Not even in your dreams, mate.
Clare Allely on how we never lose track of time, not even in our sleep

Also inside:
Getting on to clinical training: Liz Murphy’s A to Z
Not too emotional to think straight? Emotion and reasoning
The role of a Clinical Psychologist
Welcome back! Hope everyone had a great summer. So, it’s another academic year and with it comes the first issue of volume two of the Psi magazine. As usual this issue is packed with a range of interesting articles including two must-read information pieces for those of you interested in Clinical Psychology.

The cover article is written by Clare Allely and is an interesting piece all about sleep (as you probably gathered from the cover picture!) and how we never lose track of time, not even during sleeping.

The other feature is written by Marios Eliades and looks at how emotion affects our ability to reason logically. Does emotion always affect reasoning in the same way?

For those of you who are new to Manchester, past issues of the magazine can be found online at www.mhs.manchester.ac.uk/research/PSG. These contain articles covering everything from being a psychology fresher to getting volunteer work through the career’s service.

Finally, we’d just like to thank everyone who helped us with this issue, including Peter Taylor, Alyson Dodd, Jane Owens, Peter Blore, Andy Woods, Johanna Kuenzel and Ann Johnson.

Judith Johnson and Sarah Davies, PhD students at the University of Manchester
Training as a Cognitive Therapist

by Vicky Absalom

Recent years have seen accumulating evidence in favour of cognitive behaviour therapy (CBT). CBT has been shown as effective in treating not only anxiety and depression but also other Axis I and II diagnoses, ranging from Obsessive Compulsive Disorder (Salkovskis, 2002) to Personality Disorder (Davison, 2007). In response to this evidence, the Government has published Best Practice Guidelines (DoH, 2008). These guidelines state that all people suffering with anxiety and depression should be offered CBT as ‘first line’ treatment. This move has been widely supported; however, it has led to a much increased need for CBT trained therapists which cannot currently be met. So, in order to meet this need, the Diploma in Cognitive Therapy (CT) has been introduced.

Content of diploma

If you’re in Manchester, the nearest course being run is in Salford. This Diploma is part time, with training one day a week for one academic year. The course involves workshops given by key speakers, covering CT skills and model specific teaching for various diagnoses.

Along with the workshop teaching, trainees are expected to have a minimum of two clients per term which they see on a weekly basis. It is suggested that trainees see clients with mild disorders at first, and progress to clients with more complex problems later in the course. Weekly clinical supervision is provided in groups. These sessions usually consist of each trainee discussing a client and showing some footage of the clinical session from that week. Clear goals are set out and trainees are encouraged to ask questions. The footage shown should be viewed with specific questions in mind, and the supervisor and group advise and comment for further development. In addition to this, trainees are expected to submit two formal videotapes of clinical sessions for assessment. The tapes should show key CT skills in practice with clients.

Throughout the course trainees are expected to show academic skills by producing two essays (2000 words each), two case reports (6000 words each) and a dissertation (8000 words).

Entry requirements

For the academic year 2008/09 there were a total of 18 places on the diploma. These places were given to a range of mental health practitioners from professional and non professional routes; clinical psychologists, psychiatrists, community psychiatric nurses, counsellors, graduate mental health workers, assistant psychologists and PhD students.

There are set criteria to apply for the courses in CT which can be viewed on the centre’s website: www.salfordcognitivetherapycentre.com. Although most trainees come from a professional background, the 2008 Diploma course introduced a route for individuals without a professional qualification, such as psychology graduates working as assistant psychologists and researchers. A minimum of four years clinical experience is required for the non-professional route plus a Knowledge, Skills and Attitudes portfolio.

Outcomes

On completion of the course, therapists can apply for individual accreditation as a cognitive therapist through the British Association of Behavioural and Cognitive Psychotherapies: www.babcp.com

With the demand for cognitive therapists increased due to recent Government initiatives, the Diploma is one option of training. The Salford Centre at Prestwich (and others) also offers alternative courses such as the Certificate in CT and the IAPT Low and high intensity training. These courses offer an alternative route into clinical work, giving more options than just the 3 year clinical psychologist doctorate (ClinPsyD) training.

Vicky Absalom, PhD student
We seem to have an inherent fascination with time and dreams, since so much of our film, music, books and television feature them. For instance, the science fiction-action film The Matrix (1999) explored the question: Can we really differentiate reality from illusion? Specifically, the notion that our reality may just be an illusion is suggested by the brain’s ability to trick itself into experiencing dreams as being the “real world”, which has led some philosophers to wonder whether we are constantly dreaming. The American heavy metal band Metallica have a rare version of their song, One, which captures this notion very succinctly:

“I don’t know whether I’m alive or dreaming or dead or remembering
How can you tell what’s a dream and what’s real
When you can’t even tell when you’re awake and when you’re asleep”

The writer Lewis Carroll explored the concept of dreams and reality widely in his novels. In Through the Looking-Glass (1871), Alice finds the Red King asleep in the grass. Tweedledum and Tweedledee tell her that the Red King is dreaming about her, and that if he were to wake up she would “go out—bang!—just like a candle.” He also seemed fascinated with the concept of time. In Alice in Wonderland Carroll uses frequent changes in time and spatial directions as a plot device - for example time running backwards.

