times (SP)</td>
</tr>
<tr>
<td>High levels of adult support (SP)</td>
<td>TA support at registration times (SP)</td>
<td>Support from school regardless of funding (P)</td>
<td>Individual teacher attention (S)</td>
</tr>
<tr>
<td>Open access to a small group of trusted adults (SP, D)</td>
<td>Good communication between the SENCo and teaching staff (P, S)</td>
<td>Staff continuity (P)</td>
<td>Full TA availability but at a distance (D, SP, P)</td>
</tr>
<tr>
<td>Supportive SENCO and SEN support (P, S)</td>
<td>School being creative with the resources to support him (P)</td>
<td>Direct support from the ASC specialist teacher (P)</td>
<td>*Reliable and thorough TA (SP, P, D)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Staff deployment and approach</th>
<th>----------------------------------</th>
<th>----------------------------------</th>
<th>----------------------------------</th>
</tr>
</thead>
<tbody>
<tr>
<td>A range of flexible support</td>
<td>High levels of support regardless of funding</td>
<td>Discrete support in lessons</td>
<td>Full access to the SENCo and SEN team throughout the day</td>
</tr>
<tr>
<td>High levels of support</td>
<td>*Reliable and thorough TA</td>
<td>*Reliable and thorough TA</td>
<td></td>
</tr>
</tbody>
</table>

315
<table>
<thead>
<tr>
<th>OT: Staff Knowledge</th>
<th>OT: *Staff knowledge and understanding (SP, P)</th>
<th>OT: *Staff knowledge and understanding (SP)</th>
<th>OT: *Staff knowledge and understanding (SP)</th>
<th>OT: *Staff knowledge and understanding (SP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telling staff about his worries and what helps him (S)</td>
<td>Pen portrait to all staff (SP)</td>
<td>Helping staff to see signs and triggers (SP)</td>
<td>ASC training for staff from external specialists (SP)</td>
<td>Written information to all staff regarding needs and strategies</td>
</tr>
<tr>
<td>Written guidance for staff (SP)</td>
<td>Regularly updated information for staff (SP, S)</td>
<td>Staff gaining information (P)</td>
<td>SENCo and specialist teacher available for discussion with staff (SP, D)</td>
<td>SENCo and specialist teacher guidance for staff</td>
</tr>
<tr>
<td>Specialist teacher guidance for staff (SP)</td>
<td>Whole school training re ASC (SP)</td>
<td>Staff understanding his needs (P)</td>
<td>Written information for all staff (SP)</td>
<td>Staff understanding and recognising needs (SP, S, P, D)</td>
</tr>
<tr>
<td></td>
<td>Developing staff understanding (P)</td>
<td>Staff liaison with ASC specialist teacher (SP)</td>
<td>*Staff understanding and recognising needs (SP, S, P, D)</td>
<td>*A TA with good experience and understanding of ASC</td>
</tr>
<tr>
<td></td>
<td>Specialist teacher advice and support (SP, S)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Effective use of good quality information</th>
<th>OT: Good home-school liaison</th>
<th>OT: Good home-school liaison (SP)</th>
<th>OT: *Parental involvement</th>
<th>OT: Good home-school liaison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good EP report outlining non academic needs and specifying supports (P, R)</td>
<td>Good home school communication (P, S)</td>
<td>Direct home school communication (D)</td>
<td>Close home school relationship (SP, D)</td>
<td>Regular communication between parents and school</td>
</tr>
<tr>
<td>Good quality written information (R)</td>
<td>Transferring strategies from school to home (P)</td>
<td>Home and school developing strategies together (P)</td>
<td>Daily home school book (D, P, SP)</td>
<td>Home and school developing and sharing strategies</td>
</tr>
<tr>
<td>Good information sharing (P)</td>
<td>Parents being listened to by SENCo (P)</td>
<td>Sharing information between home and school (P)</td>
<td>Supportive family (S, D, SP)</td>
<td>Supportive family</td>
</tr>
<tr>
<td>Information about strategies from CAMHS to school (P)</td>
<td>Home visits (D)</td>
<td>Parents knowledge and understanding of ASC (P)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Home-school communication</th>
<th>OT: Good home-school liaison</th>
<th>OT: Good home-school liaison (SP)</th>
<th>OT: *Parental involvement</th>
<th>OT: Good home-school liaison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular communication with parents (D, SP)</td>
<td>Good home school communication (P, S)</td>
<td>Direct home school communication (D)</td>
<td>Close home school relationship (SP, D)</td>
<td>Regular communication between parents and school</td>
</tr>
<tr>
<td></td>
<td>Transferring strategies from school to home (P)</td>
<td>Home and school developing strategies together (P)</td>
<td>Daily home school book (D, P, SP)</td>
<td>Home and school developing and sharing strategies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parents being listened to by SENCo (P)</td>
<td>Sharing information between home and school (P)</td>
<td>Supportive family (S, D, SP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Home visits (D)</td>
<td>Parents knowledge and understanding of ASC (P)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: External support</th>
<th>OT: *External clinical support from CAMHS (R, P, S, SP, D)</th>
<th>OT: *External clinical support from CAMHS (R, P, S, SP, D)</th>
<th>OT: *External support</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAMHS involvement (P)</td>
<td>Scaling her worries (P)</td>
<td>Teaching relaxation strategies (S, P)</td>
<td>CAMHS involvement with anxiety management</td>
</tr>
<tr>
<td></td>
<td>Taught to identify and manage anxieties, worries and feelings (SP, P)</td>
<td>CBT (P)</td>
<td>Medication (S, P, D)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

316
OT: Barriers to effective practice
- Staff not following guidance (SP)
- Dual role of SEN staff as supporters and enforcers (SP)
- "Problem talk and 'within child' approach (R, SP)
- Lack of acknowledgement of anxiety needs in written information (R)
- Short-term ‘fix’ of problems (SP)
- Focus upon reactive strategies (R, SP, D)
- Need to look beyond the behaviour (D, R)

OT: Barriers to effective support
- Decision makers not seeing past academic results when they read reports (P)
- Lack of funding (P, SP)
- The statementing process (P)
- Other schools were obstructive and inflexible with the support they offered (P)
- Lack of suitable placements in secondary education (P)

OT: Perceived positive outcomes
- Comes to school (SP)
- He has good times (SP)
- More friendships (S)
- Increased confidence (SP)
- Worries less (S)

OT: Perceived positive outcomes
- Better self awareness (P)
- Improvements and progress (R, P)
- He has developed a skill set and experience (SP)
- More positive thinking and less worry (P)
- Increased confidence in social interaction (S)

OT: Perceived positive outcomes
- Reduction in worry (S)
- Less concerns (P)
- Less outbursts (SP, S)
- The student is more positive (SP)
- Likes attending school now (P)
- Increased effort and enthusiasm (P)

OT: Perceived positive outcomes
- More willing to try things and contribute (D)
- Built positive relationships (SP, P)
- Likes and wants to go to school (SP, S)
- She is happy (SP)
- Significant achievements (P, SP)
- Improved coping with worry (SP, P)

Other themes/notes
- Needs persist (P)
- Sensory behaviours not linked to anxiety by staff (SP, R)
- Difference of view in the level of impact of the bullying (R)
- Tangible rewards (S) – the student likes this, but staff admitted that he didn’t get it much and not in relation to his anxiety management skills development

Case 1
- Congruence between school and student views especially (R)

Case 2
- Awareness raising with other pupils (whole school) is needed (P)
- Supply teachers need to have awareness understanding and information (P)

Case 3
- Bullying hasn’t been an issue (SP, P)
- Most congruence between sources for this case (R)

Case 4
- N/A – to go within the text individually
APPENDIX II: Table of Final Themes and Excerpts for Across Cases

As per stage 5 of the data analysis process shown in table 3.5 within the main text, the cross case themes were cross-referenced with the finalised excerpts for each case and collated into one table to ensure relevance and confirm the evidence base for themes.

### Recognising factors contributing to anxiety

<table>
<thead>
<tr>
<th>OT: Managing change</th>
<th>SP1b: Was he stressed about coming to the school and it’s not stressing him now?</th>
<th>SP1a: Yeah...He was, but that was the reason for putting these measures in place.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SP1b: And when they painted the corridors and we came back and they’d been painted.</td>
<td>SP1a: Oh yeah that was a shock to him.</td>
</tr>
<tr>
<td></td>
<td>SP1b: That were a bit ‘Whoa!’</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S1: Yeah. If you have to change classes...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>R: Would that worry you?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S1: Yes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>R: What would worry you about it?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S1: What will they be doing now from my old class?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>R: Okay so what the changes might be?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S1: Yeah just that.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Changes. Anything that’s different to the normal routine. Supply teacher. SP1b</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Like what’s going to happen next, all sorts. S1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S2: The whole experience of actually moving to high school was quite traumatising to me.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>R: Okay in what ways? What made that so difficult? You’ve mentioned a few things but...</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S2: Well it was a new area so first I didn’t know where everything was so it was kind of confusing and a bit embarrassing to ask people where things were.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>There wasn’t really a map anywhere except for in some areas of the school.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>R: So like finding your way about then that was hard?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>S2: Yeah and it was just new people. Half the people which were there I had no interaction with before.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or something new in English or doing something new in IT, anything to do with something new he would get stressed on, something he’s not known or done before. Like venturing into the unknown really he don’t like. He likes to know stuff beforehand but anything that he’s taught, if anything is given new and even if it’s taught he will still worry, say ‘Oh, oh’ because he would have his own fixation on what is and what isn’t. P2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>He wasn’t very great at change, I’m trying to think back to when he was younger, collapsing the timetable, doing cross curricula days; he liked his routine. SP2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>New clothes and also going into different classrooms and stuff like that. Oh yeah definitely on that. P2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Well I’ve been through many different schools before high school...It was a worrying each time I went into one. S3</td>
<td></td>
</tr>
</tbody>
</table>
If things weren’t running to the normal schedule any changes in the rooms where he was at or the timetable without warning. P3a

The main thing that is a problem is when things I’m used to change. Like the way exam time was a little bit worrying because I came off from going to school, it was on the odd day that I was going back in which was a little bit worrying because I thought I wouldn’t wake up by the right time and things like that and miss the exam. S3

where they had funny days where it was, I forgot what they call the days but where they have a project to do and those were a bit of a nightmare for him. SP3

the transition times between classes where the classes are walking and there’s nobody in his way, a lot of perhaps the teasing and the bargy-bargy goes on and moving of the bags, lining up things are said, which is where he found, you know most of the time he found particularly difficult. SP3

P3a: Change, change very much.
P3b: Yeah anything that’s slightly outside routine throws him at times.
R: Okay and he’ll get stressed about that?
P3b: Yeah. I mean that’s why we always used to have the biggest problems at the start of the new school year where he had different teachers and different classroom and he had to deal with different people.

changes and sort of moving from year group to the next group, the transitions, changing a teacher, who was going to be his form teacher. SP3

he’d had a dreadful transition to the school. SP3

Well it’s usually mainly teachers that are supply teachers that they don’t understand I prefer to be left alone rather than tend to be pulled into the group. S3

She becomes anxious if there are changes and of course in a high school you do get room changes, you get teacher changes, you get subject changes. SP4

Trying, like, new things when I’m not sure of them. S4

Changes such as moving desks or a new person in her class can make her very anxious. Pen picture for S4

‘Change’, definitely. ‘Transitions’, yes. That can be the transition from primary to high school, that can be transitions between lessons, transitions between lessons and lunchtime. P4

She will worry about little...not knowing which room she might be in if there’s a room change or if there’s a supply teacher, not knowing them. Yeah, if it’s a new teacher or if it’s a change last minute or any changes to her routine. P4

OT: Unstructured time

• Unstructured time and lessons

SP1a: His issues are often not – I think we might have already said this – but not around class time, it’s downtime.
SP1b: It’s downtime, yeah.
SP1a: Unsupervised time.

Getting ready in the morning, getting in time to catch the bus, getting his things in order in the bag, the school bag and things like that so these are the things that he worries about. The same thing when he leaves school, there’s ample time too, he can catch the bus but one of the teachers wanted them to finish their work on the last lesson and he getting, oh upright and frustrated and then gets stressed out. P1
Like what's going to happen next, all sorts. S1

playtimes sort of, any time there wasn’t a sort of set thing he was supposed to be doing, he didn’t really enjoy those times. He didn’t know what he was supposed to be doing. P3a

when there wasn’t routine. SP3

And unstructured times such as if you had an unstructured lessons so the music lessons he found particularly difficult where they had to work in groups and design their own band and make their own music. SP3

Due to the severity of her difficulties she continues to require a high level of support during structured and unstructured times to help her access the curriculum and reduce anxiety in school
S4 – EP report

P4: Being late.
R: Okay. Other people or her?
P4: Herself.
R: Okay.
P4: Yeah. She’s… At the moment we struggle with the taxi not coming on time and that makes her very worried and if the taxi’s late to pick her up as well that makes her very anxious.

OT: Environmental and sensory factors

Yeah when he first started we were told that he was sensitive to smells and it would have an impact on his behaviour. Well food technology rooms are just here so they’re cooking, if the door’s open you would smell it easily and he was quite agitated I think when they were doing something with apples. SP1a

The fire alarm is very, very distracting and distressing for him. SP1a

again unstructured times so it can be a problem…because of the hustle and bustle and everyone doing the way. P1

It is because he got bumped in the corridor, which is normal. SP1a.

Also if the room was too hot or too stuffy or the lighting was faint and the more anxious he was the less he could tolerate all those sort of things as well. SP3

SP3: The lack of tolerance of maybe the lights or the heat, the warmth in a room or the buzzing of the computers, which I couldn’t hear, that there was computers in the room that we used to use. I couldn’t hear them but he would some days say that he didn’t like being in the room because of the noise of it.
R: Did that seem to be more when he was anxious or did it seem to be the same?
SP3: No when he’s not stressed he could cope with it but when he was stressed it would become deafening to him.

Queuing up and going through the crowded corridors at school was quite difficult. P3a

if the bus was delayed or things like that they would, as he said, herd everyone into the hall and he didn’t want to be there. P3a

She doesn’t like to be touched. If somebody is brushing past her, if it’s a busy place, she doesn’t like that. P4

P4: Toilets are a big worry for her as well.
R: In what way?
P4: She won’t use toilets unless she’s prompted but school have been very good with that and she has got a designated toilet – a staff toilet – that she can use on her own.
R: Right. Is it because of who’s in the toilets, what they’re like, or cleanliness or…?
P4: It’s the smell, it’s whether or not they’ve been flushed, it’s selecting which toilet to use, it’s if somebody else is in there as well. There’s lots of factors for toileting.

She doesn’t like to be walking down the corridors when there’s a lot of people on it. SP4

<table>
<thead>
<tr>
<th>OT: Academic pressures and expectations</th>
<th>Well I mean for example task and homework, this is a big issue so he worries and gets frustrated. P1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>He becomes frustrated when he is not able to achieve things. Specialist teacher report for S1</td>
</tr>
<tr>
<td></td>
<td>I don’t think he wanted the other boys to ever think that he couldn’t do something so I suppose there was some level of--, I’m just trying to think like with tests and things he always wanted to be up there at the top, he wouldn’t have been happy with the others seeing him having not achieved something. SP2</td>
</tr>
<tr>
<td></td>
<td>not reaching potential will make him feel low and worry which will then link to feeling depressed. P2</td>
</tr>
<tr>
<td></td>
<td>he would vaguely tell me what was going on and he used to do it via homework issues because he used homework and not wanting to do it because he would say ‘I’m useless, I’m thick, I’m no good’ all the time. P2</td>
</tr>
<tr>
<td></td>
<td>whereas some of his friends were probably a bit brighter or could do a bit more than he could and I think he found that very difficult as well. SP3</td>
</tr>
<tr>
<td></td>
<td>he’d worry about what was actually expected of him to produce or to do particularly, he couldn’t revise, he said that if he tried to revise he got confused and so that he was better off just relying on his knowledge but sort of the expectations that he would do well. SP3</td>
</tr>
<tr>
<td></td>
<td>Ryan got himself very stressed and agitated over the exams last week and still not quite himself. Liaison notes for S3</td>
</tr>
<tr>
<td></td>
<td>There’s a lot of talk in school about their target levels and reaching your target levels and Megan gets very anxious if she thinks she’s not reaching her target levels. SP4</td>
</tr>
<tr>
<td></td>
<td>Maths, I think, tends to cause her more anxieties than others, possibly because she doesn’t like to get things wrong…and Megan finds that extremely difficult to cope with. SP4</td>
</tr>
<tr>
<td></td>
<td>Exams are a big worry for her because she’s a perfectionist. It has to be right. P4</td>
</tr>
<tr>
<td></td>
<td>Megan’s levels of anxiety are still an ongoing concern; she will become anxious about work, in school and homework, and she worries a bit about making mistakes. P4 report for annual review</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OT: Negative peer behaviour</th>
<th>And feeling excluded or bullying by other students. Yeah I mean he always tell us but the thing is that he knows that’s happening…he thinks it’s important to identify it, that he shouldn’t make himself vulnerable for teasing or not so he feels it but he can’t do something about it. P1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I actually witnessed peer ‘teasing’ myself whilst walking down a corridor with Ali (which I subsequently reported). Whereby a peer asked for a hug (something Ali is inclined to do) in a mocking voice then laughed after Ali walked by. Ali walked faster, kept looking behind him or down to the floor in an anxious manner.</td>
</tr>
</tbody>
</table>
Research diary re S1

S1: the kids are just bad to me.
R: Bad to you. What do you mean?
S1: Bullying or swearing.
R: Oh dear that doesn’t sound good, what would they do?
S1: They swear and like bully me.
R: When you say bullying can you tell me any of the things that might happen?
S1: …just push me around or something.

