Use of Delphi methodology to define competencies in professional educational psychology training

Sandra Dunsmuir, Cathy Atkinson & Sarah Wright

This paper discusses two applications of the Delphi technique to define curriculum content for doctoral training programmes in educational psychology. Delphi is an approach which allows consensus to be drawn amongst experts in relation to particular issues. The first example involves the definition of competencies required for trainee educational psychologists working with young people aged 16-25 years. The second centres on the revision of the Division of Educational and Child Psychology Training Committee competencies for the British Psychology Society (BPS) standards for the accreditation of postgraduate professional doctorate programmes in educational psychology.

The Delphi technique

The Delphi technique was developed in the United States in the 1950s as a systematic method of tapping the opinion of experts; it incorporates a series of questionnaires with inbuilt feedback mechanisms (Linstone & Turoff, 2011). Its underlying premise is that the product of group consensus is more useful than the underpinning individual views. The procedure has been widely used, and has developed over the years to incorporate several key features: anonymous response from a group of often geographically disparate experts; a series of questionnaires/rounds with controlled group feedback summarising the results of the previous stage and forming the basis of the next questionnaire; re-evaluation and revision of individual responses in the light of the views expressed by other respondents; repetition of rounds of Delphi polling until high levels of agreement are achieved. Hasson et al. (2000) recommend that the minimum level of final consensus should be 70 per cent.

An important consideration is to establish who will be invited to participate in Delphi polling. Dalkey (1969) highlighted how participant depth of knowledge, levels of expertise and range of views significantly predicted the quality of the final outcome. Over time, the Delphi method has been widely adapted and new variants have emerged. Indeed, Linstone and Turoff (2011) argue 'that the growing number of facilities to carry out a Delphi on the web has definitely led to the start of a new growth curve in the use of these methods for the support of large collaborative groups' (p.1714).
Agreeing competencies for trainee educational psychologists working with young people aged 16–25

The new Code of Practice for Special Educational Needs and Disability (SEND; Department for Education, 2014) extends statutory protections into adulthood and, consequently, extends the role of the educational psychologist (EP) to working with young people up to the age of 25. There is limited literature internationally pertaining to how EPs might support post-school learners (Mackay, 2009), hence it was considered important to harness expertise from within the EP profession in order to consider curriculum implications for initial training programmes within tight timescales.

To do this, we employed two rounds of the Delphi technique. In the first round 28 respondents, selected via a posting on EPNET, the main professional electronic discussion forum for UK-based EPs, were invited to complete an initial questionnaire. All were practitioner EPs with more than six years’ experience working in universities (8 per cent), in senior/specialist local authority posts (50 per cent) or in independent practice (42 per cent), where they had had opportunity to work with young adults, developing views on the required knowledge and expertise required. The first Delphi questionnaire was presented as an online survey and respondents were invited to provide their ideas about potential curriculum content in six areas: Content, Legislation and Policy, Assessment, Interventions and Outcomes, Development and Transition. Participants were asked to rate the importance of proposed curriculum topics on a five-point Likert scale with response options ranging from extremely important to extremely unimportant. They were also invited to propose additional competencies. The results were anonymously collated and a series of reports prepared. These were organised under the six categories listed above, and descriptive data highlighting an individual’s position in relation to collated group responses were presented for each item. Participants were e-mailed their individualised report and a request made to reconsider their views before completing the second round of Delphi polling. This time, they were asked to rate whether each item was:

1. Essential within new training curricula for EPs working with young people aged 16–25 years.
2. Captured in existing 0–19 curricula, but needing extension to address the needs of this older population.
3. Not relevant within the existing role of an EP, or the new extended role.

Collation of the results from the second Delphi poll indicated a very high degree of consensus – there was over 95 per cent agreement on competencies considered either essential or perceived as already being covered in existing curricula for EP training (1 and 2 above). Given the focused nature of the survey, two Delphi rounds were considered sufficient as a high level of consensus was achieved. The criterion level for acceptance of a competence statement was agreed at 90 per cent which was considered acceptable following Hasson et al.’s (2000) guidance.

To refine the curriculum content, we convened a face-to-face meeting involving eight respondents reporting specific expertise across different domains of post-school practice including SEND, mental health, mental capacity, and assessment of specific learning difficulties within further and higher education and youth justice settings. This enabled us to add qualitative detail to the framework established via the Delphi process. Additionally it addressed a criticism of the Delphi approach; that it can be inclined to force consensus and not allow discussion of relevant issues (Hasson et al., 2000).

Identification of new curriculum areas deemed ‘essential’ by the expert group to
enable effective practice, and those which could be covered through extended current curricula to address the needs of post-16 learners, enabled the development of a competency framework for working with young people aged 16–25. This, along with more detailed information about the methodology and findings, can be found on the project website at www.ucl.ac.uk/ospa-project/.

**Defining competencies for postgraduate professional doctorate programmes in educational psychology**

The Delphi technique was also used as part of the Division of Educational and Child Psychology (DECP) Training Committee’s review of standards for the accreditation of postgraduate professional doctorate programmes in educational psychology. The challenge was to define optimal professional standards at both a theoretical/academic level and an applied/practice level, and translate these into the competencies required for contemporary educational psychology practice. To do this, the DECP training committee invited individuals with a range of expertise in educational psychology training and practice to participate in the consultation. Twenty individuals participated, comprising programme directors from across the UK (7); principal educational psychologists from varied demographic and geographical locations (7); and placement supervisors/course tutors (6).

The Delphi poll was set up as an online questionnaire which enabled this geographically dispersed group to complete it within very tight timeframes (two weeks per round). The first round questionnaire was developed by a small working group that proposed competencies for initial EP doctoral training. Participants were sent the link to the survey in an email and asked whether they thought each competence should be included, deleted or amended. If they selected ‘amend’, they were invited to propose an alternative form of words that would better capture the essence of the competence. Following submission of the 20 online surveys, results were collated and individualised reports prepared. These presented the individual with their responses in conjunction with aggregated group percentages (e.g. Include – 52.6 per cent; Delete – 5.3 per cent; Amend – 42.1 per cent). A generous standard of consensus was adopted, so where 80 per cent or more participants recommended inclusion of a competence, it was retained. Competencies were deleted where this was recommended by 20 per cent or more respondents. Proposed amendments to wording were combined into revised competency statements. The second round of the Delphi Poll therefore involved asking participants to
review the revised competencies and to make judgements about which form of words they preferred, by selecting either 'Yes' or 'No' to accept or reject the revised wording of each statement. This provided a variant on Delphi methodology that was nonetheless an effective way of reaching consensual decisions about curriculum content.

In conclusion, the Delphi technique has been shown to have great potential in defining and agreeing competencies in two different contexts. As a structured communication technique, it has offered an effective means of tapping the views of EPs with expertise, in order to define the knowledge and skill required for competent professional practice. Once more, Delphi has been shown to be an efficient way of establishing clear consensus in a group without bringing its members together for meetings and as such, can be recommended as a method that can be used for making data-based decisions about issues relating to professional psychology training.

The authors
Dr Sandra Dunsmuir is Co-Director of the Doctorate in Educational and Child Psychology at University College London.
Dr Cathy Atkinson is Curriculum Director of the Educational and Child Psychology Doctorate at the University of Manchester.
Dr Sarah Wright is the Programme Director of the Doctoral Programme in Educational Psychology at the University of Southampton.

References