More recently, the concept of time has been played out and stretched by the popular science fiction television programme Doctor Who. This depicts the adventures of a mysterious alien time-traveller known as “the Doctor” who travels in space and time in a time-ship which, from the outside, appears simply to be a blue 1950s police box.

Merging these popular recurring themes, the present article sets out to explore our sense of time during unconscious states, namely, sleep and dreams. So much of the literature focuses on timing abilities of humans during the awakened state, yet these abilities during sleep remain relatively unexplored. So, can humans still judge time when they’re sleeping?

Source of self-awakening ability
Several studies investigating human sleep have suggested that the mechanisms which enable humans to perceive the passage of time are also available during sleep. Some evidence for this comes from the ability of some individuals to time the end of their nocturnal sleep without the aid of an alarm clock (Moorcroft & Breitenstein, 2000). The existence of an internal timing clock in the brain has been suggested as a possible explanation for time estimation during nocturnal sleep in humans.
Dreams can be produced under hypnosis (Aritake et al., 2004). However, Moorcroft and Breitenstein (2000) argue that rapid eye movement (REM) sleep is a more likely candidate for enabling predetermined self-awakening, since it is the time of increased brain activation which makes waking easier and also because of its periodic nature during the course of the sleep cycle. Moreover, the duration of REM typically becomes greater throughout the course of the night which increases the chances of awakening around the desired time as it has been found that individuals generally arouse briefly both before and after REM sleep.

**Time relations in dreams**

For centuries, scientists have been fascinated by the relationship between subjectively estimated time in dreams and real time (Hall, 1981). Literature contains many examples of reports in which individuals have seemingly experienced significantly lengthy dreams in a relatively short space of time. A particular example of this is the reported dream of Maury (i.e., Frobes, 1920). In the dream, Maury lived through the brutality of the French Revolution and found himself being sentenced to death by the Court of the Revolution. At the moment the axe fell on his neck, he woke up to find that his wooden bedrail had fallen down and hit his neck. It appears that the eventful dream, which could only have been an extremely short one, was created backwards from the stimuli of the fallen bedrail. However, these anecdotal reports are fraught with limitations. For instance, Maury had been reading the story of the French Revolution just before he fell asleep and the dream could have been taking place long before the fallen bedrail (Schjelderup, 1960).

Today the idea suggested by Maury has been replaced with the widely accepted belief that the subjectively experienced time in dreams corresponds with actual time (Schredl, 2000). Dement and Kleitman (1957) were the first to demonstrate this relationship in a study in which participants were woken randomly, either after 5 or 15 minutes of REM sleep. After awakening, participants were asked to estimate whether the elapsed sleep interval was 5 or 15 minutes. From 111 awakenings, 83% of judgments were correct. Further, the elapsed time of the REM period correlated with the duration of the dream report. Noting the fact that the brain mechanisms of over or under-estimation of time spent in sleep have yet to be fully explored, Aritake et al. (2004, 2009) investigated the estimation of time during the course of the sleep as sleep progressed through the night. In the experiment, 11 healthy volunteers participated in time estimation trials scheduled six times during 9 hour nocturnal sleep periods, under carefully controlled conditions. It was found that their estimation of time decreased significantly throughout the night, from the first to the sixth trial. This suggests that the ability to estimate the passage of time shifts from overestimation in the early hours of sleep to underestimation in the last hours of sleep.

**Hypnotically induced and lucid dreams**

It is well known that dreams can be produced under hypnosis, and a key benefit of this approach is that a person can understand and react to speech and other impressions whilst they are dreaming. This means that factors such as the nature of the initiating and awakening signal, the objective duration of the dream and the central topic of the dream, etc., can be systematically investigated and compared to the participant’s own subjective reports of dream length. Schjelderup (1960) decided to use the method to investigate whether it is possible in a dream to live through a long chain of events in the course of an objectively very short time. In one experiment,
participants were put into a hypnotically induced sleep, then heard an alarm clock ringing for one and a half seconds. Despite this short stimulus, one participant experienced a dream about a series of experiences at an airport, where evidently the drone of the engine was the dream interpretation of the ringing of the clock.