It’s because why are they bullying me? I’ll get hurt one day. S1

I was never included in anything and the times which I was included they never really wanted to talk to me….I just got used to it and it was like saddening for me and for them they were just thinking that I was a bit of a burden to them. S2

He also got probably some teasing from the other boys because they were probably jealous of his ability in maths. He was very, very good, very quick, very quick to understand things that were happening particularly with numbers. He’s been on the maths challenge team and things like that so in a way he was probably identified as a bit of a geek by the others.

R: And was he conscious of that do you think?
SP2: Not all the time but there were times when the comments did get through to him and he didn’t feel comfortable with it and that’s when he would be more stressed.

All the people from the year which I joined in they all came from similar schools like X and other places similar to that and they all had like a code in a way which if you acted like that people would acknowledge you as like quite good and I wasn’t like that at all, I was quite reclusive, didn’t talk much with people, didn’t have much social skills to them and they just didn’t really pick me up at points, just ignored me or bullied me in some cases. S2

Well one incident when he went to his first school disco someone actually filmed him at the disco doing something and they put it to YouTube. P2

no one could really understand me and when I was talking they couldn’t really understand at any point whatsoever because when I talked it’s usually quite complex and intuitive but they were all like relaxed and stupid in a way, using basic language and things like that. S2

S3: When people have tried bullying me.
R: So people at school? what sort of things would they have done?
S3: Well it can go from there’s as petty as name calling to as worse as getting things thrown at me.

That he’d have nobody to sit next to, that people would pretend to be his friend and then be nasty, he was subject to bullying and people name calling and teasing because he reacted and the people who were worried about being bullied and teased would bully him as there’s a very definite pecking order in an all boy’s school and he was the bottom of the list in that class. SP3

Ryan is finding drama difficult. No-one wants to interact with him. Generally a bit down. Liaison notes for S3

They wouldn’t let him join in with anything, they told him he was weird and a freak were the worst ones at the time. They called him gay. Any name they could think of to exclude him. P3a
So that people would lose his possessions was a big, big worry for him, that if somebody took something and hid it that he wouldn’t get it back and then he’d have to explain to his mum why he’d lost it and he’d become… so even if it hadn’t happened he would be worried the whole time that it had or if he’d put his bag somewhere or if got moved you know those things would cause his stress levels to go really, really high.  

He’d back off physically, he would step backwards wouldn’t he? Trying to get away… SP1a

Parent: Seeing somebody, for example, it’s very common, you go to the supermarket, you see somebody, one of his teachers’ cars parked so he get anxious, he doesn’t want to see or him because he has to say hello and so many times…He keep worrying, he may go in supermarket come out and sit in the car.  

R: So he finds that very difficult?  
Parent: Yeah and if he find it, if he get, come across them while he is with us he kind of hide, you know, or something like that.  
R: and would that be for teachers and pupils or just teachers?  
Parent: Teachers mostly, pupils he doesn’t seem to be that bothered really and maybe his condition, I don’t know, but the teachers seem to be more of a worry to him. I mean the children also he kind of try to avoid them if he can but he feel that the teacher’s going to specifically say hello to him as they normally do and become friendly and behave, although they are you know quite reasonable, He doesn’t like that experience.

SP1a: His drama’s quite an issue for him really isn’t it?  
SP1b: Yeah drama is an issue for him.  
SP1a: Because it involves socialising with others.  
SP1b: ’Cause also it’s quite unstructured is drama.  
R: And also expressing yourself and, yeah.  
SP1b: Yes so drama can be an issue.  

like always confused about things and trying to understand. Like locked up in a cage and stuff like that.  

Certainly as an individual with no apparent friends that was one of the problems he had in year 7 was his inability to make friends. SP2

The most difficult thing was getting him to do things that he didn’t see the point of, you know? SP2

The social and peer relationships. The nurture group was never an easy ride if you like in that it was constantly, even within that group, patching and repairing. They’d fall out, somebody would have done something or said something that upset somebody within the group so the lady that was running the group was constantly repairing friendships within the group and leading them through how to make friends and keep friends. SP2

he didn’t understand the other kids and they didn’t understand him. P3a

R: can you think of any of the main things that seem to make him worry or stressed or anxious?  
P3a: Obviously going into groups.  
P3b: Social events.  
P3a: Social events.  
P3b: Mixers at school, end of the year gatherings where all the people meet up because it’s the final year, he avoided going to them because he wouldn’t interact in that.

Trying to make friends. S3

The social skills it’s mainly been whatever the SENs have been dealing with and he’s only managed it with the group, like the rest of the SEN group, not outside.
Within the group they’ve done brilliantly but anyone outside the group it’s almost like he says they don’t understand his language. P3a

Yeah and become very depressed about and it very, very, very anxious...very anxious to please because he didn’t want to be. if he didn’t get on then it might, you know they might sort of push him out or he would take a sort of, not so much friendship but with adults you know that that wanting to please and going over the top to try and do that because he was anxious that you were going, not going to like him or not want him again you know. SP3.

he puts a lot of expectations on as in socially. I think that’s part of the reason why he struggles so much because he’s got that many thoughts of what he should be doing and he can’t cope. P3a

Other children were a big part of her worries; that they weren’t doing what the teacher would say they should do and she would worry endlessly about what other children were doing...Yeah, she worries that they’re not following the rules because then she questions whether she’s got the rule correct herself... and then she worries “Are they doing it wrong or am I doing it wrong?” P4

She can get quite anxious when she’s asked to work in a group where it’s not of her choosing. She likes to work with her friends. SP4

Social difficulties are always difficult for her. She worries about what to talk about and how to answer people...she does struggle with what people mean. You know, like, especially girls: “I’m never playing with you again.” She takes that very literally and then she questions “Why would they say that?” And so she does struggle with things like that socially. P4

She is not able to cope with conflict and can become very anxious and upset when her friends fall out

S4 – specialist teacher report

**OT:** Negative thinking patterns
- Perfectionism
- Self blame
- Worry about making mistakes
- Pessimism

I think if he, for example the incident that happened in school. I'm sure they’ve talked to you and so on. He was eating and a bit of sauce in his food get on his shirt and he made a big scene about it at lunch time so they phoned me they’re saying he’s become anxious he said he’s going to, we shout at him at home because he’s wasted, his first time he’s wearing that shirt so they even phoned me. P1

…his thinking makes him, it makes him anxious. SP1a

gets frustrated when he cannot achieve - wanting perfection. IEP for S1

I’ve nipped in to get a game out the cupboard, there’s a little store room in there and the minute he sees me and he’ll go ‘Ooh! Is it something bad!? Is it something bad!? ’ and his face his horror and I’ve not even gone in there for him. So he’s stood there and he sees me like that he thinks I’ve come for him because he’s in trouble. SP1b

Still hasn’t managed to put pictures on his art book as he is worried about getting it wrong (has trouble with this kind of open task). Liaison notes for S2

all the things which I had about all the bad things that was just making me feel as if I was the reason why it was bad and that just made me pessimistic about everything I did. S2

It was all the time when I was in class just hypothesising about different things which I was like doing to see if that was like making people do stuff to me...yeah I was always thinking that it was something I was doing that was making them do it. S2

I’d be worrying about that because usually I’d feel like I wasn’t really committing to the class much, the times which I did commit I usually didn’t think that it actually helped with the class that much. S2

324
Yeah, usually I’d like think in my head that I could have done better and it would just like kept me for the rest of the clas
s.

Yeah as I say he was probably dwelling on things and incidents and he could come back to that a lot and when it was a negative thing well then that nobody in the class liked him. SP3

P3a: Yeah. It’s only recently that he’s been more positive because he got asked to do an essay at primary school about where will you be in ten years time and he handed the piece of paper to the teacher and he said ‘I don’t need to do this because in ten years time I’ll be dead’ and he was very, very down on himself, which is when we first got him referred to CAMHS.

P3b: He’s often said to you on a few occasions ‘I don’t know why you bother, I’m not worth it’

He felt he was different and he- why other children didn’t like him, why they picked on him that was something he dwelt on quite a lot. What was it about him that made the other people not like him and pick on him and him not to be able to have friends? SP3

R: What sort of things would he say then?

SP3: I think it was more he would say about the issues that were making-, you know ‘my life is dreadful because...’ rather than how it actually internalised and made him feel

Fears about the future I think for himself, the home security and not having any food, being taken into care I think is another one, being homeless and that losing his temper and hurting somebody because he knows, he was aware that that was something the he did. SP3

Worrying about getting things right. That’s always been a major thing. Worrying about… worrying about getting the right answer in, putting her…very reluctant to participate in case she got it wrong or everything always had to be right, so…and it would just be a build up. P4

also gets very anxious if she can see that others in the class can do something and she can’t do it, whereas in most cases it’s not that everybody can do it, it might be one or two can do it and quite a lot can’t, but she perceives that as “Everybody else can do it and I can’t.” SP4

P4: Missing school.

R: Okay, so if she’s sick or something like that?

P4: Yeah, she… Only 100 per cent attendance is acceptable so she’s had two occasions where she had to see her doctor in school time and that made her very worried that she wouldn’t get 100 per cent attendance.

She is very worried about making mistakes in school and seems unable to cope with getting things wrong. Specialist teacher report for S4

Exams are a big worry for her because she’s a perfectionist. It has to be right. P4

<table>
<thead>
<tr>
<th>OT:*Difficulty processing and managing feelings</th>
<th>R: And can you tell me when you feel worried, what does it feel like?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Build up and overload of thoughts and feelings</td>
<td>S1: I’m not sure.</td>
</tr>
<tr>
<td>• Difficulty understanding their own feelings</td>
<td>He becomes frustrated when he is not able to achieve things and when he is not able to communicate how he’s feeling. Specialist teacher report for S1</td>
</tr>
<tr>
<td>• Difficulty expressing worries and feelings</td>
<td>Ali lashed out. A boy has been pushing Ali in the toilets, taunts him and calls him rude names. On more than one occasion Ali has been punched, pinched and bruised by pupils. Letter from parent to school re S1.</td>
</tr>
</tbody>
</table>
Internalising feelings

R: Trying to understand and deal with the way you were feeling that was a worry for you so you were thinking about that a lot?
S2: Yeah. The more I thoughted (sic) about it the more I was worried. It was kind of like an endless loop of worrying.

all my feelings were there all the time and when it was the beginning of school it was all quite frantic, all the feelings, like different mood swings in classrooms.

S2

Yeah all the bad things that happened to me I just put them away and they were all building up to a point where I just couldn’t take any more. S2

I wouldn’t really know my son was worried because he wouldn’t know how to tell me he was worried. P2

Had a lot of difficulties explaining what the problems were. You could see there was a problem but he wasn’t very good at articulating. SP2

it’s an understanding of yourself isn’t it and he’s just not always been in tune with all his emotions as such. SP2

I don’t think he could probably distinguish much between what was the emotional and what was the anger, you know what was the sort of feeling of frustration and what was sort of the feeling that nobody understood him and his life was so awful. SP3

Ryan obviously struggled to express how anxiety made him feel. He could describe physical effects, but had difficulty in describing emotional feelings.

Research diary re student

understanding and managing his feelings, there are times when he doesn’t quite know what emotion he’s supposed to be showing. You don’t so much see it as an anxiety but he’s always conscious of it. P3a

With Ryan I think he repressed a lot of his emotions and things. SP3

S4: It’s just, like, loads of thoughts that, like, I don’t even remember because there’s so many at once (draws)
R: Okay, so there’s just lots...
S4: Yeah (draws).
R: ...bombarding you?
S4: Yeah. Just like...(draws)
R: All over. Right. I see, so lots of thoughts all just getting too much. Is that right?
Student: Yeah, a lot too much

R: Would she tell you that as well, that she was sad, or not?
P4: No, she couldn’t verbalise that.

OT: Home circumstances

• Worry about home circumstances

R: Are there any other things that used to make you feel anxious or even still do?
S2: It was how it would happen after school, what would happen at home and how I would interact with things which I do at school like at the time my mum was like really ill and acting all stressed because of all the things happening in the family and that was like putting forward until when I was at school.
R: You’d worry about that at school?
S2: Yeah and feelings that I’d have from family, that were kind of interlinked with conversations where I was always quite nervous and thinking about how at home it was all gloomy and how at school it was the same, there was no way for it to have actually stopped

Mum is very domineering and dominant and mum will very often say some quite strange things but also is very much on her own agenda and I’ve noticed Matt
has found her embarrassing and he’s not known how to handle that. Fortunately it's been in the privacy of this room and there's been myself and mum and perhaps one other adult and Matthew and I've seen Matthew afterwards and assured him that you know, 'Don't worry', I've just sort of said, 'Mums are always anxious about how you perform and what you're going to achieve, don't worry about it, we know what we're doing' and sort of put his fears to rest but you can see he is anxious about her approach and has found her quite embarrassing at times. SP2

### Recognising the signs and impact of anxiety

<table>
<thead>
<tr>
<th>OT: Physiological manifestations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 'Sleep difficulties and tiredness</td>
</tr>
<tr>
<td>• Nausea</td>
</tr>
<tr>
<td>• Nocturnal enuresis</td>
</tr>
<tr>
<td>• Altered eating habits</td>
</tr>
<tr>
<td>• Feel hot, perspire or go red</td>
</tr>
<tr>
<td>• Unusual internal feelings, aches and pains</td>
</tr>
<tr>
<td>• Shaky legs</td>
</tr>
<tr>
<td>• Rashes and changes in skin tone</td>
</tr>
<tr>
<td>• Muscle tension and stiffness</td>
</tr>
</tbody>
</table>

R: So sometimes you might have difficulty in sleeping?
S1: Yeah.
R: Yeah. Why is that?
S1: I just get worried.
R: So you're thinking about things?
S1: Yeah.

Well he goes red in the face, as I say he cries, he becomes sweaty P1

S1: Like oh I'm just getting, you know, I can't--. I'm really worried what's happening.
R: Yeah so when you're really worried, you touched your tummy there, does it feel funny in your tummy?
S1: Yeah.
R: Yeah? Like how, can you describe it to me?
S1: Just weird.
R: Is there anywhere else on this body that you feel things when you're worried? You can draw on it here if you want. So in your tummy, okay, thank you. Is there anywhere else? So all that bit here it can feel funny when you're worried.
S1: Yeah.
R: Okay is there anywhere else in this body that you feel things when you're worried?
S1: Around here, this area.
R: Okay on your legs.
S1: Yeah.
R: And how do your legs feel?
S1: Just a bit weird.
R: Okay. When you say weird could you describe that?
S1: Just shaky

R: And is there anywhere else on here that you feel like when you're worried, in your body?
S1: Here.
R: In your hands? Okay and what do your hands feel like when you're worried?
S1: Just worried.
R: Just worried, okay? Do they move or do they feel hot or cold or?
S1: They feel hot.
R: They feel hot, okay. So when you're worried your hands get a bit hot.
S1: Yeah.

Headache, 'Ma I've got a headache' he says, 'I've got a headache'. P1
He would say his tummy would hurt or I'm tired those are the main ones. P2

on some occasions he did bed wet when it got really bad. P2

Also another thing he used to do when he was anxious he would comfort eat and also he would only eat one particular thing in comfort eating and he would eat it all the time and when I would give him something of a change to eat he wouldn't eat it and he would only then drinks wise it would only be one particular drink and it used to be in like a sports bottle thing. P2

P3a: with school any time there’s anything major coming up he’ll get ill, physically nauseous.

S3: Well a lot of it is a pain there (indicated to his side)
R: A pain down your side?
S3: Yeah and then most of the time I get massive like shocks across (indicated up his arms).
R: Up your arms I think you’re saying.
S3: Most of my body.

He gets really bad stomach ache, dizziness and literally feels as if he’s going to be sick, very rare occasions he’s actually sick but Ryan never complains of being ill. The minute he has an exam it’s almost as if everything’s hit him at once. P3a

Yeah and sort of he would seem very, very tired sometimes, coming to school really completely washed out and tired and curl up. SP3

On one of the occasions his exams were one day and then the next day. He managed to get through it but it knocked him ill afterwards. It’s almost like he pushes himself to get through these bits and then just blur. P3a

He also reported that before an exam where everybody thought he was fine and not worried about an exam but that he was bed wetting. SP3

he was anxious...he'd tend to be very pale, very pinched in his face or very tight, all his muscles were very tensed and maybe pace around a bit and be very agitated. SP3

He would complain of aches and pains and sickness. He tends to get a lot of rashes and skin complaints so which would be worse, red blotches getting very itchy all over when he was anxious or upset about things as well. And really bad sort of itchy patches and discomfort, obviously eating would be something that would be affected by it as well. SP3

P3a: He’s always had trouble sleeping. He struggles to get to sleep, he has to have music on to go to sleep but even with that he struggles to go to sleep.
R: Does it seem to be worse when he is anxious?
P3a: Yeah. Sometimes he just doesn’t get to sleep and he’ll come down the next day bleary eyed and say ‘Oh I don’t feel good ‘cause I’ve not had any sleep’.

And, like, my hands go all, like, sticky. S4

Like, sometimes my hands stiffen up as well. Like, I won’t be able to hold a pen like this. S4

Sometimes my legs go all shaky and wobbly. S4

I sometimes get a headache … S4
I think the TA can recognise from the fact that she does start to fidget and fiddle quite a lot, SP4

R: Do you think you could describe and tell me, or maybe show me on here, what that feels like? Would you rather tell me or would you rather show me by drawing?
S4: Show you.
R: Okay. Well, you can draw it on there (body outline) what it might be like.
S4: (draws) like, I get butterflies.
R: Okay, I see in your picture like butterflies in your tummy?
S4: Yeah.

She would always say “I’ve got tummy ache” or “I feel sick.” …she always says she feels sick. P4

she does get very hot and the need to be outside. SP4

P4:…when she’s anxious, her eating and her sleeping.
R: Okay, in what ways?
P4: She’ll stop eating, she can’t sleep. She does sleep better now. She’s medicated for sleep but even with her medication if she’s extremely anxious then she will struggle to get to sleep and she’ll wake constantly through the night.

OT: Outward emotional expression
- Crying
- Sadness, upset or distressed
- Presented differently

And he will openly cry, very, very distressed. SP1a.

No just upset really, just physically upset. P1

quite agitated, visibly agitated. SP1a

you could see he was upset. You could see that he wasn’t happy. SP2

Even though I didn’t quite show it much of the time people knew that I was having different feelings about things just by how I was acting, my facial expressions, tone of voice etcetera. S2

and he would get teary for the least thing…that’s how he dealt with what was going on with tears. P2

he would cry sometimes and just, you know that his life was so awful and everything and I think the extremes obviously with a child with autism is extreme and he would be extremely sad. SP3

quite often tearful… and she’d just do like a silent crying where she’d just have tears but nothing else. P4

when she’s anxious and gets quite stressed and uptight. SP4.

OT: Difficulty controlling emotional responses
- Extremes of behaviour
- Easily angered or frustrated

SP1a: he can be walking, people are walking left and right, supposedly, on both sides of the corridor and Ali would just go down the middle maybe or he’d be on the left and if there are people in the way he’d just barrel through them…He might be bumped so he’s turned round and just grabbed the first thing whether it’s a girl in year 11’s hair, which was an example, and he’s pulling at it ferociously. We had it on the CCTV, you know this girl, your sort of height he pulled down to half height. It is because he got bumped in the corridor, which is normal.
Physical outbursts toward others

Outbursts of behaviour at home

SP1b: Because it was busy.
SP1a: And he didn't cope.
R: So did he go for her just sort of purposefully or just didn't know what to do?
SP1b: She were in the way.
SP1a: No he just went to the first thing around him…
SP1b: …he’s bothered about getting from here to here and pushing out the way anything that gets in his way.
SP1a: Yeah but what I mean is if he was anxious and somebody was causing him a problem…
SP1b: If he was anxious, yeah.
SP1a: …he’d shove them out the way.

Loses the plot, yeah. P1 / He becomes irrational. P1

Gets frustrated when he can’t keep up with the pace. TA comments in daily diary for S1

There’s been a few times where I’ve spiked out and just hit someone. Like once in drama club it was an activity where we were all following each other and everyone was trying to follow me to try and get me agitated I just literally pushed everyone out the way and just left the classroom. S2

I felt like it was everyone against me and it just made me frustrated and just spiked out. S2

P2: Yes. He would have like bad behaviour and reactions.
R: What sort of things would that be?
P2: He would just go from being all hyper one minute and then not the next.

And he worried, you know worried about things but didn’t have anybody to talk to about those issues and so bottled them up and then so when they did come out it was like an explosion and a complete melt down as opposed to sort of just having, sort of having regular predictable outbursts it was just quite unmeasurable and unpredictable really. SP3

and he was doing things like flipping whenever children tried to interact with him, shutting down completely in class, running out of class. SP3

he’d come in throw the bag in, you know aggression, sometimes anger and aggression would come out as an initial part of it….SP3

he would become very probably unable, shut down and be unable to discuss that with them but then consequently get very angry and feel unfair and he may come in and chuck his pencil case or throw his bag and stamp and then anger and emotion at the same time. SP3

Involved in an incident in music - hit another pupil when they tapped his hand to get attention. Liaison notes for S3

…could come across as when a teacher wanted to talk to him about it as very sullen whereas really he’d shut down and wasn’t able to talk to them, the implication for him was that the situation would escalate very quickly because of the fact that he couldn’t discuss what was the problem or what was happening or he wasn’t willing to and his need really just to get away and have that time to quieten down played against him, if you tried to sort of stop him then he could lash out at a member of staff or slam out the door and walk out so that sort of thing really. SP3

The only time anything really happens from me being worried is when it’s more of a violent situation and it’s usually me retaliating. S3

Well he’d lashed out at people, thrown things around, tossed chairs and tables, destructive really. SP3
A lot of it was at home. Only very occasionally it over spilt into school. She was very strict with herself about keeping it together in school and it would boil over at home a lot, but occasionally it would spill over when she couldn’t control it. P4

While her behaviour in school is generally very controlled, difficulties in school or unresolved worries can cause very extreme behaviours at home. Pen picture for S4

<table>
<thead>
<tr>
<th>OT: Impact upon emotional wellbeing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Low mood</td>
</tr>
<tr>
<td>• Signs of depression</td>
</tr>
<tr>
<td>• Feeling unable to cope</td>
</tr>
</tbody>
</table>

| I can’t cope with this anymore, oh I can’t. S1 |
| Said it was a ‘black week’. TA comments in daily diary for S1 |
| There was some times where I just fully broke down. S2 |
| He would become quite frequently withdrawn but at the period of anxiety which would link to severe emotional and mental health issues. P2 |
| At the time in school when it was like in the down part, my face was like always gloomy instead of like joyful. S2 |
| He seemed at sometimes very, very depressed, not happy with his life at all to the extent that I was quite worried… the school and myself were very, very concerned about his wellbeing at that time. SP3 |
| Ryan very down today and seems on downward spiral. He also has zero tolerance and upset X (another student) a few times in session. Liaison notes for S3 |
| On several occasions he has attended games club at lunch time and said he is very unhappy at the moment (he would not elaborate). Liaison notes for S3 |

<table>
<thead>
<tr>
<th>OT: Poor self perception</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Poor self confidence</td>
</tr>
<tr>
<td>• Low self esteem</td>
</tr>
<tr>
<td>• Negative self concept</td>
</tr>
</tbody>
</table>

| His self esteem obviously is affected sometimes he says ‘Nobody like me’ so but not quite often but it does happen, it does happen yeah. P1 |
| Seems to have a very negative self image and self blame for his difficulties. E.g. he needs to be nicer. This could be a reflection of the attitude and approach of parents and staff as seeing the problems as very ‘within child’ Research diary re S1 |
| because he would say ‘I’m useless, I’m thick, I’m no good’ all the time and that was normally at the time when he was experiencing problems and even though I would reassure him ‘No you’re not thick, stupid’ blah-blah-blah he would be saying that as him being negative and down about something. P2 |
| Because he would think he was stupid which will then lead to low self esteem. P2 |
| Just from what he would say that he was worthless, that he was no good at anything, that nobody liked him. SP3 |
| because he’s bright he was aware that he was different but not aware why he was different, felt he didn’t fit in, that things weren’t the same for him, that he was a bit of a ‘freak’ which was, you know, and that, the way he presented to the other people that he didn’t, couldn’t make friends that they didn’t, nobody understood him I think was one of his main issues. SP3 |
| feeling like he was odd, didn’t fit in, was worthless. P3a |
| Megan is a very able pupil but lacks confidence in her ability and worries unduly about making mistakes. IEP for S4 |
She gets very anxious if she thinks she’s getting anything wrong at all and does spend a lot of time checking with her TA before she answers questions, before she’ll put her hand up, before she’ll put pen to paper sometimes. SP4

Megan can be very reliant on one to one support and lacks the confidence to proceed without reassurance and very structured guidance. Pen picture for S4

**OT: Impact upon social interaction**

- Increased difficulty with social relationships
- Become uncommunicative
- Become more withdrawn
- Hiding away
- *Repetitive talk when anxious*
- Difficulty with reciprocal conversation
- Disengagement in lessons and group activities

And changes the subject sometimes and if you’re maybe having a discussion about something and he doesn’t want to get into conversation and he’ll go ‘And anyway, what did you do at the weekend?’ SP1b

What was the impact of his anxiety?...Again is this our perception...right because it would create problems with social and peer relationships but he might not perceive that. SP1a

he kind of hide, you know, or something like that. P1

he pretend that he’s not seen them. P1

P1: …and he keep asking ‘Are we going to catch the bus? Are we going to get there on time?’

R: So repetitive questioning?

Parent: Repetitive questioning, yes.

He would be talking to a member of staff in a sort of agitated way ‘Where, where are we going? What, what?’ SP1a

About missing the bus ‘I’m going to miss the bus! I’m going to miss the bus! I’m going to miss the bus!’ SP1b

Key quotes

He would be talking to a member of staff in a sort of agitated way ‘Where, where are we going? What, what?’ SP1a

Yeah. If you’d see me in crowds everyone would be like talking and I’d just be there silenced and in a sense of doing nothing...It wouldn’t literally be away from people it would be just me thinking about everything else without actually focusing on what’s around me. S2

Being more withdrawn, in certain lessons perhaps not getting involved in, you know subjects like perhaps history or geography. SP2

Well when I was anxious usually people would know that I was anxious because I would usually not talk, I wouldn’t really look at anything just look at the floor and things like that. S2

Just lack of communication, just very withdrawn and not communicating with you. SP2

He would become quite frequently withdrawn. P2

I wasn’t very social so when I was in activities which required me to actually get on with people I wasn’t really the type of person to help. Usually in a group I would just sit there, whenever people asked me I’d just give it them and just pushed them off away. S2

Well one incident when he went to his first school disco someone actually filmed him at the disco doing something and they put it to You Tube ever since then he went a bit closed and very wary about all the pupils. They’ve actually kind of lessened but sadly because he became wary of the other pupils he didn’t make too many friends and when he does form friendships he is a lot more careful on how he does that. P2
when he was stressed he wouldn’t want to engage in anything or any sort of contact, any eye contact, there was sort of no body language and no verbal contact… SP3

Refused to work with other pupils as he wasn’t happy with how they were preparing for the group exercise. Liaison notes for S3

I think the social relationships and difficulties would get worse when he was anxious about things. If something had worried him at home or something had worried him outside the school or he felt something had been unfair in a lesson then if he went to the SEN social group at lunchtime then he could possibly be aggressive or dismissive or wouldn’t want them to sit next to him, he wanted a big space around him so that if somebody did sit next to him he could…so that sort of where it impacted on, you know somebody who was trying to be friendly to him he could then be quite aggressive because of something that had happened earlier on that he was anxious about. SP3

…what’s right and wrong and what you can and can’t do because he’s not socially interactive to the point where he knew this is what you should be doing. P3a

because he could snap at people, the ones that he did get on with, over nothing. Be very, very, not very tolerant of them…SP3

When he gets back from his exam he just really doesn’t--. He doesn’t come out of his room. P3a

we could see him do certain things, curl up in a ball, he’d hide in his bedroom. P3a

He’d just be very, very tense, very withdrawn, would come into a room and sit in a corner away from everybody else, quite often actually on the floor by my feet sort of and away, turn his head away, bury his head in his coat or just curl up into a sort of a foetal type position. SP3

She’d just worry and not talk about things and withdraw. P4

She would become quiet… but she’d become mute where she just couldn’t speak. P4

and she turns off as well in the lesson SP4

P4: …withdrawing and needing to hide away. She’d need to make herself small.
R: Okay. Could you describe that to me? What would she do?
P4: She’d go into a foetal position and she’d try and cram herself into a very small place – under a table, under a bed – somewhere where she was very confined and we found through therapies that bear hugs helped.

P4: Yeah, she’ll repeat things or she’ll talk about things that just aren’t relevant.
R: More when she’s anxious than at other times or all the time?
P4: Yeah, anxious.
R: Okay. Are there any particular examples of things?
P4: She’ll just try and change the subject. So, for instance, if she’s worried about going to the toilet or something she’ll start talking about “When we went to Spain when I was three…”

OT: Increased repetitive and autistic behaviours
- More reliance on routine and

he’s looking at the clock all the time, he’s lost the concentration on whatever’s in front of him and that’s a difficult time. SP1a

Re the fire alarm:
ritualistic behaviour  
- Pacing  
- Sensory responses  
- Scratching and picking hands  
- Hoarding items  
- More reliance upon interests  
- Fidgeting or fiddling

I remember one time that it was raining very hard and there might have been --, I don't think there was anyone on the yard at all except for Ali running round in circles like an aeroplane with his arms out. Obviously he loved it but I went to get him because this is morning break so it’s quarter past eleven, he’s got the rest of the day soaked through if he stayed out there and people are looking at him thinking ‘What on earth are you doing?’ I imagine but he wasn’t aware of that at all. SP1a.

…he does do this marching up and down and like looking for, like as if he was looking for something. If he was over by the door he’d be fiddling with the corner of a box or something. He might be listening to you but he wouldn’t be looking. SP1a

He’ll go outside in the yard, and they line up in their houses, well he can’t line up in the house line because he needs to walk up and down the house line with his hands on his ears. SP1b

Fidgeting, very much, very fidgety. SP1b

he kind of keep scratching...you see him picking his, picking his.. once he scratch his hand and it’s just seems a superficial one but he kept on picking on it when he is anxious until he’s left small marks and also the school have been telling him not to pick on them so every time he does, he does his homework or get into situation when he’s anxious he tend to pick on them other than other normal children when they pick on things when they’ve got nothing else to do. P1

if he was agitated he’d be like picking at the corner of a box behind you or something like that but he would walk up and down. SP1a.

also he would have little rituals as well going on too like he had a little ritual of getting up and going to bed as well. P2

He’ll get very obsessed with yugioh. Head full of facts and spending lots of his free time researching all the different cards. Liaison notes for S2

I’d fidget in class all the time. S2

pace around a bit and be very agitated. SP3

Well he’s always had the thing with playing with things, his hand has always got to be engaged which is why they allow him with the blue tac because he’s still concentrating on what’s being done but his hands have always got to be... He’s always been fidgety hasn’t he? P3b

little bits, he sees little bits of specks everywhere and that can be distracting. I think when he’s anxious that’s worse and so he can’t focus because he’s trying to pick up all the little bits of fluff from everywhere. SP3

rocking, probably a little bit of rocking and clicking fingers, fidgety things. SP3

SP3: He picked things up, his pockets, I don’t think he trusted people or anything with his possessions, he’d hoard, a real hoarder, and he’d keep them in the inner pocket of his blazer and in the lining of things.

R: What sort of things then?
SP3: Little bits and pieces that he might have picked up. He would pick up an unusual shaped stone perhaps or a bit of blue tack, something that he’d found somewhere, a bit of silvery thing, he picked up one day a blade which obviously then got him into trouble because he then was showing somebody and flashing it around. He might have notes and bits of paper or his drawings which he wanted to keep safe from anybody else, those sort of things would be in so the pockets were always bulging. That would be the more anxious the more things there would be.
P4: She would become more fixated, more routine... Now her big fixation is the Simpsons. She's watched every episode of every season. Tidiness has always been an issue for her – neatness and tidiness.

R: Are these sorts of things, things she'll do more when she's worried?

P4: Yeah, it becomes much more. At the moment it's absolutely fine. She just has to watch a couple of episodes before she goes to bed. If she's very anxious it's hard. She wants to do it 24 hours a day, but, like I say, at the moment she's doing very well. So a couple of episodes at night just fulfills that and, like I say, on anxious days she'll need to do it all day, every day.

OT: Sub-optimal performance
- Not working to full potential
- Lack of independent decision making
- Reluctance to participate in class
- Difficulty completing homework
- Impact upon concentration and attention
- Increased disorganisation

We would say that he's not reaching his potential at school. SP1a

Gets frustrated when he can't keep up with the pace. TA comments in daily diary for S1

He needs someone sat next to him when he is doing homework as he gets so bogged down in detail e.g. measuring boxes to the millimetre when doing a poster to ensure they are the same size. Went through 100 pictures rather than just selecting one as he has difficulty making a decision and needs an adult to help him select one quickly, he kept selecting and erasing them over and over again. Liaison notes for S2

Still hasn't managed to put pictures on his art book as he is worried about getting it wrong (has trouble with this kind of open task). Liaison notes for S2

He had problems with attention and concentration, if he was in an anxious state then that's what would have been impacted SP2

I couldn't focus in class, I wasn't getting homeworks done, not good. It was just generally bad. S2

Thinking back to the year 7 and he was very disorganised. If he was stressed the disorganisation became greater. SP2

Quite often or he wasn't concentrating he was so involved with the social issues within the class or anxieties that he wasn't taking in what was going on SP3

Yeah within the lesson he would be sort of huddled into himself really within the lesson and not contribute anything to the lesson. SP3

Where he wasn't able to communicate himself why that homework hadn't been done or why he was so anxious about something, doing a presentation, which a lot of the time would come across as him just being sullen and refusing as opposed to being very anxious about it. SP3

Poor organizational skills noted from liaison notes. I cannot assume that these link to the anxiety, but they do seem to cause problems with doing homework which does in turn lead to anxiety. Research diary re S3

She needs help with preparing for the lesson. She needs to be able to look to her one-to-one to get the nod to answer the question. She needs to check her answer before she gives it and... not that she needs help with the work. P4

It obviously will affect her ability to work to the... to work at the level that she is able to work at... because although she's doing incredibly well, if she didn't have the anxieties I suspect she possibly would be doing even better. SP4

Very reluctant to participate in case she got it wrong. P4

She works quietly with her TA but is reluctant to contribute in front of the others. Specialist teacher report for S4

She gets very anxious if she thinks she's getting anything wrong at all and does spend a lot of time checking with her TA before she answers questions, before she'll put her hand up, before she'll put pen to paper sometimes. SP4
### OT: Risk of lowered attendance and exclusion

- Reluctance to attend school
- Returning home when anxious
- At risk of exclusion

We had a couple of days, not protracted periods of time but there were days when he refused to come to school. Mum would ring and explain that he was stressed or something had happened and he didn’t feel he could come into school. SP2

I mean school refusal, in the early days he would try and avoid going to school because of things but now with structures put in place...P3b

Ryan would very well, would probably have been kicked out. P3b

<table>
<thead>
<tr>
<th>Perceived effective actions and strategies to address the anxiety</th>
</tr>
</thead>
</table>