Lucid dreams have also been used to explore the relationship between the subjective experience of time during sleep compared to real time. The term “lucid dream” is given to dreams in which the dreamer can consciously manipulate as they are aware that they are dreaming (Tholey & Utecht, 1997; LaBerge, 1985). They are particularly useful to the study of time intervals in dreams, since lucid dreamers can execute prearranged tasks in their dreams and mark the beginning and the end of the task with eye signals that can be measured objectively by electrooculogram (EOG) recording. In five proficient lucid dreamers, Schredl (2007) explored the relationship between the required time for counting in lucid dreams and in the waking state. In contrast to Schjelderup’s (1960) conclusion, Schredl’s results showed that the time required for counting in a lucid dream was comparable to the time needed for counting in wakefulness. Similarly, LaBerge (1985) demonstrated that time intervals for counting from one to ten in lucid dreams (by counting from one-thousand-and-one to one-thousand-and-ten) are close to the time intervals for counting during wakefulness.

Bioelectrical activity during subjective estimation of duration and dream structure

It has been suggested that humans’ subjective timing mechanisms are dependent on the frequency of the dominant Electroencephalography (EEG) alpha rhythm. It is thought that a phase of the alpha cycle is equivalent to a “tick of a biological clock” (Wiener, 1958). Speeding up this biological clock leads to the underestimation of time intervals, while slowing this frequency leads to overestimation of time (Hoagland, 1936). Moiseeva (1975) analysed bioelectrical activity of the brain in humans to examine its relationship with subjective estimations of dream duration. Studies in Parkinsonian patients in whom implanted electrodes were being used for treatment were carried out. This enabled them to analyse not only EEG and Electrooculography (EOG), but also the unit activities of neurones of subcortical structures were recorded during natural night sleep using ESCoG (electrosubcorticogram). EOG records eye movement, ESCoG measures the activity of neurones in subcortical structures and EEG measures the activity of neurones firing from within the brain by recording the electrical activity along the scalp. Moiseeva (1975) detailed a case of one Parkinson’s disease patient whereby at the 40th minute of her sleep she had a dream which consisted of rather obscure visual images and a sensation that someone was near her whom she should drive away. The patient moaned and moved her right arm, after which she was awakened and interrogated. The duration of the dream, according to the patient, was no more than half a minute which was consistent with the duration of the EEG and ESCoG changes expressed namely, low voltage theta and alpha-like activity as well as a few sharp and fast waves. So this link between bioelectrical activity of the brain and dream state strongly suggests that individuals do have the ability to estimate the duration of dreams.
The relationship between objective sleep variables and subjective sleep estimates in depression and schizophrenia

Previous studies have demonstrated timing deficits in individuals with depression and schizophrenia when they are waking, but are their timing abilities during sleep equally affected? (see article, ‘Could it all be a matter of time?’ in issue 3 of the Psi). Rotenberg, Indursky and Kayumov et al. (2000a) decided to explore this subject by investigating whether self-reported sleep quality and duration was related to any objective variables amongst depressed and non-depressed individuals. First, they explored the impact of slow wave sleep (SWS). They found that SWS in people with depression correlated positively with the subjective estimation of sleep duration and eye movement density in REM sleep correlated with the subjective estimation of the number of awakenings. In sum, compared to healthy controls, SWS in depression appeared to have a positive influence on the subjective feeling of sleep duration while phasic REM sleep activity had a negative influence.

Rotenberg et al. (2000a) were also interested in whether individuals with depression would underestimate the amount of sleep they received. Their prediction was confirmed only partly as both groups displayed almost an identical percentage of correct estimations of sleep duration. However, depressed patients were more likely to overestimate and particularly underestimate sleep duration (32% vs 42%, respectively) compared to their healthy counterparts. Due to this tendency to particularly underestimate the duration of sleep, individuals with depression may be more likely to feel as if they have not received sufficient amount of sleep even if they had. This may provide some explanation of why depressed individuals tend to report more problems with their level of sleep.

In related research Rotenberg, Indurski and Kimhi, et al. (2000b) investigated objective sleep variables and subjective estimation of sleep duration and quality in individuals with a diagnosis of schizophrenia. For three consecutive nights, participants were monitored for biophysical changes, and then asked questions concerning their perceived sleep duration, sleep latency, number of awakenings, and sleep depth on waking. As expected, compared to participants without a diagnosis of schizophrenia, those with schizophrenia exhibited a tendency to give greater subjective estimates with increasing objective sleep latency. An unexpected finding was the ability of participants with schizophrenia to estimate correctly the duration of wakefulness before sleep onset.

Correct estimation of sleep latency was not found in the healthy subjects or in patients with major depression (Rotenberg, 2000a). It is difficult to interpret this finding, but potentially sleep latency is overestimated in these groups because sleep delay causes emotional tension which affects the subject's ability to time accurately. In comparison, participants with a diagnosis of schizophrenia are more likely to have blunted affect. This may mean that sleep onset latency does not cause any emotional tension, and could enable accurate subjective time estimation.