**OT: Well planned transition to secondary school**

- Tours of the school at quiet times
- Liaison with primary schools and parents
- Extra familiarisation visits before transition

First of all he had a pre-visit with school on his own with his teacher from the primary school. SP1a

We take them on a tour. SP1a

Right at the beginning of the year, in year six into seven, transition, he was one of the students that I drew the staff’s attention to on the inset day. SP1a

the worries were presented to us by primary school so they had existed in primary. We had transition meetings for him, they gave us a lot of pre-entry information. SP2

Oh yes and the worries were presented to us by primary school so they had existed in primary. We had transition meetings for him, they gave us a lot of pre-entry information. SP2

and, like, some subjects like PE and Science I wasn’t sure of but on sampling day they made sure that my form did them two subjects. S1

So I did spend quite a lot of time at the primary school before she started and heard an awful lot about her anxieties, which seemed to be very great in the primary situation. So what we put in place before she started were lots of meetings with mum and Megan into school during the summer term of year six – the first half of the summer term. So we had lots of visits where she came and just had a look round school with mum, had a wander. She came with her TA from primary school and spent a lesson with the current year eights on a number of occasions. So we put her into an English lesson and into a maths lesson so that she could just get a taste of what high school life was like. SP4

Yeah. Going to the school all them times before everybody else and they’d take her at quiet times. They take her around the school while everybody else was in lessons. P4

So far Megan has coped very well with her transition to High School. She benefited from a very carefully planned and implemented transition plan to ensure that all her worries were addressed before the school holidays. Specialist teacher report for S4

TA came to the primary school with me for her year six review meeting and she met her then. We also put in place the MOTH – the Moving onto High School – which a transition programme that we’ve used for the last couple of years and that goes on in the second half of the summer term and we did five weeks on a Thursday afternoon. So for two and half hours we had six pupils, not always special needs, a couple of them were just vulnerable pupils, coming from primary schools totally on their own who we felt would struggle when they got here and during that time...SP4

Yeah. Then during the transition the old one-to-one and the new one-to-one had lots of consultations. They did lots of note making between themselves to make...so that she passed on all the information and the one-to-one spent time with Megan before she went. They spent time with me, so there was a lot of information sharing. Yeah and that was probably the biggest key and they got to know her beforehand and they had all the information of what to look for – the signs – from me and the old one-to-one and it worked. P4
**OT:** Structure, planning and organisational support
- Clear structure, routine and predictability
- Use of differentiated planners and diaries
- Daily/weekly planning and guidance for change
- Support with planning and reviewing homework

I didn’t mention to you before, the TA will take him. It’s Monday morning first thing, the TA will go down and they’ll get his planner and he’ll come out and he’ll have a few minutes with that TA to set him up for the week. Are you up to date with your homework? You’ve not got your homework in? Right what can we do to help you get it--? When is it due? You can imagine the sort of things. Is there anything you’re worried about this week? Let’s have a look at your planner. What’s coming up this week all that. SP1b

Well it’s like we said he doesn’t like change. So what things seem to help with his anxieties? Structure and routine. SP1a

S1: Do you want to see my planner?
R: Yes please. Actually I’m going to leave that on while you show me your planner.
S1: There you go.
R: Great, thank you, and is this all your lessons?
S1: Yeah.
R: And who writes in this, is it just you or is it other people?
S1: I think me and sometimes the form tutor. It’s good so I can know what happens.

The one thing that does help is structure and routine. P2

We had some TAs who supported him, not a lot in class but it was more to support his organisation...he did need some support to help him to make sure that he then wasn’t in trouble for not doing homework, he wasn’t in trouble for being in the wrong place at the wrong time, all those sort of things. SP2

We have the school planners, which are very difficult for ASD children to manage because they’re a bit of a blank page really and they have to organise themselves through that planner so we created our own special planners. Some are based around behaviours, some are based around homework and organisation and Matt used the homework organisation one so if they’re on that particular planner it’s the TA or the teacher’s job to record the homework it’s not Matt’ job so they hand that in, the teacher will record the homework so that it’s legible and there’s some proper instructions so at home if they have support at home with homework, mum/dad whoever has got some idea of what they’re supposed to be doing. There’s also much clearer tick boxes for when they’re going to do it, when they’ve done it and when they’ve got to hand it in. It’s like a structure for the organisation so yes he used one of those. SP2

Definitely structure and routine. P3a

We put in place a lunchtime safe place for him to go, a games club where he could come and where it was staff manned and there were games so it was giving him something to do in the unstructured times. SP3

Even if it was helping him with his homework that he hadn’t got done, hadn’t got handed in. SP3

The structure and routine helped...the more structure you could give him the better really. SP3

Early warnings. Being told about things before they happen, the earlier the better but not just telling him the once, you have to sort of almost drum it into his head. P3a

The lunchtime clubs. I don’t suppose it’s really a strategy but the SENCo team run a club every lunchtime so that it takes away the unstructured times and she has a choice of what she wants to do. She doesn’t have to go to them but she knows it’s always there as a backup. She knows she can always go to that room at any time in the day. P4
Structure and routine – I think that’s the biggest thing with Megan, is the fact that every morning she knows exactly what’s going to happen on that day and I think without that… SP4

R: You chose ‘times when nothing was planned’. So is that something that’s been hard for you in the past? At your old school or at your new school?
S4: At my old school ‘cause, like, at high school I have timetables for my planner and, like, I know where to go at each time

Her homework diary’s been great for her. P4

<table>
<thead>
<tr>
<th>OT: Adaptations in lessons</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Printed class notes and instructions</td>
</tr>
<tr>
<td>• Adapting lessons to take into account specific needs</td>
</tr>
</tbody>
</table>
| I’ll tell you what we do do that he sometimes writes slowly and the instructions’ll be put on the board and he hasn’t got enough time to write them down so his teaching assistant, especially in maths, uses a little white board and she writes down what they have to do so when it’s rubbed off the board we don’t have all the panic. SP1b

They were briefed about how Asperger’s actually works and they changed their ways of teaching. S2

S2: Yeah. The teachers started to talk more in our language instead of like complex language.
R: What’s ‘our’ language, what do you mean by that?
S2: Things that teenagers would be able to understand not like words which we wouldn’t have learnt yet and like they spoke in different terms that we’d understand like their behaviours they were more relaxed and chilled out when they were talking. Like beforehand they were all strict and straight to the point but now it’s more relaxed and talking like a teenager in a way.
changes from it being just put things on board and we have to copy it down and that’s changed to activities instead. S2

gradually helping him to take more responsibility for his own organisation. SP2

Yes I think and again it’s yes and it’s repetitive learning of strategies to do with organisation and to do with social skills, you don’t just teach them and expect them to learn it it’s repeating it and being prepared to go over it again and again and again and no it’s not that we told you last week or last month and it’s happened again, that’s okay, it’s just you need a reminder. SP2

S2: Yeah like if you got a question right they would develop it and say how it was truly right.
R: They’d give you feedback?
S2: Mm and even if it was bad they would give us ways to help us get better.

Adaptations (sic). i.e. giving him other ways of communicating i.e. the internet and so on. P3a

the PE was adapted so that he didn’t necessarily have to do the contact sports, there was a TA appointed I think in his PE lessons, games lessons who could take a small group and do skills so that he could manage it at his level. SP3

Megan needs personalised instructions. This is more as a reassurance than because she doesn’t listen. Pen picture for S4

Megan would benefit from printed class notes to help reduce anxiety. IEP for S4

<table>
<thead>
<tr>
<th>OT: A safe space</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A quiet place to go</td>
</tr>
<tr>
<td>• Taking a break from class</td>
</tr>
<tr>
<td>S1: I get to my room or somewhere.</td>
</tr>
<tr>
<td>R: To your room when you’re at home, is there anywhere at school that you go?</td>
</tr>
<tr>
<td>S1: To the LSE.</td>
</tr>
</tbody>
</table>
A safe place with adult support at unstructured times

R: To the LSE, so that’s the room where Miss X (TA) and Mr X (SENCo) are.
S1: Yeah.
R: Yeah okay. So does that help going to that room?
S1: Yep.

But I think really if he’s agitated or anxious in class we’d bring him away from that situation to settle, refocus and he may either go back in but more often he would stay out of that, if it was half way through, he’s out of the class for than less than half an hour and go to the next lesson so he’s got a fresh start as it were.

I mean we say, not just to him, but you’re always welcome and he’s started using room 17 more so that is a specific place really...It is used as a classroom but lunch and break times it’s a safe haven.

until I got picked up by a learning support it all got uphill from there...It got worse until I managed to get picked up by a person who’s in my form room, one of the people from the SEN team was the former tutor helper and she noticed that it was all like bad for me so she picked me up and told me about this group I could visit at lunchtimes.

We’ve always run a lot of lunchtime activities, which is there really as providing a safe place so like we do a games club and they play connect four, draughts, chess, that sort of game, which actually was the sort of thing that Matt liked doing because he was with adults, he was in a safe place and he wasn’t getting picked on.

And having a specific person to go to or a place to go to.

To continue to provide a trusted adult Megan can approach and talk to if she feels anxious or unhappy in school and to provide quiet time/place if she needs some space to talk and reduce anxiety. IEP for S4

OT: Use of anxiety management strategies
- Using creative activities and interests to redirect and distract
- A card system for leaving class
- Lying down
- Having a drink
- Using relaxation strategies
- Access to favourite or comforting items

R: when you’re worried what helps you to feel better?
S1: Like drinking something.
R: Drinking something? Okay, what sort of thing?
S1: Like water.
R: Water, does that help you feel a bit calmer?
S1: Yeah.
R: Okay, good. Is there anything else that helps when you’re worried?
S1: Maybe just doing that, drinking water and lying down.

Ali has a locker and...it’s like a little shrine inside of obviously things that are precious to him. Lots of pictures of him when he was a baby, lots of things that he’s made and there’s stuff...when you open the locker it’s like these, there’s things stuck on the door and things all stuck up around the locker so whether...that’s a comfort to him. And a little place he goes to, his little hermitage that he goes to when he’s stressed.
sometimes that he was so stressed he’d just sit in the corner and I’d just give him some blue tack and showing him where he’s really to unwind, you know to come to a level where he could talk about it and helping him to learn to talk about, you know explaining to him that people won’t understand what’s wrong unless he talks about it.  

P3b: Artistic, he has his own little artistic things he’ll do--
P3a: With blue tack and drawings. The white picture there is one of Ryan’s
R: And do you think that helps?
P3b: Via the computer we do little stick figure scenarios.
P3a: It does because he’s sort of talking to the stick figures, giving them a conversation.
P3b: He’s not creative in terms of art, he’s no good at art but he’s found his own artistic creative side via the computer, the things he enjoys doing, making little stories and scenarios via stick figures and stuff like that.

He has to have somewhere to go back to at the end of the day where he can just curl up in a ball and hide, we’d have to make sure he’s got the bits he needs with him such as he has certain cushions and fluffies and so on in his room. They’re called fluffies, they’re pillows, blankets but they’re all fluffies and his bed isn’t so much a bed it’s almost like a nest and he just curls up in a ball in this nest.  

P3a: And things that we recognised such as Ryan when he gets really frustrated needs time out. He needs time away from everyone.
P3b: Which they worked with us and then developed the card system.

R: If we were helping another young person like you, say a younger person who was going into year 7, and we wanted to make school as good as we could for them and to help them so that they weren’t getting worried and anxious what would you say would be good things for them to do and for school to do?
S3: The only thing that I can really think of is doing it so they have somewhere to go if they’re worried.
S3: There are two of the cards, there was one that said you were going to the room and one that just said you were going to sit out of the classroom for five minutes or so, you used them depending on how worried or stressed you were and most of the time I hardly ever used the second card.
R: Okay so the second card is that the one where you go somewhere else?
S3: You went just outside the classroom.
R: Just outside the classroom and what happened then?
S3: You just had a few minutes to calm down, yeah.

what we did do was give him a card so that if things were too bad that he had an excuse to come out of the lesson and go to the respite where he could then cool down and have a drink and even have a lie down if he was particularly tired and he just couldn’t keep his eyes open. SP3

P3a: He’ll have blue tack, he literally sits there and models with it.
P3b: He’s allowed it now because it’s more of a way of engaging his hands, he’s not concentrating on that and ignoring the people there, which is being understood now.
P3a: But he sits there and fiddles with it.
R: Are there any other things that anybody’s told you to help?
S4: Like, deep breaths and just focusing on something like... not about the worries. Focus on something else.
S4: Like... Like, sometimes I just sit down and draw... I got this, like, colouring-in book but it wasn’t, like, stuff... a big chunky one that has, like, dogs and stuff in. It was, like, a really detailed one with farm animals and stuff. Just focusing on that and colouring it in...
P4: she has a happy box... I think she has a small version at school. Her happy box is here and that’s, like, got squishy toys in, wiggly toys, you know, fiddly things. When she’s very stressed she likes to lick things so there are things she can lick in there.
R: So she has access to that if she needs it when she’s stressed?
P4: Yeah.
R: That’s really good. So who came up with that idea then?
P4: I think that was something that came out of a brainstorming session with the previous specialist teacher and her old one-to-one and we made her this box, and a happy book she’s got as well, which is just photographs, a few written words in it, but they’re photographs of happy memories.
R: Great. Then does she look through it when she’s feeling bad?
P4: She can just look through and... I mean, one of the pictures is just this room because she likes this room, so at school she can just... It’s... They’re very random pictures. Somebody else looking at it would think “What on earth’s this?”

To continue to provide a trusted adult, Megan can approach and talk to if she feels anxious or unhappy in school and to provide quiet time/place if she needs some space to talk and reduce anxiety. IEP for S4

she always has a card in her pocket as well if, for instance, she ever is alone, which is not going to happen, and it’s a card to say “I need help” so that she doesn’t have to speak. That helps. P4

---

OT: Peer support networks

- Mutual support from friends
- Friendships with similar peers
- A group identity
- Friends to be with at unstructured times

He’s in a really good class isn’t he? They’re really-- most of the time they’re quite accepting of him aren’t they and they’re quite good with him? SP1b
R: What is the best thing about school for you and the thing that you are most pleased with?
S1: there’s more people that act nicer.
R: Okay. And what does acting nicer mean to you? What sort of things?
S1: Like caring for one another.

It helped because we could share compassion with how it actually felt and how he usually dealt with I would do too and things that he had trouble with I’d tell him how I dealt with. It helped us go through school quite a lot.
S2

earlier on I was in a nurture group, I think it was year 8 to 10 where there was like a group where several people who had similar problems in school they all chatted about how it was and how we could cooperate in ways that could help us deal with it.
S2

There was X who is one of my friends early on even though I only just met him but he was similar in a way where he was like picked on because he likes stereotypical science like facts and...he’d know how to help me and make me feel happier. Also there was X who’s a person who’s got similar actions to me because we were very similar in terms of how our earlier life were like, like bullied a lot, had very weird ways to cope with it. We were easy to like share our opinions because most of the time we were quite good at agreeing things. Things which I liked he liked.
S2

There was in the learning support we had like a friend circle in a way where everywhere which we went we usually had a few of us together, some people who were safe to talk to who wouldn’t really act weird with each other and that was a way for me to deal with places which like at break times where we could just hang out together and talk about things.
S2

Definitely the nurture group. I really feel that that has been key to the success of not just Matthew but quite a few of those with those sort of emotional/social difficulties. The taking away the being a single person and giving them a place in a group, a group identity. SP2
Re the group: more about the fact that they are people having the same sort of issues. It’s not necessarily about the people themselves it’s more he’s associating with ‘they are similar to me, they have the same sort of problems’. P3b

At the dinner times where he used to be wandering around and sat around in a corner all of a sudden he had a group that he could go off to and interact with… he was busy helping out with those sort of things at dinner time so he didn’t have the opportunity to get into trouble, he was busy doing something. P3b

R: Trying to understand and deal with the way I was feeling, so is that something that’s quite difficult? S3: Yeah. R: And is there anything that helps you with that? S3: Talking to my friends mainly. we’ve seen so much benefit from him being involved in the learning support group because he then started coming home and saying ‘Oh my friend said this’ and they were words we hadn’t really heard from Ryan. There’d be one person occasionally that he kind of clicked with and no one else in the world would understand either of them. P3a

helping him to find like-minded people that he could possibly get along with. SP3

yes, she does have social difficulties working with some groups but she has made friends and she has got a friendship group so, again…that helps SP4

She has made a friendship group and she does like to work with her friendship group. SP4

<table>
<thead>
<tr>
<th>OT: Social skills supports</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Small group social and communication skills work</td>
</tr>
<tr>
<td>• Use of social scripts and visuals</td>
</tr>
<tr>
<td>• Guidance with problem solving</td>
</tr>
<tr>
<td>• Friendship development support</td>
</tr>
</tbody>
</table>

so social skills, approaches, so normally we are trying to get him to copy others. Modelling yeah, things like that… Yeah I mean obviously I try to put him in Scouts so he can model himself outside school on other children’s behaviour. P1

SP1a: She had a social skills group of two or three students – does she do the executive skills with them at all? SP1b: The specialist teacher does a bit of everything in the time…She sees him every Monday morning – when she’s not talked to them in the corridor – and she goes through various things and then she’ll say to us ‘Is there any problems?’ SP1a: She’ll try and talk through issues and address those on a weekly, you know whatever comes up but the executive skills…but it’s turn taking, social, what is acceptable, the norm in society, behaving in a certain way, not shouting out, well turn taking.

she did a card that he had in his pocket and it was a prompt card and it basically was a laminated card explaining that if people want to hug you they may not be wanting to do it as friendship, they may be doing it because they’re teasing you and other people might be watching and they’re finding it amusing so you need to be careful of that and it basically gave him instructions didn’t it? SP1a

R: You chose learning about social and communication skills. S1: Yeah. R: Do you know what that means? S1: How to act with the people. R: Yeah and does somebody help you with that? S1: Miss X (Specialist Teacher), do you know her? R: Yes I do, yeah, does she help you with that? S1: Yeah. R: And does that help you be less worried or not?
S1: Yeah.
R: What sort of things do you talk about with Miss Specialist Teacher?
S1: Like what’s going to happen in school or that sort of thing.
R: What sort of things did it help you to learn about then?
S2: How to talk with people mostly because beforehand I wasn’t really a talkative person but now I’m willing to talk with people...like how to speak normally and how body language can help, even though body language is not really that good for me because I’m not good at showing via a body
R: ...so what things seemed to help him with his worry or anxiety?
SP2: Yeah so social skills approaches definitely.
P2: But in the last year of high school they did what you call job related stuff to apply for jobs, interviews, ringing up to speak employers and also help on like job applications and also other forms like applications like sixth form colleges or whatever. In fact how to fill out application forms for general purposes like knowing personal details and stuff like going to banks and also filling out online things too. They did all of that like filling out online applications also talking about when you go into, if you want to go to work how would you approach wanting to go to work and they did exercises and also they did like pretend, like the kids were like employers and they did like role play in personal development classes so social skills approaches are appropriate to their age.
R: And that’s been helpful to Matthew?
P2: That’s helped him; he’s done okay on those.
SP2: In the nurture group compromise, learning to compromise, learning to be perhaps a little bit more flexible because he’s quite rigid sometimes, conflict resolution, how to work through a problem, getting on with people, you don’t have to like somebody but you can get on with them.
R: So teaching the ins and outs of all those kind of complexities.
SP2: The complexities of social communication and understanding how to get through it with a degree of comfort I suppose without it becoming a major worry, yeah.

He attended the social skills group which was a structured group which we sat down and we worked on specific topics, things like listening to other people, how to be a good friend and helping him develop those sort of skills so I think he benefited quite a bit from that as well. SP3
R: You had some classes with the Specialist Teacher didn’t you?
S3: Yeah.
R: So sometimes you talked about communication and social things?
S3: Yeah. It helped me stop getting worried but it never really calmed me down from it.

trying to help him to see things from other peoples point of views because initially it was all very much he’ll only see it from his own thing so then got very anxious about it but really when you sort of say look at it from the other person’s point of view and that’s something ongoing that he’s always going to need help with. SP3

Also helping them move on their friendship because within that group or within different groups that I was doing could identify pupils that you felt had similar interests but hadn’t found each other within the school so by putting them together and encouraging them to talk to each other saying ‘oh well you’re interested in this and you’re interested in that’ and then sort of pivoting the friendship really through the regular meetings that even though they were obviously not close friends but they had somebody supportive in school and once they’d found that they’d got somebody else or a little group that they were less likely to be targets to the bullying and stick together. SP3
we used games like Socially Speaking and cards from another game, you know SEAL type cards. We’d do quite a bit of role play and practice things like so if it was a presentation we’d say let’s do it here so you know what you’re going to say, help him structure things and just play normal games sometimes just to get some interaction between two people in a structured environment.

Use of social stories, comic strip conversations and happy box to help relieve anxieties. These provide visual representations of events and make concrete understanding more likely. Pen picture for S4

Re: Social skills approaches’
P4: The Specialist Teacher does that with her. They have like a circle. It’s called circle something…and they do that on a Monday lunchtime.
R: Do you think that helps?
P4: Yeah, it does. It gives her confidence.

Yeah, they do a lot of, you know, like, her time out card? It means she doesn’t have to speak. A lot of time at home she will write things down rather than say them... Yeah. When she’s stressed she much prefers the written word than spoken. She seems to process that better. P4

I buy in from the LA and the X has done a circle time group for Megan and three others. She is the specialist ASD teacher and we’ve had that during Monday lunchtime so Megan has been able to… I don’t go into those sessions. Anything that happens in there is between them but she has been able to use those sessions to voice any anxieties she’s got as well. SP4

SP4: I think putting in the social skills work.
R: So who does that with her?
SP4: That is the specialist teacher.
R: So she works on specific areas of social skills with the girls?
SP4: Yeah, with the four girls.
R: Do you know what kind of things she’s worked on with them?
SP4: She’s done a lot of friendship work with them and how to work in groups.

OT:*Positivity and acceptance
- Using strengths, talents and interests
- Mentoring younger students
- Disclosing ASC positively to peers and teachers
- Use of rewards and reinforcement
- Staff positivity about personal characteristics, strengths and skills

R: You said getting rewards or praise.
S1: Yes I agree.
R: What sort of rewards do you like Ali?
S1: Like getting like certificates or badges.
R: Okay so does that help you?
S1: Yeah.

R: You chose being included and accepted at school.
S1: Yeah.
R: So does that help?
S1: Yeah.
R: Do you know what that means?
S1: That means everyone likes you.
R: Yes and if you think people like you does that help you?
S1: Yep.
S2: Mostly I think most of the teachers were actually briefed beforehand that they knew that I had the Autism but they didn’t know what type it was, that was until about a year ago when I actually told the PD teacher that I had Asperger’s and then everything changed.

R: And that was about a year ago you said?

S2: Yeah. We were doing topics about mental disorders and I just came out saying that I had Asperger’s and everything changed.

R: How did it change?

S2: Everyone acted different towards me because they researched about what Asperger’s was and they all started being more friendly and the bullying literally just stopped there.

R: When you say ‘they’ do you mean other kids in the class?

S2: Yeah the people who originally did bully me they now knew what I actually had and it just stopped.

R: Would you say then that it would be a good thing for other students to know if somebody has Asperger’s early on so that they understand or not?

S2: Yeah because if people knew that some people in the school had Asperger’s then they would be more considerate towards you and know that you’re feeling much more pain than what they’re actually having.

Yeah strengths talents and specific interests is one as well because using his strengths and talents...when he gets to university and he’ll just be like one of many because you’re quirky and you’re different, you know he has a gift, he has a talent and the more he can narrow down...

SP2

We’ve tried to give them a role in games club to help the younger ones, sort of be good role models, try and always go on the positive, you’ve had difficulties, you’ve found certain things difficult, child x, child y whoever can you just give them – use them as peer supporters...I mean occasionally I’ve had a child who’s perhaps struggling with maths homework and I’ve said ‘Matt can you help so and so to do their maths?’ and I’ll make a joke of it like ‘I’m really busy’ or ‘I can never remember how to do that can you help him’ and he’s always willing and he’s always quite happy to do that. SP2

The community as a whole at the school is very good, it’s very family and pastoral like. P2

Beforehand everyone was just getting equally just like merits that was just pointless but now the teachers they was like specifically saying how things were good for people, it was different from like primary school where they were like all joyful but this one it was more mature in terms of praise. S2

What helps his anxiety? Rewards and enforcement. P2

P3b: But the rest of them are all younger and he’s actually more of a...mentor to them in helping them.

R: That’s good and do you think that helps him, being a mentor?

P3b: Yeah he actually comes and talks about the fact he’s helping people out and he likes that type of thing, the fact he can help other people where not necessarily that help wasn’t there for him in the early years. Now they’ve put this in some of the people that could have been having problems and possibly excluded the same as he was when he was first there may not have that issue because he’s there to help them through.

Yeah the sort of creative, he was very, very good at modelling, making things out of the blue tack and that’s something that he found relaxing and helped him and also gave him something to talk to others about as something he was good at so it helped so it helped his self esteem, other people in the class would want to see what he’d done and that sort of thing really. SP3

As he went through the school introducing some of the younger ones that were having similar difficulties that he’d had earlier on he was able to offer some good advice and help them and also because he was so good at some of the games, the card game that they played, Yugioh cards, and knew all the rules and things that he actually could monitor the others doing it and help them or teach them and it gave him a role within another group with some of the younger ones there. SP3
He kind of moved forward the minute he actually got his diagnosis. He became more positive, he kind of felt like he’d been given his peace and he knew where he fitted in and he knew why he didn’t fit in with everyone else. It was almost like being told yeah that’s your language and yeah no one else understands it but it’s a very good language. Instead of feeling like he was odd, didn’t fit in, was worthless, he felt like he was important and he was almost special. P3a

… I think amongst her peers because she has something that not everybody else has got I think that… It’s difficult putting it into words but I think that really helps her that…and that’s an area that, comparing Megan to perhaps one or two other children on the autistic spectrum, if they haven’t got an absolute strength in something within their peers they can be seen as very different and not fitting in, but because she has something that most children in high schools want, which is to be a star in the PE department, it gives her kudos I suppose. SP4

Yeah, and nobody… At school everybody has accepted her… I wish other people could have her experience because it’s been amazing. She has just been accepted for who she is. P4

Re bullying: It’s never been an issue for her. When she first started there at the school she was the only girl from her primary school to go there, so she went there alone, which was good for Megan because she reinvented herself and people just accepted that Mrs X came with her – that’s her one-to-one – and one girl asked her and Megan told me. “A girl asked me why did I have Mrs X. Was it because I was dyslexic? And I told her ‘No, it’s because I’m autistic.” I said “And what happened then?” “She said ‘Okay, fine.” P4

School 4 are very positive about the student, her personality and her skills. This seems to impact greatly upon her self esteem. She seems to worry less about getting things wrong when it is constantly reinforced that she is doing well and that she is skilled and likeable. Research diary re S4

They all love her – everybody. They all know… I mean, like I say, even down to the office, the people in there, everybody knows who she is and what her needs are and that, in itself… She knows everybody knows and that’s just like…It takes the pressure off because she doesn’t have to worry what they’re going to think or what they’re gonna do. P4

A continued recognition of Megan’s academic strengths and successes in swimming/dance and flute to maintain her self-esteem and develop her confidence in her own abilities. IEP for S4

P4: Yeah, she does. She gets a lot of merits and certificates.
R: Do you think that helps?
P4: Yeah. She gets very proud of herself

<table>
<thead>
<tr>
<th>OT: Adult support with anxiety management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult reassurance</td>
</tr>
<tr>
<td>Open access to trusted staff to discuss worries</td>
</tr>
<tr>
<td>Recognition of signs and triggers by staff</td>
</tr>
<tr>
<td>Staff support to identify and manage thoughts and feelings</td>
</tr>
<tr>
<td>*Support to express worries and emotions</td>
</tr>
</tbody>
</table>

He’d be stranded and ‘What do I do? I don’t know what to do’ whereas if there’s always somebody to touch base with and reassure that this is where you should be. It’s not a problem, come on now son, let’s go to class, room 21 you know where that is’ and he’d be alright then. SP1a

Re support from SENCo/TA
R: Okay, what sort of things would they do that helped?
S1: Act better, like tell me, tell me not to worry.

R: Is there anybody you can go to when you’re worried?
S1: There is quite a few people but I’ve forgot their names.
R: Okay and do you do that?
S1: Yeah.
R: Yeah. Does that help or not?
S1: Yeah it does. And being helped to understand my worries and how to deal with them.
S1: Yep.
R: Does anybody help you with that?
S1: …some other people, like Mrs X (TA) and Mr X (SENCo).

That Monday morning session is to try and say ‘Right, are you worried about anything? And if you’re worried about it well let’s--. there’s no point in worrying about it all week, let’s try and get rid of it, solve the problem, get the homework done, come at break time and do your homework’ so that if there’s anything he’s not carrying this baggage round all week. SP1b

he’s calmed down because they talked him through. I don’t know what they talked, I suppose they told him you know look we phoned your dad, he’s not bothered, we talked to your mum she’s not bothered so that’s okay. P1

by getting onto the problem and dealing with it very quickly and very obviously so that he saw that it was being dealt with then lessened the impact. SP2

obviously through the nurture group we were helping him to identify and manage his emotional feelings and thoughts so I think that did help. SP2

Occasionally they (the TAs) would come to me and they would say Matt isn’t good at the moment and then we would perhaps look at why Matt wasn’t good at the moment. SP2

Yeah Miss X (specialist teacher), she was the person who was in here. She was helping a lot and she was very compassionate, she listened to what we said and she didn’t really tell it to everyone else except for the SEN team because they were the only people who could actually deal with it good. S2

Having a safe place to go and a person that he could go to and knowing that person would be there and would listen so whilst he didn’t actually have a TA that he was attached to as such he knew who in school would listen if he turned up and said that something, whatever had gone wrong so that was really important. SP2

We work a bit on looking at how his difficulty was impacting on his life or if something had happened within school that staff had informed me of we could do that. SP3

Helping him to take that step back and think about it, which he did as he got older, did start to do, helped him because rather than thinking they’re saying that, X has said this to me because he hates me and I’m the worst person, he can actually say well it’s probably because I did…and he’s just a bit cross with me and people who are friends can just be, you know fall out and get annoyed...See those things rather than him dwelling on something that he thought. SP3

And Ryan also knows there’s certain people at school he can go to that he can confide in that know the situation, say like the SENCo, like his form teacher, like X. P3b

he said that he had somebody who listened to him, that he felt there was somebody in school that was on his side because I think he felt school was… he was against the world almost like yeah, so there was somebody within the school who was on his side who would go and negotiate for him I think that’s something that he said himself that has really helped him. SP3

it was helping him to say that it was okay to be angry, you know when he did have a friend that it was okay that if that friend annoyed him to tell that friend and it didn’t mean that was the end of everything, which I think he sort of equated that getting annoyed was that it, you know very black and white in all of that. SP3

We were looking at trying to get him to understand himself better and his needs so the sort of main focus was that. SP3
School are very accommodating. They know her very well so they're able to read her and they will probably put that in place before she has to say. P4

She is very astute at picking up whenever Megan is anxious and if things are not just working right, but she is also very good at picking up before something happens, because once she knows what the activity is going to be in that lesson she will pick up if that could create a difficulty for Megan…and she'll plan accordingly. SP4

To continue to provide a trusted adult Megan can approach and talk to if she feels anxious or unhappy in school and to provide quiet time/place if she needs some space to talk and reduce anxiety. IEP for S4

**OT: Staff deployment and approach**

- A range of flexible support
- High levels of support regardless of funding
- Discrete support in lessons
- Full access to the SENCo and SEN team throughout the day
- *Reliable and thorough TA*

what we would say is wrap around care, which is at any time he can, if he’s got a concern, he would come and ask or come and say ‘Oh can I just speak to…?’ SP1a

He has a team of people…In a small team really rather than just one person, he has maybe three or four people that he would trust more than the others. SP1b

And he’s in a class with a lot of support, isn’t he? SP1a

SP1b: Support in every lesson…
SP1a: Well it isn’t to sit next to him at all, it would be about re-focussing. If he was looking around the room it would be to re-focus his attention, prompting, if he needed support with a word then that sort of thing but not the Velcro approach at all him.

There was nurture group, there was learning support, there was like the buddy of friends circle. S2

ey’d tell teachers how it was bad and how she would pass on the things that I said to teachers. S2

when they have trouble with getting fundings on the statementing they find whatever they have to find within themselves to give the need to my kid…Whatever, even if my son Matthew wasn’t allocated all the funding they made do within their own school. P2

somebody to help with the organisation in form time and registration. SP2

Miss X (SENCo) she was the main person who actually helped because everything was passed onto her and she was the one who made everything happen. Yeah if there was anything bad I could just go to her or the SEN team in general, anyone there. S2

We supported in PE, for the last number of years we’ve employed a PE specialist TA. What that’s enabled us to do… is to create in those PE lessons a group of boys, of which Matthew would be part of, who could access some PE at their level so they weren’t seen to get away with doing no PE, they did some. We have also very carefully made arrangements that like the games lesson which is your full on – your rugby, your cross country – all the things that are typically a nightmare for this child, he wasn’t allowed to do because he had a meeting or catch up session so we manipulated his timetable. SP2

The TAs who were supporting him, obviously he worked closely with them and through the SENCO as well and obviously that involves them through maybe the head of year who was having issues would come and we’d have a discussion about why in particular those things were problems…His form teacher in particular you know came and sort of knew that he could come and talk about any things that he was concerned about so that it sort of spread outwards really and also his peers as well. SP3
I was quite flexible really, we'd just see what happened when you got there, you couldn't really plan because you'd plan and then somebody'd slam through the door and it would be like oh this has been a bad day and we need to just address what's happening. SP3

P3a: The school. The school have been brilliant. P3b: …they put the funds available to deal with things for Ryan knowing that they weren't going to get this

This particular school has been amazing. They've put so many things into place for him, before an actual diagnosis, because they could see the same as we could that there was this issue and it needed to be addressed. P3a

It’s continuity. It’s having somebody there that’s familiar because they engage with the teachers at different times and different days and different teachers. P3b

Ryan having lots of problems at the moment and may be less tolerant than usual. Liaison notes for S3

the one member of staff, the assistant head, if it hadn’t of been for the fact that he was dealing with this at the time Ryan would very well, would probably have been kicked out. He actually kept him in there because he could see and obviously understand what we were trying to tell them even though there wasn't that official obviously bracket around Ryan at the time. P3a

SP4: The TA that is working with her has a good understanding of children on the autistic spectrum. She had worked in the past with children on the autistic spectrum. So we were looking for a TA with experience in autism and X was looking for a job working as a TA with a child on the autistic spectrum so we managed to put those two together. R: So do you think that experience of the TA helped? SP4: Definitely, yeah.

she’s always there for her, but she also has the ability to step back in class and let Megan manage for herself and develop independence SP4

R: Is there anything else about the TA? You say that’s really worked and that’s helped a lot. Is there anything else about her that you think is particularly helpful to Megan’s needs? SP4: I think the fact she never leaves a stone unturned. R: Right. SP4: She will follow everything through and she is very organised and if she says she’s going to be somewhere at a certain time she will make sure that she is there. She never fails to meet Megan first thing in the morning. If she isn’t going to be there for whatever reason she makes sure that somebody else is going to be there. She never fails to find out exactly what’s going to happen on that school day and to pass that information on to Megan.