Conclusion

The ability of some individuals to awaken at a predetermined time suggests the existence of an internal timing mechanism. Moreover, it has been shown that the human brain has the ability to estimate the passage of time during nocturnal sleep despite the presence of time cues. This suggests that the internal clock may also underlie unconscious timing functions. Studies have also shown that current psychopathology (e.g. depression) can have an impact on sleep time estimation. Future work into the underlying mechanisms may allow us to enhance these abilities and creates a number of possibilities. Could the mind asleep, in some respects, be superior to the mind awake?

Clare Allely is a PhD student at the University of Manchester

Dreams are an important part of many cultures.
What is language and where did it come from? In Origins of human communication, Tomasello argues that human cooperative communication evolved as part of a broader adaptation for collaborative activity and cultural life in general. Tomasello examines in detail the communicative skills of human infants and great apes, especially as manifest in gestures. This is a crucial source of evidence as a non-linguistic infrastructure of intentional understanding and common conceptual ground is logically prior (both in ontogeny and phylogeny) to an abstract symbolic code that conveys meaning. The central idea here is that conventional languages – first signed and then spoken – arose by piggybacking on natural gestures such as pointing and pantomiming.

The fact that humans understand the mundane utterance “can you pass the salt?” as a transparent request rather than, say, an enquiry about condiment passing abilities, rests on a uniquely human suite of social-cognitive and social-motivational skills, specifically, intentionally informing others of things for cooperative motives. OHC concludes the long and circuitous journey from ape gestures to human communication with a proposal for how the functional demands of communicative motives (sharing, informing and requesting) became grammaticalised into the conventional linguistic constructions of the world’s six-thousand languages.

OHC is a work of cognitive-science that is concerned with the social foundations of human communication; a combination which is perversely rare in language research. This book should be of interest to anyone curious about what makes us human, where that uniqueness came from and how it works.

Paul Ibbotson, PhD student

Rob Dempsey, PhD student

BABCP 2009 Conference – Exeter University

This July I attended the annual BABCP Conference at Exeter University. The BABCP is a somewhat unique society in that its membership comprises academic researchers, clinicians, nurses, therapists, lay members, research assistants and students. In total, 1200 attended this year’s conference.

The BABCP Conference consists of a number of symposiums, keynote addresses, panel debates, workshops, open paper sessions and poster presentations, across a wide variety of topics of relevance to both research and the clinical practice of psychological therapies. Speakers from a range of countries provided interesting talks on subjects as diverse as bipolar disorder (my own area of interest), the self-management of mental health conditions, positive psychology, chronic fatigue syndrome, cancer and psychosis. There was even a panel debate between leading academic figures discussing the gender differences in the number of men and women employed in high-level academic and clinical positions. A particular highlight for me was the keynote address by Professor Susan Nolen-Hoeksema, who was an engaging speaker when talking about her substantial body of research investigating the “toxic effects of rumination” upon well-being.

The BABCP Conference presents a valuable opportunity for young researchers to present and discuss their research with world-leading academics and clinicians, to hear presentations from these experienced researchers, and to learn more about the future directions of their current research. The conference also provides the opportunity to socialise with other young (and not so young!) researchers and clinicians.

Next year’s BABCP is to be held here at the University of Manchester.
For many, clinical psychology holds a fascinating appeal. The opportunity to study human experience, to understand emotional and mental health difficulties and to learn how such problems can be approached interests a number of psychology graduates. Unfortunately, the upshot of this is that if you’re interested in a career in clinical psychology, you’re not alone. Psychology is an increasingly popular subject and applications for clinical training courses far outnumber the posts available. However, this shouldn’t put off anyone who is interested. With the right experience, hard work and a few lucky breaks, success is entirely possible. Liz Murphy recently gained a place on the course here at Manchester. Here she lays out all her advice and top tips in an ultimate guide covering your time from graduation to clinical training.

I’m about to start the ClinPsyD course here at Manchester, and thought I’d write this article to share my experiences and offer some advice. This information may already be familiar to those interested in applying but I hope some will find it helpful. I’ll describe my own pathway onto the clinical training course, but want to emphasise that there are a number of varied ways of getting the right experience. There is no big secret to getting onto courses and you’ll find that your own journey provides a personalised learning curve.

Getting that first job: The bottleneck
Psychology is the UK’s 2nd most popular degree (after Law). This creates a bottleneck after graduation for jobs and further training afterwards, and presents a real challenge to those interested in working in psychology! Personally, I found that short-term or part-time posts were a good way of getting a foot in the door. My first job was a 3 month research post, looking into how people from non-traditional backgrounds can be encouraged to study psychology at university. If research doesn’t interest you though, support worker jobs and volunteer work can also provide valuable learning experiences.