Megan will volunteer answers but needs reassurance from her TA that she is giving the correct answer. IEP for S4

**OT:** Staff knowledge and understanding

- Written information to all staff regarding needs and strategies
- SENCo and specialist teacher guidance for staff
- Staff understanding and recognising needs

Re going to reviews:
R: So what sort of things would you tell them? S1: Like what’s happening in school, why am I worried.

It’s like having a pen portrait but his was two sides of A4 and that goes to the staff. SP1a

She sees him every Monday morning – when she’s not talked to them in the corridor – and she goes through various things and then she’ll say to us ‘Is there any problems?’ SP1b
<table>
<thead>
<tr>
<th>Asc Training for Staff from External Specialists</th>
<th>The Longer We Had Him Here the More We Got to Know Him, the More Staff Understood Who He Was, Where He Was Coming From, and They Would Take Account of His Needs. SP2</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;A TA with Good Experience and Understanding of ASC</td>
<td>The Specialist Teacher Who Ran the Nurture Groups and She Gave Us a Lot of Advice, Feedback, Suggestions, Strategies, Attended Meetings, Reviews, She Was I Think Very Pivotal in Helping Us as a School. SP2</td>
</tr>
<tr>
<td></td>
<td>Matt Came Into This School as One of a Group, a Year Group with Other Children With ASD Statements and It Was Like We'd Had One or Two Somewhere Vaguely on the Spectrum But We'd Got Three or Four in That Year and As a School We Felt That We Needed to Improve Our Skill Set Enormously Because We'd Got All These Children to Deal With So We Did. We Actually Did a Staff Inset in September and We Got Somebody in to Come and Give Us Some Training on Asperger's So We Had Whole School Training Not Specifically to Matthew But Specifically What Is ASD, How Does It Affect Children, What Can You Do? SP2</td>
</tr>
<tr>
<td></td>
<td>Staff Knowledge Understanding and Approach Definitely… When the Boys Come in Year 7 I Do a Pen Portrait in Quite a Lot of Depth for Anybody Who I've Got a Lot of Information for, So Your Statemented Children. All Staff Whether They Would Teach Him or Not Would Have That Because Obviously in High School You Get Cover or in Those Days Teaching Staff Were Covering So You Might Turn Up to Your Maths Lesson and It's Not Your Teacher But It Might Be Somebody Who If They Know Some of Your Needs Can De-Stress the Situation… Probably About a Side of A4 With Some Understanding of His Difficulties, Some Useful Strategies… And It Goes to All Staff. SP2</td>
</tr>
<tr>
<td></td>
<td>Then as They Go Through If Something Happens or Like in Matt's Case He Got the Diagnosis of Asperger's We Do Updates So They'll Be Memos on the Staff System. SP2</td>
</tr>
<tr>
<td></td>
<td>I Think It Was More the Case Them Starting to Recognise That There Was Something Wrong and Taking Him Off Somewhere Quiet as Opposed to Him Seeking Them Out But That Was Sort of the Next Step for Him Really. SP3</td>
</tr>
<tr>
<td></td>
<td>Mainly the Learning Support Department as a Whole, He Knows That Anyone in There Will Understand What He's Talking About. P3a</td>
</tr>
<tr>
<td></td>
<td>When They Didn't Understand Because I Think She'd (the SENCo) Never Heard of Ehlers Danlos and She Wrote It Down and She Said I'll Have to Look Into That for When Ryan Starts and It Was Little Things Like That. P3a</td>
</tr>
<tr>
<td></td>
<td>I Know That X (SENCo) Does Have What's Called a Communication Passport Which Is Basically a Couple of Sides of the Key Information. P3a</td>
</tr>
<tr>
<td></td>
<td>That Security of Knowing That Somebody Will Help Her, Direct Her, Advise Her, Tell Her What's Going On, Whereas Other Children Have to Find It Out for Themselves to a Certain Extent or It Just Happens, and Megan Just Couldn't Cope With That. SP4</td>
</tr>
<tr>
<td></td>
<td>She Has Now Started at Lunchtimes… We Have a Lot of Clubs in Place at Lunchtime, a Lot of Support From the TAs. There Is Always a TA in the Dining Room at Lunchtime Who the Children Can Go and Sit With and to Begin With Megan Always Sat on the Table With the TA. She's Now Started Sitting on the Table Next to the Table With the TAs With Her Friends and They All Sit Together But It Has to Be the Table Next to the TA. So She's Coped With That Anxiety and She Will Now, as Long as She Knows There Is a TA Somewhere on the Quad… She Will Wander Off With Her Friends But I Think She Would Be Anxious If She Couldn't See a TA Around. SP4</td>
</tr>
<tr>
<td></td>
<td>Like, All of the Teachers Making Sure I'm Okay With the Work. Like, Some Teachers Would, Like, Just Walk Around the Room, Like, Talking to Everybody But Some Would, Like, Look at the Work and Then, Like, Come and Ask Me and Sit Down. &quot;Are You Okay With the Work and How Are You Dealing with It?&quot; S4</td>
</tr>
<tr>
<td></td>
<td>She Knows Everybody Will Use an Approach That She Can Cope With. P4</td>
</tr>
</tbody>
</table>
I think the staff have played a big part in this. I think they’ve taken onboard, but again, because Megan is such a delightful young lady I think it’s made it easier for them to take everything onboard and to do things in the way that suits Megan because she is such a delight. SP4

I think talking to the staff an awful lot and we have had training in school from a local special school and they do brilliant…and we’ve had that as whole-staff training and we’ve also had a specialist teacher. SP4

The specialist Teacher will be in school once a week to support Megan and advise staff. Pen picture for S4

The SENCo and the whole team are very good at making sure everybody…like, all the staff at high school, down to the dinner ladies, everybody knows who she is and knows…Even the ladies in the office. P4

being able to produce something like this for the staff, which gives a full sort of picture portrait of Megan and what she needs, how she learns, what to do if she is anxious and things like that…It went to all her teachers in school, so along with her IEP which has on it her nature…the nature of her difficulties plus the strategies that we felt would work for Megan in school, this just gives a lot more detail…just to help people understand what makes Megan tick. We also had a meeting with all her teachers at the beginning of year seven where we talked through all the information that we’d got from the primary school and also mum gave us an awful lot of information. SP4

We record weekly and send information home to dad, or have done, for an extended period of time, weekly, and he would write on it and send it back as well wouldn’t he? Because there was concerns about why weren’t things being picked up and so we’d write them on as communication. SP1a

the communication at the school has been absolutely fantastic too where the SEN people liaise with all the teachers all the time. P2

With them I’ve learnt from it too as a parent to take on what they’re doing and I do it at home. P2

When he is back X (SENCo) is going to do a home visit to get some insight into the situation. Liaison notes for S3

And that was just interaction between us telling them this is the situation that we have the SENCo working with us and bringing a system into place that has worked for Ryan. P3a

They’d listened to us and not only that when they didn’t understand because I think she’d (the SENCo) never heard of Ehlers Danlos and she wrote it down and she said I’ll have to look into that for when Ryan starts and it was little things like that. P3a

I think the most important thing is information sharing, being open and sometimes it’s hard as a parent to say “Oh well, she does this,” but you have to be open and share everything that you can think of, and they can get over these barriers. P4

Her TA and her mum have a book which they both write in constantly, so there’s an awful lot of information goes home and an awful lot of information from home comes to school. So both TA and mum are very aware if she is anxious… They have built up a very close relationship through this book. SP4

I think the biggest thing is home school communication. We have a little book in Megan’s school bag that we send notes daily so that they’re aware of, you know, the slightest thing. They can keep an eye and vice versa. P4

Before we had Megan we’d never heard of Asperger’s so we have taken a lot of time to educate ourselves. We did the early bird course with the autistic… You know, we’ve done lots of workshops, we’ve read a lot and I think information is power. P4

I think the fact mum is very willing, she is very supportive, she comes in to everything she’s invited to. SP4
OT: External support

- CAMHS involvement with anxiety management
- Medication

P3a: There was once. He had, I can’t remember the name of the scheme. They were running a scheme where they had a personal trainer and he did brilliantly because he was getting all his aggression out...

P3b: Because it was one on one...

P3a: ...and it was one on one and this focus was between the two of them.

P3b: It was part of CAMHS wasn’t it? It was a one on one situation where he dealt with this...a youngish guy that went to the gym at the leisure centre.

P3a: That was brilliant but unfortunately they ran out of funding for it. Yeah it didn’t continue because he did actually see a big improvement in himself.

P4: That one helps.
R: So ’Helping her to identify and manage her physical emotions, feelings and thoughts’.

P4: Yeah.
R: Who does that and how’s that done?

P4: The Clinical Psychologist at CAMHS did a lot of that with her about recognising when she’s getting stressed and what...trying to work out what it was and...

Yeah, and the Play Therapist has done work with her on that and she is very good at recognising. She knows now that funny feeling in her tummy is a worry.

P4: Yeah, that’s a problem. It’s getting better though. She’s had CBT and play therapy and that’s been really good for her.
R: So ’Understanding and managing her feelings’ is still a difficulty. It does make her anxious but it’s getting better?

P4: Yeah because we’re both being taught how to recognise those early warning anxiety feelings and what we can do about it.

R: What sort of things might you do?

S4: Like, I sometimes clench my fists.
R: So when you’re worried you might clench your fists?

S4: Like, with X at CAMHS she said do that and then, like, relax and then do it again for three seconds and then relax it.

P4: They did a lot of numbers – one to ten.
R: Like scaling?

P4: Yeah, scaling of her worry throughout. We did, like, a worry diary and it helped her to recognise.
R: So that was with CAMHS?

P4: Yeah.

She is currently receiving Child and Adolescent Mental Health Service (CAMHS) support and is taking part in play therapy sessions. She takes Resperiden medication for her anxiety and Melatonin to help her sleep.

IEP for S4

OT: Barriers to effective practice

- Funding process not seeing past academic achievement
- Lack of funding
- Differences in responsiveness to need and guidance by teachers

In discussion the student’s anxieties and the level of these were noted by school and SEN staff as concerning. However, none of his paperwork (e.g. IEP, review minutes, etc) reflects this and are primarily regarding focus in lessons, social skills, behaviour etc. Research diary re S1

Re staff guidance: But with everything, some people might not do… SP1a

But you know maybe that (sanctions) could come from, I don’t know, senior leadership, although I am senior leadership but for our purposes of sort of socialising him and integrating him it would be better perhaps if I wasn’t doing the telling off but he needs to sometimes. SP1a I don’t really think he is aware of the impact he has on other people…SP1a

Very ‘within child’ (e.g. his behaviours are a problem to others, rather than what can we do to help him). Research diary re S1
SP1a: Well I think it’s very much we feel like Red Adair, fire fighting and things will settle and we’ll do something.
SP1b: And then the next thing starts.
we’ll reprimand him, he’ll be apologetic, five minutes later he’s doing the same thing. SP1a

There seems to be a lack of understanding/acknowledgement of what is behind behaviours and a focus on reactive actions. For instance with the situation with the student trying to hug people, staff guidance says “No! No! No! Under no circumstances allow Ali to hug staff or students.” Reasons for him needing to do this him seem not to have been addressed nor suitable alternatives for these needs found. Research diary re S1

Strategies and information are very within child e.g. “I will not allow other students to make fun of me” in a social story Research diary re S1

speech and language were no longer involved so there was this pressure to remove the statement. SP2

even after he got the diagnosis they didn’t qualify for any money to help because he was deemed to be too intelligent, too good obviously which is stupid because a lot of people with Asperger’s are quite bright in their right, but they have all the other needs. P3b

one of the things we noticed was when they go up a year, if they’ve changed teachers that teacher’s not always aware. I don’t know whether it’s in notes or anything like that, they’re not aware of it, they’ve not read up on it or anything and so you’re repeating the same thing year after year, going round telling everyone this is his problem, this is what he’s like, can you try and do this and it will help you. P3a

And the fact that not all staff take it onboard, you know, although you can say if you shout at this boy he’s going to withdraw, he’s going to run away that they don’t always understand that he’s shut down and they think he’s being rude and cheeky and not answering them so the attitudes of staff and some of the staff who still expect everybody to do, you know, and treat them all the same. SP3

And people look at her academic results and think she doesn’t need any help and inside she was just falling to pieces to the point where she was selectively mute, she was doing the silent crying, she’d stopped fighting. She was just completely switched off. She would come home and sit in that chair with her big winter coat on zipped up to the top and she’d just stay there all night. P4

She was statemented by then, but not enough hours, and we were going through the whole process of fighting for more funding. P4

I’m not convinced that the money that comes in with her statement covers her TA and the support that is put in place and all the clubs that we put on as a department but if we’re getting a child into this school I will put in whatever support I feel is necessary. SP4

a lot of the schools we went to see before we picked that one were very obstructive…they weren’t prepared to look at Megan as an individual. It was “This is what we will give her. She will get all her hours but it will mean she has a TA waiting for her in a lesson.” That’s not what she needs. She needs somebody by her side. P4

there was no… That’s what we found. There was nowhere where she would fit because she is unique and she is very complex and she’s very intelligent, and there is nowhere for her. I mean, luckily we’ve found…and the all girls make a difference. P4

<table>
<thead>
<tr>
<th>OT: Perceived positive outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Like and attend school</td>
</tr>
<tr>
<td>- Increased positivity and</td>
</tr>
<tr>
<td>happiness</td>
</tr>
<tr>
<td>- Increased confidence and</td>
</tr>
</tbody>
</table>

Well I think that I’m glad that he’s here and not staying away. The fact that he wants to come is a positive. SP1a

We have good times as well. We have lots of good times. There’s lots of laughs. SP1b

I’m proud that he has achieved great in his grades and he’s done absolutely fantastic. I’m also proud that he has understood his Asperger’s and Autism and realises that will not get in the way of what he wants to do in his life. P2
This seems to be the most insightful interview yet. He was able to clarify and give examples as to how he felt and the supports that worked, yet his social communication needs are obvious. He seems to have made exceptional progress from what was recorded in earlier documentation and how he was described from earlier school years. R 2

Well I’m just proud of Matthew because he’s completed his five years of statutory education here with his head held high, he’s going to get good results hopefully, he’s gone out there, he’s represented the school at things like the maths challenge, I always find him a very pleasant young man, I think we’ve seen him, it’s very hard to quantify a measure of his improvement socially, it’s not like doing a maths test but I think he’s made great progress and he’ll always have difficulties perhaps in that area and moving into the world of work he’s going to find as a challenge but he has got a skill set and he’s got experiences hopefully he’ll draw on from school that he can move into the world of work. SP 2

Well before I came to this school I was quite nervous and I didn’t talk much but now I’m more expressive and I talk a lot. S2

And I’m getting a lot less worried. S3

As he’s got older there’s been less incidences of problems, we’ve been called in to say he’s been involved in this we haven’t had that recently. P3b

I’m a lot less violent than I was when I started because it used to be as common as once or twice a week that I’d get in some form of fight and now it’s I think over the last school year it’s probably been two or three times. S3

You could see a difference in him, around school there was less major incidents that had blown up within class or that he’d come out of class or that he’d report back, occasionally that he would report back that things were good, you know which was very, very rare for him. Initially everything was very, very black, there was nothing that was good whereas yes he’d had a good day, they’d enjoyed the games club, this had gone well, that lesson had gone well. SP3

P3b: I mean school refusal, in the early days he would try and avoid going to school because of things but now with structures put in place…
P3a: He loves school.
P3b: …he loves school because he knows there’s something there for him to go to.

I think the thing I’m most pleased in within him is the fact that he cares about everyone else and he wants to help everyone else. P3a

His achievements I think bearing in mind he’s always said I’m not going to get to this point, seeing him not just getting to those points but the amount of effort and enthusiasm he puts into things now because I didn’t expect that but I think that’s the biggest thing. Seeing him show enthusiasm for things, other than computer games. P3a

Her confidence has grown and she is much more willing to “have a go” at things which challenge her. P 4 report for annual review

She’s got friends who invite her round. She’s invited friends here, which is a new thing because you can’t cross over home and school but now she is. She had a friend for her birthday. P 4

that she actually wants to come to school and loves school and is happy. SP4

She is an absolute delight and just the fact that she is happy. Even though she is anxious she is happy. SP4

Megan is gaining confidence and sometimes contributes her own ideas and opinions. Teacher comments on S4’s yearly report
I have been impressed with Megan's involvement in pair and group work. She has come out of her 'shell' and contributed really well to whole class discussions.

Teacher comments on S4’s yearly report

We had a lot of contact with mum to begin with and the contact with mum has kept up through the book with the TA but I’ve had very little contact with mum, so…apart from the reviews. We have a review every term and we have the annual review so, you know, I do see mum on a regular basis, but I’ve not had the phone calls that the primary school said I would get – the consistent phone calls – and when I was talking to the Inclusion Service teacher who supported her in primary school, when she rang me up to make an appointment to come and do her core visit and she said “Well, the school must be doing something right because you’ve had very little contact with mum. SP4

…and she struggles with gross motor but high school PE is very different, but she had a block: “It’s PE, ah!” So she’s overcome all of that to get ‘Gymnast of the Year’. She’s just amazing. She is. We’re so inspired by her, you know. P4

She is a major success story. We cannot believe now going back to those dark times of year two, year three, to where she is at now. It’s just unbelievable how well she’s doing. P4
Ethics Approval Application - CONFIRMATION for Medium Risk

Ethics Education <ethics.education@manchester.ac.uk> Thu, Mar 8, 2012 at 3:36 PM
To: [Redacted]
Cc: Kevin Woods, Deborah Kubiena, Shelley Darlington

Dear Dawn

Ref: PGR-7546291-A1

I am pleased to confirm that your ethics application has been approved by the School Research Integrity Committee (RIC) against a pre-approved UREC template.