Top tips
• Search for research assistant (RA) jobs on www.jobs.ac.uk or assistant psychologist (AP) jobs, IAPT low intensity worker jobs, and support worker posts on www.jobs.nhs.uk. If you are a member of the BPS, you can access job adverts on the Psychologist Appointments site: www.appmemo.co.uk.
• Prepare yourself for the fact you may have to apply for many posts and attend several interviews before being successful. Be resilient, learn from the process, and persevere.
• Get your driver’s license. Not being able to drive held me back from many posts.
• Join the psychology assistants’ group: manchesterasstpsychs@hotmail.co.uk. They also distribute job adverts at their meetings.
• www.psyclick.org.uk is a valuable source of information and solidarity but use sparingly because it can create collective anxiety. Also see www.clinpsy.org.uk.

Applying for RA posts
I currently work as a project manager for a research project in the department of psychiatry here at Manchester. This has given me experience of short-listing and interviewing research assistants, and has shown me that certain things you can do to make you stand out:

Top tips
• Make sure you meet the person specification. In your form, provide explicit evidence as to how you meet it. This can be from your studies, work experience, or volunteer work.
• Avoid including irrelevant information or giving the impression that you are just using the post as a stepping stone.
• Written communication is an important research skill, therefore complete your form carefully and give a professional impression.
• If you have been given a paper to read or a presentation to perform, prepare well and try
to demonstrate a critical understanding of the subject rather than summarising it.

**Maximising your experience: Volunteering and work experience**

I have been working in psychiatry research in self-harm for the past 3 ½ years. My post has been both interesting and challenging and has provided its own unique experiences. However, at times I’ve felt I was ‘out of the clinical psychology loop’. This feeling might be a familiar experience for others who are not working within clinical psychology departments. I have therefore had to find other ways of expanding my experience through volunteer and support work.

**Top tips**

- Volunteer for a clinical psychologist: During my first two years in research I worked part-time. This allowed time to volunteer for up to a day a week. I emailed local clinical psychologists with a CV a covering letter and stating the specific skills I could offer (i.e. research). I got my first NHS placement at Gaskell House assisting with practice-based research projects. Following this, I volunteered at the Memory Clinic where I carried out neuropsychological assessments as an honorary AP. In return for volunteering I received supervision from clinical psychologists. One caveat is that most clinical psychology departments do not have the supervisory capacity to take on volunteers therefore you may have to contact many individuals to get a response.
- I was also employed as a support worker for a health care agency alongside my part-time research work. This allowed me to gain experience with a wide range of client groups, which I was subsequently able to discuss in my supervision sessions during my volunteer AP post. It may also be worth looking for bank nursing assistant work within a mental health trust.
- Volunteer for charitable organisations: After I gained my full-time post in research project management, I sought out volunteer opportunities out of office hours. I volunteered as a computerised CBT support worker at Self-Help Services www.selfhelpservices.org.uk. This was excellent for gaining insight into CBT and making theory-practice links. Self-Help Services also provide access to training courses plus supervision with experienced mental health personnel. As I’m now leaving to start the clinical course there are currently vacancies for new cCBT volunteers so please sign up.
- Get the most out of your employment or volunteer experiences. Work hard, show initiative and exceed their expectations within your own competency. This will pay off in terms of good references and may result in paid work opportunities.

**The Clinical Doctorate Course: Applying for training places**

You need to apply via the Psychology Clearing House. [http://www.leeds.ac.uk/chpccp/](http://www.leeds.ac.uk/chpccp/).

The closing date is 5.00pm on 1 December 2009. Give yourself plenty of time as completing the form is time consuming. I first chose to apply when I had two years of experience after graduating, and I gained a place the second time I applied.

**Top tips**

- Attend the talk that Dr Aidan Bucknall gives for the Manchester assistant psychologist group about the application process, around July or August every year.
- References are a very important part of your application. Your clinical referee should ideally be a clinical psychologist. Request to see a copy of your references (e.g. under the Freedom of Information Act). If you are not happy with them, ask someone else to be a referee.
- Research the courses you want to apply for on the Clearing House website. Apply to courses that match your own interests and reflect these interests in your application form.

The Clinical Doctorate course comprises of both practical work and lectures held at the University.
Features

Although the form has changed this year, there are some example application forms on psyclick.org which should give a guide to the general standard. However you must make the form your own. Don’t just list your experiences, give your thoughts / reflections / what you learnt from them.

The ‘other’ sections about interests apart from psychology, experiences such as travelling, or other factors relevant to you form, should be used to their full potential. Lots of people’s forms sound similar, but when I’ve read these sections I’ve found that they can really change the tone of the form in a way that can be quite powerful. Communicate something interesting and unique about yourself, and how this is relevant to clinical psychology.

Get a clinical psychologist to look over your form to provide comments.

If you are applying for Lancaster, an online task is used to shortlist people instead of the application form. I like this process as it gives people with diverse backgrounds and experiences an even playing field for getting an interview. I recommend practising the previous year’s task under timed conditions beforehand.

Top tips

• Attend the Manchester psychology assistants group meeting on clinical interviews at the end of February. Current trainees share their experiences here and give great advice.
• Prepare for the interviews but don’t over prepare and end up quoting rehearsed answers. Also, don’t spend too much time reading what you don’t know and try and consolidate what you do know.
• There are some example questions on psyclick.org that give you a general idea of the sort of questions that can be asked.
• Have a mock interview. Get used to articulating yourself in an interview situation.
• Try to be yourself in the interview and to get your personality across. I found clinical interviewers value this more than my previous experiences of research interviews which tended to be more formal.
• Show an ability to think fluidly, critically, to approach things from different perspectives, and to link theory to practice.
• Different courses have different orientations and styles of questioning. Some interviews may suit you more than others so don’t be disheartened if one doesn’t go well.

Coping with not getting a place

It’s hard not to, but try not to take it personally. Dealing with rejection is unfortunately part of the process. Think of it as something you can learn from, focus on where you need to develop, and put this into practice the next time. I also found it helpful to have a contingency plan in the event that I would be unsuccessful after several attempts. For me, that would have been to pursue a PhD and stay in mental health research. There are of course other worthwhile careers out there and gaining a place is not the be-all and end-all.

However, if it’s only a career in clinical psychology that you want to pursue then I urge you to keep trying. Getting a place requires perseverance and tenacity; it’s difficult but it’s not impossible. I wish you all luck with your applications.

Elizabeth Murphy manages the MASH project which is based in the department of psychiatry at Manchester University

Volunteering for organisations such as cCBT at the Zion Centre can help provide you with the practical experience you need to gain employment and places on clinical courses

“Try to be yourself in the interview and get your personality across”
Many psychology students are interested in clinical work, but how sure are you that you really know what a clinical Psychologist’s role is? Furthermore, have you ever wondered how service users see that role? Well, here’s your chance to find out answers to both questions. Dr. Rachel Calam is the programme director of the doctorate in clinical Psychology here at The University of Manchester and Miguel Hayworth and Graham Stierl are from the community liaison group at The University of Manchester. Here they discuss the role of the Clinical Psychologist from their perspectives.

What is a clinical psychologist?

Clinical psychologists work to reduce distress and to increase psychological well-being. Their work is very wide ranging across many different client groups, from parents of young infants through to old age.

Clinical psychologists come into training having already studied for a degree in Psychology. They then have experience in the NHS or similar settings before they can come into clinical training. The training in clinical psychology is a three year general training which provides clinical psychologists with the basic skills that they need to contribute to people’s care across the lifespan. They will have experience of work with children, adults, learning disabled people and older adults as part of their three year clinical doctorate. This then qualifies them to practice. Once they are qualified, clinical psychologists develop specialist skills to work with particular client groups. They could, for example, become very skilled in working with people with physical health difficulties in hospital settings, or, in contrast, could work in community settings such as children’s centres to help parents manage difficulties with their preschool children.

Clinical psychologists will usually work as part of a team, and will collaborate with the other staff who may be involved in someone’s care, including for example social workers, medical practitioners, nurses, and a very wide range of other people who may contribute to care. Because their work is so wide ranging, you will find psychologists in all sorts of different settings, including hospitals and health centres, community mental health teams, child and adolescent mental health services, social care services and educational settings. Some work in private practice. Some clinical psychologists work primarily in training and research.

Their work with clients will usually involve assessment, which may include interviews, observation, and sometimes pencil and paper tests, amongst other approaches. The psychologist will work to develop a formulation, or understanding, of the difficulties that the person or family is experiencing, and should collaborate with the individual or family to work out an approach which is likely to help. Clinical psychologists will work with a
A variety of therapeutic approaches. Many use cognitive behavioural therapies, but a number of other sorts of therapies are also used. Sometimes psychologists may decide it would be better not to work directly with a particular individual or family. They may instead consult with a team who are directly involved in that person’s care, to reduce the number of appointments and contacts the person has to have, while making sure that a good understanding of their psychological needs contributes to their care.

Miguel Hayworth and Graham Stierl are former service users and members of the Community Liaison Group at the University of Manchester

What is a clinical psychologist?

The role of the clinical psychologist is to help an individual find ways of coping with their difficulties by helping them to find the best route to recovery.

Each individual’s problems and their experiences of how these problems affect them are unique. Understanding how an individual’s problems affect them is thought to be an important learning stage in the road to recovery. Because of the unique nature of the problems faced by service users, we believe that the duty of a psychologist is not to push one particular care pathway, but rather it is to help an individual to discover what options of care are available to them and decide which options suit them best.