If anything untoward happens during your research then please ensure you make your supervisor aware who can then raise it with the RIC on your behalf.

Regards

Gail Divall
PGT & Quality Assurance Administrator
School of Education

Tel: +44(0)161 275 3390
Working Week: Tues - Fri
http://www.education.manchester.ac.uk
http://www.education.manchester.ac.uk/intranet/
## APPENDIX KK: Statement of Ethical Good Practice

<table>
<thead>
<tr>
<th>Ethical Principle</th>
<th>Risk (s)</th>
<th>Action</th>
</tr>
</thead>
</table>
| 1 Respect for human dignity    | Potential risk to participants due to the sensitive issues being discussed and raised anxiety due to this | Participants will only be eligible for participation if they are deemed currently not to be in a critical phase.  
Be sensitive to this possibility and apply criteria regarding the participants' ability to manage this and additional support measures and signposting to other services as required.  
Ensure a sensitive and supportive approach is provided to participants by the researcher.  
Ensure that participants are aware they can contact the researcher during the course of the research and following interviews to discuss any issues or concerns. |
| 2 Ensure integrity and quality | The data collection methods may be inappropriate for use with the particular participants.  
Carrying out the interviews with the researcher, who may be perceived to be in a position of power, may increase the participant’s anxiety. | Careful consideration has been given to the appropriateness of the methods for the particular participants in discussion with tutors and fieldwork supervisor.  
Piloting of the interview questions and format prior to use with the actual participants will help to fine tune the methods being used.  
Deliver the data collection methods in a sensitive manner, to reduce the chance of anxiety being induced.  
Provide research information with a picture of the researcher prior to the interviews so that the participants know a face prior to the interview.  
Provide opportunities for the participants to reflect and debrief as and when needed.  
Visit the chosen interview venues before the interviews to assess seating dynamics, room layout, possible interruptions etc.  
As participants are being given the opportunity to express their views and feelings, they may bring up unrelated matters they |
| 3 | Respect for free and informed consent | Participants may have been informed about the research by a perceived figure of power. As a result they may feel pressured to take part in the research. The participant may feel obliged to take part in the research, as the request to participate may be made by a practitioner that they have a relationship with. | Provide participants with sufficient information for full informed consent in a manner suitable to their needs, cognitive levels and age. The nature of the research will be explained in simple, clear language and questions will be encouraged. Information about the best methods of informing the participants, and any difficulties in accessing information by them, will be gained in advance so that the most appropriate format of information can be provided. Stress that participation is voluntary and they have a right to withdraw at any time without explanation. Remind the participants of this right throughout the research. | Provide clear and sufficient information to ensure participants are able to give informed consent, and ensure they are aware that confidentiality will be |
and/or not having a clear understanding of the nature of the research.

<table>
<thead>
<tr>
<th>4</th>
<th>Respect for vulnerable persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>The participants may be more anxious or vulnerable. They may find the process of liaising with an unfamiliar adult anxiety-provoking.</td>
<td></td>
</tr>
<tr>
<td>The researcher’s experience in working with this group should enable them to carry out the process in a way most suitable to the students needs and to recognise the signs of possible emotional distress and be able to support them and signpost to additional support accordingly and in a timely manner.</td>
<td></td>
</tr>
</tbody>
</table>

Participants may not be familiar with being consulted about their views and may find it a difficult process.

Participants may have possible additional

Ensure that criteria for participants are closely adhered to, so that the likelihood of this is minimised as much as possible. Ensure that the interviews take place in a location familiar to the participant, and that room layout is conducive to comfort. Provide research information with a picture of the researcher prior to the interviews so that the participants know a face prior to the interview and intervention.

Care has been taken to ensure the
conditions or needs (e.g. low self-esteem, hearing impairment) that may make them more vulnerable, or may need adapting for.

Specific contextual information may elicit particular anxiety or emotional distress from participants during interviews.

Possible difficulties or differences in understanding, literacy, language, cultural and any other relevant factors may affect the participant's ability to give informed consent and take part in the interviews and intervention fairly (e.g. sensory differences, hearing or visual impairment etc).

The vulnerability of students with ASC renders them at risk from possible manipulation, coercion, or emotional distress.

Parents may be unwilling or anxious about sharing information with others during interviews.

methods used best suit the participants, and questions will be carefully worded and visual prompts utilised as required.

Within the realms of confidentiality, discuss needs of participants with the schools prior to the interviews so that any needs, difficulties, adaptations and specific information to be avoided is taken into account.

Liaise with stakeholders in developing the interview questions so that all potential difficulties are taken into account.

As above, the participation criteria will ensure that students who are currently at a critical phase in their management of anxiety are not included.

Be mindful of this throughout the research and treat all participants respectfully.

Ensure that debriefing is carried out immediately after interviews, and that a known member of staff at the school is available to the participants if required.

These factors will be explored prior to and within the initial interview, and all required measures to adapt for these needs accordingly will be taken.

Participation criteria will ensure that students who do not have the necessary language/literacy skills are not recruited. Parent participants may have needs in this area and care will be taken to ensure that interviews are conducted in a way appropriate to their needs.

Make it clear to all participants that they may withdraw from the research at any time.

Ensure that participants are assured of confidentiality.

Provide signposting to where parents can receive additional support (e.g. parent groups, health services etc) as...
| 5 | Respect for privacy and confidentiality | Practitioners involved in the research may feel threatened if they perceive the research to be a direct assessment of their individual practice. | required at the end of interviews. Be clear that the research is concerned with gaining information about needs and practices as a whole not specific practitioners’ practice. Research results will be presented in an honest yet positive way to practitioners during feedback following completion of the research. As above, participants may not want to be openly seen to criticise the practices of their employing organisation, but measures can be taken to ensure that questions are framed in a way not to be seen as being critical. |
| 6 | Participation in a voluntary way | Students/parent participants may feel obliged to take part in the research, and may feel they ‘owe it’ to the school/practitioner providing information to them to take part. | The researcher and practitioners providing information about the research will do so in a neutral way and use pre-prepared information and scripts as required. No coercion to take part will be given, and practitioners will actively inform participants that whether they take part is their choice and it will not affect their relationship and the services they receive if they do not. Participants will not be offered any specific incentives to take part. The researcher will initially inform the participants that they can stop at any point. The researcher will frequently check for signs that they are |
Practitioners may feel obliged to take part in the research.

not wanting to.

excessively uncomfortable or feeling negative emotions throughout the process and, if signs of this are observed, the researcher will check that they are ok to carry on and remind them of their right to withdraw without giving a reason (as appropriate).

Stress that participation is voluntary and they have a right to withdraw at any time without explanation. If a participant chose to withdraw, their data would be destroyed.

The participants will not be offered any material incentive to take part in the research.

| 7 | Procedures should avoid harm | Due to the sensitive issues being discussed, and the nature of the participants, they, or their parents, may become distressed during the research. | Adverse risk of this should be eliminated as far as possible through assessment processes for identifying participants. The researcher will endeavour to be alert to potential signs of excess stress, anxiety and emotional distress, and will have discussed possible de-escalation techniques with the practitioners that work for the individual participants. The staff members at the student’s school will be advised when the research is taking place and to be aware of signs of distress or anxiety in the participant and to inform the researcher of such. Participants will be encouraged to talk to the researcher or school practitioners if they have any concerns. The interview questions and intervention will be devised to avoid provoking possible distress as far as possible. Provide signposting to where parents can receive additional support (e.g. parent groups, health services etc) as required at the end of interviews. The researcher will frequently check for signs that they are excessively uncomfortable or feeling negative emotions throughout the process and, if signs of this are observed, the researcher will check that they are ok to carry on. |
The participants may worry about what they have disclosed, and any information that may have been deemed negative toward the school or practitioner (in the evaluative interview).

Some of the participants may be prone to aggressive behaviour due to the nature of their needs. This could put the researcher at potential risk.

The students will miss lessons for the sessions and this may disadvantage them.

The practitioners involved may feel overburdened as a result of the research.

The participants will be advised that only information that suggests a safeguarding issue will be disclosed, and that otherwise information will not be individually shared with the schools/LA, but will be provided collectively with others’ responses.

Participants will be reminded that they have the right to withdraw at any time, and that information will remain confidential.

Initial assessment should omit any participants who may possibly meet this description. However, interviews will take place in school premises with the researcher so that other staff will be available in the unlikely event that support is required.

This will be taken into account in the selection process and interviews will be arranged at times to avoid negative impact upon the students’ access to the curriculum. Parents will be made aware of this.

The commitment from practitioners is limited and the researcher will work collaboratively with the schools and practitioners to ensure that the time line of the research fits around their other commitments and that any disruption and commitments required from them are minimised.
## APPENDIX LL: Research Timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Time budget</th>
<th>Contingency time</th>
<th>Changes to Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov 2010 - March 2011</td>
<td>• Exploring ideas and negotiating research with LA</td>
<td>10 days private study time</td>
<td>5 days (weekends)</td>
<td></td>
</tr>
<tr>
<td>Jan – April 2011</td>
<td>• Reading literature and writing thesis proposal</td>
<td>20 days private study time</td>
<td>10 days (weekends)</td>
<td></td>
</tr>
<tr>
<td>April – June 2011</td>
<td>• Revising thesis proposal following similar work in publication being found</td>
<td>5 days private study time</td>
<td>Weekends</td>
<td></td>
</tr>
<tr>
<td>June 2011</td>
<td>• Complete thesis proposal and ethics forms</td>
<td>5 days private study time</td>
<td>Weekends</td>
<td></td>
</tr>
<tr>
<td>July 2011</td>
<td>• Thesis panel</td>
<td>1 day private study time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>August / September 2011</td>
<td>• Revising thesis proposal and ethics forms following thesis panel</td>
<td>5 days private study time</td>
<td>Weekends</td>
<td></td>
</tr>
<tr>
<td>October to December 2011</td>
<td>• Awaiting ethical approval</td>
<td></td>
<td></td>
<td>Delay in ethical approval due to concerns over the complex needs of the proposed participants. Decision taken to change proposal due to this.</td>
</tr>
<tr>
<td>December 2011 / January 2012</td>
<td>• Decision to change proposal and resubmit</td>
<td>16 days private study time</td>
<td>Weekends</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Discussion / agreement with local authority placement provider</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Rewriting of proposal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Resubmission of proposal and ethics forms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>February 2012</td>
<td>• New thesis panel for resubmission of proposal</td>
<td>5 days private study time</td>
<td>Further private study time</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Activities</td>
<td>Study Time</td>
<td>Additional Information</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>March 2012</td>
<td>• Ethics forms to be completed and submitted</td>
<td>4 days private study time</td>
<td>Further private study time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ethical approval for the resubmission received</td>
<td></td>
<td>Participant identification and recruitment took longer than hoped and took in excess of 10 weeks, which delayed the further stages of the process. Process continued throughout all of March and April</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Identification of participants with EPs and preparation for contacting them for consent pending approval</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Finalising information for participants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>March and April 2012</td>
<td>• Liaison with school SENCos regarding identification and recruitment of participants</td>
<td>16 days private study time</td>
<td>Weekends and evenings during this period Due to the above, these activities took place from March up until July 2012</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Initial consent letters/information to parents sent and discussion as required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Receipt of initial consent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Clarifying suitable participants based information from discussion with schools and information from files</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Information and consent letter to participants meeting the criteria (students, parents, school staff)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Pre-interview meetings with students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Final consent received</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Arranging dates and venues for interviews</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Preparation of resources to aid interviews with the students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>March - July 2012</td>
<td>• Writing literature review and methodology (in addition to what has already been written/read earlier in the year for previous proposal)</td>
<td>21 days during holiday periods</td>
<td>Weekends and evenings during this period</td>
<td></td>
</tr>
<tr>
<td>April 2012</td>
<td>• Pilot interviews</td>
<td>4 days private study</td>
<td>Further private study</td>
<td></td>
</tr>
</tbody>
</table>

365
<table>
<thead>
<tr>
<th>Time Period</th>
<th>Activities</th>
<th>Time</th>
<th>Time</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>April/May 2012</td>
<td>- Semi structured interviews with participants</td>
<td>12 days private study</td>
<td>4 days holiday time</td>
<td>Due to the above these actions took place from May to August 2012</td>
</tr>
<tr>
<td></td>
<td>- Collection of further data regarding students from school/EP files</td>
<td>time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May/June 2012</td>
<td>- Transcription of interviews</td>
<td>16 days private study</td>
<td>Evenings and weekends as</td>
<td>Due to the above and the spread of the interview dates this took place</td>
</tr>
<tr>
<td></td>
<td></td>
<td>time plus 5 days holiday</td>
<td>required</td>
<td>during May to September 2012</td>
</tr>
<tr>
<td></td>
<td></td>
<td>time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>April-July 2012</td>
<td>- Thematic analysis of interviews and documents</td>
<td>10 private study days</td>
<td>Weekends and evenings</td>
<td>Due to the above this took place from May (starting with</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>during this period if</td>
<td>documentary analysis) to October 2012</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>required</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Triangulation of themes/results</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July-August 2012</td>
<td>- Thesis write up</td>
<td>10 private study days</td>
<td>Weekends and evenings</td>
<td>Due to an unexpected operation and a period of ‘interruption to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>plus 8 days booked</td>
<td>during July/August 2012</td>
<td>study’ caused by this, these actions took place from October 2012 to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>holiday time</td>
<td>(study days in August</td>
<td>February 2013</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2012 if required</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>End September 2012</td>
<td>- Thesis submission</td>
<td></td>
<td>Extension to be</td>
<td>Due to the above and beginning full time work in September 2012, this</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>requested until end Oct</td>
<td>took place in April 2013.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2012 if required</td>
<td></td>
</tr>
<tr>
<td>Oct/Nov 2012</td>
<td>- Viva</td>
<td>Depending upon panel availability</td>
<td>Dec 2012 if required</td>
<td>Due to take place in April 2013 to be confirmed at time of submission</td>
</tr>
<tr>
<td>Oct/Nov 2012</td>
<td>- Amendments following viva</td>
<td>Evenings and weekends</td>
<td>Dec 2012 holidays if</td>
<td>To be confirmed at time of submission – time set aside during April/May 2013</td>
</tr>
<tr>
<td></td>
<td></td>
<td>during Oct/Nov/Dec 2012</td>
<td>required</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>dependent upon panel date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>January 2013</td>
<td>- Final feedback to the stakeholders /participants</td>
<td>Time off during January</td>
<td></td>
<td>To be arranged after viva for summer term 2013</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2013</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX MM: Research Budget

<table>
<thead>
<tr>
<th>Item/s</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research and Autism/Anxiety related books for the literature review not available through the university library</td>
<td>Approx £200 from researcher’s own funds</td>
</tr>
<tr>
<td>Sending and printing letters</td>
<td>No cost - The LA will absorb these costs through its day to day printing/postage and/or letters are sent by email</td>
</tr>
<tr>
<td>Meeting spaces</td>
<td>No cost - These will be provided by the LA and schools as required</td>
</tr>
<tr>
<td>Materials (e.g. paper, mats, card) and printing for interview resources</td>
<td>Minimal cost of approx £10 - Most will be created from the researcher’s personal resources</td>
</tr>
<tr>
<td>Audio recording equipment</td>
<td>No cost - Provided by the University</td>
</tr>
<tr>
<td>Staff costs</td>
<td>The costs of the school practitioners being involved in the interviews/recruitment will be absorbed by the LA through normal working processes</td>
</tr>
<tr>
<td>Travel costs to and from interviews/meetings regarding the research</td>
<td>Approx £100 in petrol costs from the researcher’s personal funds</td>
</tr>
<tr>
<td>Materials (e.g. paper etc), printing and stamps to feedback to participants</td>
<td>Limited costs of approx £5 - from the researcher’s personal resources</td>
</tr>
</tbody>
</table>
# APPENDIX NN: Operational Risk Analysis