A clinical psychologist is different from a psychiatrist in that their role is to deal with the individual and not with medications. It is suggested that the way a clinical psychologist operates and interacts with a client and a carer should be as a working partnership, as colleagues in order to re-enforce the idea of equity.

We believe that the role of the Clinical Psychologist has vastly improved but still has a long way to go. Clinicians at the moment do not offer a large enough range of treatment choices. The current stance is that everything needs to be evidence based, but we believe this is too business focused and too academic. As such the individual needs of the client are not always met. This reliance on evidence-based treatments can limit choice. It can also be argued that it prevents the modernisation of the clinical psychologist role to be more collaborative in nature.

We believe that unless the working culture does not change treatment choices will remain limited. We firmly believe that alternative treatment practices are extremely important and should not purely focus on the obvious such as Yoga. Rather, we support the inclusion of some previously un-emphasised practices such as Gardening, orienteering, football, swimming, walking etc in treatment pathways.

In conclusion, we believe that whilst the role of the clinical psychologist has improved in recent years, there is still room for improvement. We emphasise the need for a more person-centred approach to developing treatment pathways and suggest that alternative therapies such as gardening, football and walking etc. should be included as possible treatments.

Alternative therapies such as swimming may be beneficial and could be considered as a treatment option by Clinical Psychologists
Reasoning refers to ‘the ability to arrive at a logical conclusion’. As such, research into reasoning has traditionally been concerned with issues of human rationality; whether people are rational thinkers. It has been suggested that certain factors might influence our ability to reason. The search for causal factors modulating reasoning is, however, still in its infancy. Nevertheless, evidence converges to the trivial, but generally neglected, conclusion that affect/emotions might be one factor modulating reasoning outcome. The strong associations between emotional processing and the right prefrontal cortex (a neural basis of emotion-cognition interactions) (Damasio, 1995; Pessoa, 2008) indicate that reasoning fallacies ‘may be a special instance of the modulatory effect of emotion on cognition’ (Goel & Dolan, 2003, p. B20).

So, what evidence is there to support the idea that emotion influences reasoning? How is it tested and what do the findings show us? The majority of findings on the effect of emotion on reasoning come from the deductive reasoning paradigm. A deductive inference is used to arrive at a logical conclusion from a specific set of premises (for example, All men are mortal. Socrates is a man. Therefore, Socrates is mortal). Given that the premises are true, the conclusion requires no other verification but logical consistency. The conclusion must be right if the premises are right. In deductive reasoning tasks, participants are asked to make reasoning judgements solely using the information provided in the problems.

Let us now address the ‘what do the research findings show’ part of the question. They indicate that emotion can indeed influence reasoning, often leading to reasoning fallacies. Empirical findings have indicated that reasoning is affected by emotional states. Both positive and negative affective states have been robustly associated with logical fallacies on various reasoning tasks. For example, after a film mood induction, participants in both positive and negative moods show impaired reasoning performance on a Wason selection task (see Figure 1) compared to participants in neutral moods (Oaksford, Morris, Grainger & Williams, 1996).

Similar findings have been reported for the impact of specific affective traits on logicality. High scorers on the Beck Depression Inventory (BDI) show impaired logicality in syllogistic reasoning compared to low scorers on the BDI (Channon & Baker, 1994). High scorers are more prone to their own pre-existing beliefs (belief-bias effects) in the evaluation of categorical conclusions. Studies looking at the effect of anxiety have shown an analogous effect. High anxiety is related with significant impairments on verbal reasoning tasks compared to low anxiety (Derakshan & Eysenck, 1998). Generally, empirical evidence indicates that affective states and traits impair logicality in deductive reasoning; they are associated with diminished logicality.

Only a few studies have investigated the effect of emotional contents on logicality. Even so, findings are consistent with the consequences of affective states and traits on reasoning performance. People are more prone to logical fallacies when reasoning about emotional relative to neutral contents on various deductive reasoning tasks. For example, Blanchette

Figure 1. Abstract version of the Wason selection task: ‘Which cards need to be turned over to see if the following statements hold true?’

A. The rule is: ‘If there is an M on one side of the card, then there is a 1 on the other side of that card’. The logical response is ‘M’ and ‘3’. The typical response is ‘M’ and ‘1’.

B. The rule now is: ‘If there is an M on one side of the card, then there is not a 1 on the other side of that card’. The logical and typical response is ‘M’ and ‘1’.

"Affective states and traits impair logicality in deductive reasoning"
and Richards (2004) manipulated the affective connotations of neutral words in a conditional reasoning task (‘if p, then q’) (see Figures 1 and 2) and found a detrimental effect of affective content on logicality. The same result has been obtained in experiments where both positive and negative affective value in neutral words and non-words was induced via classical conditioning (Blanchette, 2006; Blanchette & Richards, 2004). Since both positively and negatively conditioned emotional contents impair logicality, emotional content can be argued to have an effect on reasoning, independent of its valence. It should be noted, that this effect has been documented in both patient and general populations (Kemp, Chua, McKenna & David, 1997).

In summary then, laboratory investigations indicate a detrimental effect of induced emotion on logicality. But are these results generalizable with respect to the effect of real-life emotional experience on reasoning? Are they generalizable when the affective value of such emotional experience cannot be separated from any semantic connotations it may have? A selection of studies have looked at the effect of real-life emotion on reasoning abilities.

Such studies paint a different picture for the effect of emotion on reasoning. They demonstrate better logicality in reasoning tasks with specific emotional content over those with neutral contents. In these studies participants complete reasoning tasks that have either a neutral content, generally emotional content or an emotional content specific to them. Improved logical reasoning for terrorism-related problems was reported for London residents (UK), over London (Canada) residents, following the terrorist attack in London (UK) on 7th July 2005 (Blanchette, Richards, Melnyk & Lavda, 2007).

Likewise, Blanchette and Campbell (2005) reported that British war veterans perform more logically in syllogisms featuring battle-related contents than generally emotional and neutral contents. Similarly, Blanchette, Lindsay and Davies (2008) report a link between victims of sexual abuse and enhanced logicality about abuse-related contents. Victims reporting higher levels of distress (a larger number of Post Traumatic Stress Disorder (PTSD) symptoms) reasoned more logically about abuse-related compared to neutral contents. This enhanced logicality has also been reported in phobic and obsessive-compulsive disorder patient populations when reasoning about their condition (Johnson-Laird, Mancini & Gangemi, 2006).

So, as reviewed above, there is an apparent discrepancy between the effects of laboratory-induced and real-life emotional experience on reasoning ability. Laboratory-induced emotions seem to impair logical reasoning, whereas real-life emotions appear to facilitate reasoning performance in line with logicality. Why is this the case then? It might be due to the functional nature of emotions. The beneficial effect of real-life experienced affect on logicality is clearly in accordance with a functionalist view of emotions. This view argues that the generic characteristics of emotions serve an adaptive purpose (Frijda, 1994). Affective influences promote adaptive reasoning some times in line with logicality and other times in line with non-logicality (Damasio, 1995). Even though affective processing may not always seem specifically adaptive (for example, when leading to a heuristic bias under laboratory conditions), it may still serve a universally adaptive purpose (for example, when the heuristic bias allies with prior comforting beliefs about the real world). It seems to me that such an intuitive cost-benefit analysis does indeed make sense: decreased logicality is a small cost in return of emotional well-being; in return for not accepting distressing conclusions as applicable/probable to oneself.

This discrepancy between the effects of real-life and laboratory-induced emotions on reasoning may be best interpreted with the ‘affect-as-information’ hypothesis (Schwarz & Clore, 1983). This argues that affect assigns value to its causal origins and processes that value as information. Since affective value can be altered...
to be, the less we focus our reasoning on logicality processes.

In summary, findings from the deductive reasoning paradigm suggest that laboratory-induced emotions lead to logical fallacies. On the contrary, research on real-life emotional experience indicates a beneficial effect of emotions on logicality. This apparent discrepancy is a question that needs to be addressed. Likewise, the mechanisms underlying affective consequences on reasoning remain to be empirically examined. A ‘subjective relevance of content’ hypothesis is being proposed to account for this discrepant effect. This argues that an emotion can have a different effect on logicality as a function of its experiential salience. If an emotion is experienced as more subjectively relevant (because of its association with real-life events) it leads to increased analytic over heuristic processing for reasoning relating to its experience. If an emotion is experienced as less subjectively relevant on the other hand (as in the case of laboratory-induced emotions), it leads to increased heuristic over analytic processing for reasoning relating to emotional events.

Concluding, I feel the need to highlight the obvious gap in our knowledge about the effect of emotion on reasoning: the effect of emotion on inductive reasoning. An inductive inference is used to arrive at the most probable universal conclusion from a specific set of cases. It is an informal reasoning operation that proceeds from the individual to the general. In induction, the truth of a conclusion cannot be logically guaranteed by the truth of the premises. Rather, probabilistic inferences about populations are drawn from representative samples (for example, ‘The sun has risen every morning up until now. Therefore, the sun will also rise tomorrow’). Even though affective influences on deductive reasoning have gathered some attention, their respective influences on inductive reasoning have been greatly neglected. This is of course of crucial importance, not only to update scientific knowledge about human reasoning, but also to make the discipline of psychology more applicable to real life.

Everyday thinking essentially involves drawing conclusions on available evidence; it is more closely related to inductive inferences. Marios Eliades, PhD student

“People are informed by their emotions when reasoning”