<table>
<thead>
<tr>
<th>Risk</th>
<th>Level</th>
<th>Contingency Plan</th>
</tr>
</thead>
</table>
| Practitioners will not take up invitations to take part due to workload and current heavy constraints upon time due to governmental austerity measures | Medium | • Discussion with the EPs will take place to identify schools who are most likely to be able to carry out this role and to have the time agreed to do so.  
• Stakeholders will be encouraged to see the potential time/cost benefit. E.g. although they would need to give time to this now, support from the researcher in carrying this out may mean they would require to give much less time to this area in future if the stakeholders were to carry out this exercise themselves (which is likely given the LA priorities at the given time, of which the needs of this group of students is one. However, care will be taken to ensure that this information is presented in a factual rather than coercive manner.  
• Contingency would be to widen the area from which participants can be sought and thus the research is conducted (e.g. across a wider area of the LA, more than one LA etc). |
| No participants agree to consent to taking part in the research     | Low   | • Preliminary exploratory discussions with the LA and schools within the area indicate a good level of interest and support for the research due to high levels of need. The time scales and commitments required from practitioners will be made clear from the outset.  
• If no practitioners within the LA wish to participate, other LAs in the North West of England will be approached. |
| Considerations in the participant criteria eliminate all possible participants | Low   | • Modified criteria will be identified if this should occur.  
• If no student participants within the LA wish to participate, other LAs in the North West of England will be approached. |
| Identified participants do not consent to take part                 | Low   | • As above                                                                                                                                                                                                       |
| Participants do not attend the scheduled interviews                | Medium | • In the first instance interviews and sessions will be rescheduled and if non attendance still occurs then contingency participants will be sought from a wider area.  
• Phone call/email/letter reminders will be used as required.       |
| Participants withdraw from the process                              | Low   | • As above, plus all efforts will be made to ensure that participants feel happy and informed throughout the process so that possible withdrawal is minimised.  
• As the process will be short for most participants (e.g. one interview) it is less likely. More participants will be recruited than required to allow for this. |
| Emotional state of participants during interview or focus group causes the researcher or participant to cease the interview | Low | • The researcher will take steps to try to ensure the participants feel as emotionally ‘safe’ as possible and take all precautions necessary to monitor emotional state and respond as necessary to any observed needs.  
• Additional participants will have been sought to ensure more than the required number as contingency.  
• Questions will be carefully constructed to cause as little adverse emotional feeling as possible; however, given the nature of the needs of the student (e.g. anxiety) it is likely that some level of discomfort may be experienced.  All measures possible will be taken to minimise this. |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants refuse to allow audio recording of interviews and sessions</td>
<td>Low</td>
<td>• A colleague will be identified to aid with note taking during the interviews if this occurs.</td>
</tr>
</tbody>
</table>
| The research is not support by the schools within the LA | Low | • The recruitment methods aim to ensure the collaborative process of participation.  
• Preliminary exploratory discussions with schools within the area indicate a good level of interest and support for the research due to high levels of need.  The time scales and commitments required will be made clear from the outset.  
• Contingency would be to widen the area from which participants can be sought and thus the research is conducted (e.g. across a wider area of the LA, more than one LA etc). |
| Researcher illness/ absence | Low | • Contingency time has been factored into the research proposal.  The research time frame could be extended if absolutely necessary. |
| Participant absence/ illness | Low | • More participants than required will be recruited to allow for this. |
| Possible conflicts between working as a TEP in schools and acting as a researcher (for example, teachers asking for advice or providing additional information about children involved in the research). | Low | • The researcher does not currently act as a link EP for any high schools within the area.  
• The specific role as a researcher (rather than a TEP) will be clarified with schools before commencing the research.  
• If approached for psychological advice for a specific child, the role will be clarified and schools/participants will be directed to seek advice from the SENCo or school EP. |
APPENDIX OO: Thematic Networks for Case 1 (Ali)

- Managing change
  - Worry about what will happen next
  - Change in environment
  - Change in staff
  - Missing the bus
  - Change in routine
  - Transition to high school

- Managing self-organisation and unstructured time
  - Self organisation
  - What to do in unstructured time

- Environmental and sensory factors
  - Being bumped into in the corridor
  - Busy times
  - Fire alarms
  - Certain smells
  - Problems completing homework
  - Worry about achievement
  - Academic pressures

- Becoming more self aware
  - Realising his differences
  - Changes in adolescence

- Social interaction and communication
  - Interactive work in class
  - Interacting with others

- Difficulty processing and managing feelings
  - Difficulty understanding his feelings
  - Peer teasing, swearing and exclusion
  - Worry about getting hurt by peers
  - Bullying
  - Questioning why he is being bullied

- Negative thinking
  - Perfectionism
  - Worry about being reprimanded
  - Worry about everyday incidents
Recognising the signs and impact of anxiety

Physiological manifestations
- Unusual feelings in his head
- Headaches
- Shaky legs
- Sweating
- Hot and restless hands
- Red faced
- Feelings in stomach

Difficulty controlling emotional responses
- Physical outbursts toward others
- Frustration
- Loses control

Sub-optimal performance
- Keeping up with the pace
- Disorganised
- Confusion
- Lack of attention
- Distracted
- Doing homework
- Not completing tasks
- Not reaching his potential

Impact upon emotional wellbeing
- Increased difficulty with social and peer relationships
- Verbalises low mood
- Feeling like he can't cope

Poor self perception
- Difficulty with social interaction
  - Difficulty with reciprocal conversation
  - Avoidance of others
  - Withdrawal
  - Repetitive questioning when anxious
  - Visibly agitated
  - Distress
  - Outward emotional expression
  - Upset
  - Crying
  - Sensory responses
  - Fidgeting/fiddling
  - Hyper vigilant
  - Pacing
  - Repetitively looking at clock/watch
Perceived effective actions and strategies to address the anxiety

- Weekly planning and guidance for changes
- Planning for homework
- Structure, planning and organisational support
- A place to go during unstructured times
- A safe quiet place to go
- Taking a break from class
- Written guidance for staff
- Telling staff about his worries and what helps him
- Staff knowledge
- Specialist teacher guidance for staff
- Lying down
- Having a drink
- Coping mechanisms
- Transitions planning prior to high school
- Familiarisation visits
- Liaison with staff
- Tour of the school
- Support with social skills
- Social scripts
- Social experiences that allow positive peer modelling

- Classroom strategies
  - Own whiteboard
  - Written instructions
- Support to understand and manage his feelings
- Adult support with worry management
  - A familiar adult for regular discussion about worries
- Peer support
  - Caring and nice peers
- Home-school communication
  - An accepting class group
  - Regular communication with parents
- Support with social skills
  - Specialist teacher support with social and communication skills

- Perceived positive outcomes
  - Comes to school
  - He has good times
  - Increased confidence
  - More friendships
  - Worries less
  - Help with school work
  - Apart from the time
  - Being able to do things
  -常态化
  - Coping skills
  - Input from adults
  - During unstructured times
  - He has more friends
  - Worries less
  - He is able to cope
Recognising the signs and impact of anxiety

Physiological manifestations
- Altered eating and drinking habits
- Nocturnal enuresis
- Reports of stomach ache

Outward emotional expression
- Frustration
- Extremes of behaviour
- Physical outbursts
- Mental health needs

Impact upon emotional wellbeing
- Tearful
- Presented differently
- Low mood
- Breakdown

Sub-optimal performance
- Difficulty with concentration and attention
- Difficulty completing work
- Difficulty with decision making
- Over attention to detail

Poor self perception
- Easily distracted
- Low self esteem
- Negative self concept
- Becomes withdrawn

Difficulty with social participation
- Disorganisation
- Becomes uncommunicative
- Lack of attention to the social world
- Lack of participation in class and group activities

Increased autistic behaviour
- Retreats into his interests
- Fidgeting
Perceived effective actions and strategies to address the anxiety

Adapted teaching approaches
- Specific feedback from teaching staff
- Creative and practical teaching activities
- Building independence by gradually decreasing support
- Teaching approaches accounting for TRS ASC
- Strategies given in a repetitive manner

Barriers to effective practice
- Good home-school communication
- Good home-school liaison
  - Transferring strategies from school to home
  - Staff support to identify and manage his thoughts and feelings
  - Immediate and obvious response to concerns
  - Recognition of signs and triggers by staff
- Adult support with emotion management
  - Open access to trusted staff to discuss his concerns
  - Compassionate people who listen
- Structure, planning and organisational support
  - Differentiated planner with clear targets and goals
  - Support with planning and reviewing homework
  - Support with self-organisation
  - Daily routines and structure

Planning for transition
- A safe space
- A quiet place to go
- Adult support at unstructured times
- Activities at lunch and break times

Positive and acceptance
- Use of rewards and reinforcement
  - Using his strengths and talents

Social and life skills
- Social, communication and interpersonal skills work
  - Support with life skills
  - Work on problem solving skills

Peer support networks
- Group identity
- Bonding with similar peers
- Friends at unstructured times
  - Shared coping strategies

Staff knowledge and understanding
- Whole school training re ASC
- Developing staff understanding
  - Regularly updated information for staff

Perceived positive outcomes
- More positive thinking and less worry
- Improvements and progress
- He has developed a skill set and experience
- Increased confidence in social interaction
- Better self-awareness

Mutual support of friends with similar experiences

TA support at registration times
- A range of supports
- School being creative with the resources to support him

Supportive SENCO and SEN support
- Pen portrait to all staff

Emotional, social and educational support
- Regularly updated information for staff
APPENDIX QQ: Thematic Networks for Case 3 (Ryan)
Recognising the signs and impact of anxiety

**Physiological manifestations**
- Rash and blotchy skin
- Stomach ache
- Poor appetite
- Pale and pinched face
- Tenses muscles
- Reports of nausea
- Sleep difficulties
- Pains/shocks in his body
- Tiredness
- Hoarding items in his pockets
- Increased repetitive actions
- Fidgeting
- Picking up bits of fluff
- Pacing around

**Outward emotional expression**
- Sadness
- Crying
- Running out of class
- Throwing items
- Easily angered and frustrated
- Outbursts of anger toward others
- Slamming doors
- Sad and depressed

**Risk of low attendance and exclusion**
- Difficulty controlling emotional responses
- Unhappy
- Low mood
- Negative self concept
- Low self esteem
- Decreased self esteem
- Curling up and hiding away

**Interaction and social difficulties**
- Refusal to work with others
- Increased difficulty in social relationship
- Intolerance of others
- Increased social withdrawal
- Uncommunicative

**Poor self perception**
- At risk of exclusion
- School refusal
- Difficulty absorbing information
- Difficulty with concentration and attention
- Lack of contribution to lessons
- Getting behind with homework
APPENDIX RR: Thematic Networks for Case 4 (Megan)

Recognising factors contributing to anxiety

- Cognitive distortions
  - Worry about making mistakes
  - Perfectionism
  - Negative comparison to peers
  - Striving for 100% attendance

- Difficulty expressing and managing feelings and emotions
  - Overloaded by thoughts
  - Difficulty expressing feelings

- Managing change
  - Daily transitions
  - Transition to high school
  - New and unfamiliar experiences
  - Changes in routine or timetable
  - Change of teachers or classes

- Unstructured times
- Lack of structure

- Environmental and sensory factors
  - Using toilets at school
  - People touching/brushing past her
  - Noisy and busy places e.g. crowded corridors

- Academic pressures
  - Homework
  - Reaching expectations/targets
  - Exams
  - Certain lessons e.g. maths

- Social difficulties
  - Peers not following the rules
  - Conflict between peers
  - Worry about social etiquette
  - Group work and team activities
  - Worry about communication and interaction with peers
Recognising the signs and impact of anxiety

Physiological manifestations
- Butterflies in her stomach
- Poor sleep/tiredness
- Shaky legs
- Gets hot
- Headaches
- Sweaty hands
- Nausea
- Stomach ache
- Doesn't eat much

Outward emotional expression
- Crying
- Uplight

Sub-optimal performance
- Not working to full potential
- Difficulties with concentration and attention
- Lack of independent decision making
- Reluctance to contribute in class

Difficulty controlling emotional responses
- Outbursts of behaviour at home

Poor self confidence
- Reluctance to answer questions
- Needing adult support nearby

Increased autistic behaviours
- Fidgets and fiddles
- More reliant on routines
- More reliant on interests

Changes in social interaction and communication
- Changes the topic
- Uncommunicative
- Repetitive talk
- Becomes withdrawn
- Reluctance to participate in class
- Disengages in lessons
- Hiding away in small places
## APPENDIX SS: Analysis of the Theoretical Propositions for Research Question One

### Linking to Research Question 1: What are the perceived difficulties and needs of students with ASC who show signs of anxiety in the mainstream secondary school setting?

<table>
<thead>
<tr>
<th>Propositions</th>
<th>Evidence to support the proposition?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overarching proposition:</strong> The students with ASC showed noticeable signs of anxiety within the school environment</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Sub Propositions:**

- The students displayed negative patterns of thinking linked to their anxiety | Yes |
- The students experienced physical signs or symptoms when anxious | Yes |
- The students displayed non-verbal signs that were untypical when anxious | Partially |
- The students’ anxiety led to changes in their speech or vocalisations | Yes |
- The students displayed emotional distress or vulnerability when anxious | Yes |

**Overarching proposition:** Specific factors within school caused anxiety for the students with ASC | Yes |

**Sub Propositions:**

- Sensory and/or environmental factors within school may have impacted upon the students’ anxiety | Yes |
- Social situations and differences in social understanding led to anxiety for the students | Yes |
- The students' anxiety was heightened by changes at school | Yes |
- Perceived peer exclusion, teasing or bullying by other students may have led to anxiety for the students | Yes |
- The students experienced anxiety during times of transition | Yes |
- The students’ awareness of their own differences or needs caused anxiety | No |
- The students became anxious about achieving aspirations or about expectations of them | Partially |
- Difficulties with understanding and managing their own feelings heightened the students’ anxiety | Yes |
- Unstructured times were a cause of anxiety for the students within school | Yes |
- The students’ anxiety resulted from a perceived lack of adult understanding of the needs of the students within school | Partially |

**Overarching proposition:** When anxious, the presentation, experiences and behaviour of the students with ASC were adversely affected within school | Yes |

**Sub Propositions:**

- The students’ anxiety impacted upon their social and peer relationships at school | Yes |
- The students’ anxiety may have had an adverse effect upon their academic performance | Yes |
- The students’ anxiety contributed to their lowered self-esteem | Yes |
- The students’ eating or sleeping patterns were affected when experiencing periods of anxiety | Yes |
- The students may have experienced severe emotional or mental health needs during their periods of anxiety | Yes |
- The students experienced changes in attention and concentration at school when anxious | Yes |
<table>
<thead>
<tr>
<th>Statement</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>The students may have displayed adverse behaviour at school when anxious</td>
<td>Yes</td>
</tr>
<tr>
<td>The students’ anxiety may have caused repetitive or compulsive behaviours</td>
<td>Yes</td>
</tr>
<tr>
<td>The students’ anxiety led to physical or emotional withdrawal</td>
<td>Yes</td>
</tr>
</tbody>
</table>
APPENDIX TT: Analysis of the Theoretical Propositions for Research Question Two

Linking to Research Question 2: What is perceived to be effective practice in supporting students with ASC who show signs of anxiety in the mainstream secondary school setting?

<table>
<thead>
<tr>
<th>Overarching proposition:</th>
<th>Evidence to support the proposition?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific actions, intervention, support and/or strategies at school helped to limit or manage anxiety for the students with ASC</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Sub Propositions:**

- Good knowledge, understanding and approach of school staff lessened the likelihood of anxiousness within the students | Yes |
- The students’ anxiety was reduced through the use of appropriate visual and concrete teaching approaches | Yes |
- Teaching staff providing suitable adaptations to communication and language use would help to limit the students’ anxiety | Partially |
- The students’ anxiety was reduced through the use of social skills lessons and/or the ‘hidden curriculum’ | Yes |
- The students’ anxiety in school was reduced by teaching specific social and/or communication skills | Yes |
- The use of visually based social skills approaches helped the students to manage their anxiety within school | Yes |
- The use of modelling approaches helped the students to manage their anxiety within school | No |
- Opportunities to practise learned strategies within the school environment helped to reduce the students’ anxiety | No |
- Providing opportunities to help the students generalise skills that had been learned to other settings or situations helped to reduce their anxiety | No |
- The students’ anxiety was reduced by emphasising and utilising their strengths and talents | Yes |
- Including the students’ specific interests more at school helped them with managing their anxiety | Yes |
- Professionals external to the school helped to reduce the students’ anxiety | Yes |
- Understanding and support from peers helped the students with their anxiety | Yes |
- Adults (such as teaching staff and other professionals) collaborating with each other regarding the students’ needs helped in managing the students’ anxiety | Partially |
- School involvement with parents/carers helped to reduce the students’ anxiety | Yes |
- The students’ anxiety was reduced by helping them to identify physical and emotional feelings and thoughts | Yes |
- The students’ anxiety was reduced by helping them to identify and manage negative feelings, thoughts and worries | Yes |
- The students’ anxiety was reduced by teaching them relaxation and calming strategies at school | Partially |
- Involving the students in planning for their needs at school helped to reduce their anxiety | No |
- The students’ anxiety was reduced by the use of genuine inclusionary approaches and acceptance at school | Partially |
- The students having access to supportive and trusted adults at school helped to alleviate anxiety | Yes |
- The students having a specific place to go to when anxious at school helped to reduce their anxiety | Yes |
<table>
<thead>
<tr>
<th>Statement</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>The students’ anxiety was reduced by having clear routines and structures in place at school</td>
<td>Yes</td>
</tr>
<tr>
<td>Making adaptations regarding environmental factors at school helped to decrease the students’ anxiety levels</td>
<td>Partially</td>
</tr>
<tr>
<td>Planning and support prior to transition to secondary school helped manage the students’ anxiety</td>
<td>Yes</td>
</tr>
<tr>
<td>The use of creative, artistic or sensory activities at school helped the students to manage their anxiety</td>
<td>Yes</td>
</tr>
</tbody>
</table>
## APPENDIX UU: Analysis of the Rival Explanations

<table>
<thead>
<tr>
<th>Rival explanations linking to Research Question 1: What are the perceived difficulties and needs of students with ASC who show signs of anxiety in the mainstream secondary school setting?</th>
<th>Specific rival explanation</th>
<th>Evidence to support the Rival Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overarching rival explanations</td>
<td>Outcomes of the research are due to researcher bias</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Outcomes of the research are due to a limitation in sample</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Outcomes of the research are due to issues of reliability within data collection and analysis</td>
<td>No</td>
</tr>
<tr>
<td>Rival explanations linking to Research Question 2: What is perceived to be effective practice in supporting students with ASC who show signs of anxiety in the mainstream secondary school setting?</td>
<td>The presentation, experiences and behaviour of the students with ASC were adversely affected within school by factors other than anxiety</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>The students with ASC did not show noticeable signs of anxiety within the school setting</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>The presentation of the students within the school setting was not due to anxiety, but to the nature of ASC</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>The needs and difficulties associated with the students’ anxiety were caused by factors outside of the school setting</td>
<td>Partially</td>
</tr>
<tr>
<td>Rival explanations linking to Research Question 2: What is perceived to be effective practice in supporting students with ASC who show signs of anxiety in the mainstream secondary school setting?</td>
<td>Supports and interventions not mentioned within the data collection account for the perceptions of ‘what worked’ for the students with ASC within the mainstream setting</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Support or intervention provided outside of the school setting accounted for the perceptions of ‘what worked’ for the students with ASC within the mainstream setting</td>
<td>Partially</td>
</tr>
</tbody>
</table>