Can you learn to think more like a psychologist?

D. Alan Bensley with a guide to critical thinking

Do you think the way a psychologist thinks? One might hope that readers of this publication would answer with a resounding ‘Yes’ or at least ‘I’m working on it’. But this assumes that psychologists are good thinkers. In fact, we sometimes make the same mistakes in thinking as people with much less training (Sternberg, 2007). Perhaps we should try to think as psychologists do when their thinking is at its best – when they think critically.

Critical thinking is reflective thinking in which a person reasons about relevant evidence to draw a sound or good conclusion (Bensley, 1998). Psychologists need critical thinking to draw correct conclusions from research, determine which theory is best, make correct diagnoses of mental disorders, determine the most effective treatment, and solve many other problems. Students often appear to focus instead on learning facts to pass an exam: this is not sufficient to prepare you to think and work effectively in psychology. And it’s not something that will inevitably improve as a career progresses: research suggests that having more clinical training and experience sometimes, but not always, increases proficiency on tasks requiring critical thinking such as assessment and diagnosis (Garb, 1998). Examples include open-mindedness, intellectual curiosity, commitment to reason, and a sceptical attitude. Therefore, as I make the following general suggestions for improving critical thinking skills, I will also discuss dispositions related to the skills and illustrate with examples from psychology.

1. Strive for precision and clarity in your thinking

When it comes to relationships, do you think ‘opposites attract’, or do ‘birds of a feather flock together’? People have opinions about questions like these because they have their own commonsense theories of mind, which are often imprecise and resistant to change (Bloom & Weisberg, 2007). In contrast, psychologists strive to clearly state their theories and are willing to revise them. As you study psychology, reflect on whether you hold any imprecise commonsense beliefs that should be replaced by the more precise terminology and findings of scientific psychology.

2. Seek reasons

Ask ‘Why?’ when people make claims without offering reasons. The less evidence they provide, the more sceptical you should be. For example, many self-help gurus are self-appointed experts with inadequate training and little concern for whether scientific research supports what they recommend (Salerno, 2005). In contrast, psychologists have increasingly advocated using evidence-based practices; that is, using treatments and interventions that scientific research has shown to be effective in various ways.

3. Examine alternative viewpoints fairly

By keeping your mind open to new ideas and viewpoints, you may find a position you favour has some limitations you overlooked. This can save you the embarrassment of jumping to a wrong conclusion or making a bad decision. Sometimes when scientists are willing to consider unpopular ideas, they make unexpected discoveries, too. For example, contrary to decades of research, Macklis (2001) discovered that neurons in the hippocampus, a small brain area associated with learning, do reproduce throughout life.

Psychologists must also be careful to avoid the common error of confirmation bias or seeking evidence that favours their own view while ignoring negative evidence. Mahoney (1977) found that reviewers tended to more favourably evaluate articles.
agreeing with their own views than articles of equal quality that disagreed.

4. Be sensitive to the quality of evidence
Do not be overly impressed with weak evidence provided by anecdotes or vivid examples. In the early 1990s, both parents and professionals were greatly impressed by stories of a new technique where facilitators guided the hands of autistic individuals to help them type responses on a keyboard. This facilitated communication (FC) apparently helped autistic children write poems and do challenging academic work well beyond their previous capabilities. Early evidence supporting FC came from case studies and naturalistic observation (Green, 2002). Scientists remained sceptical, however, because case studies and naturalistic observation studies do not allow much control of extraneous variables, such as the influence of the facilitator. When experimenters controlled and manipulated the information available to the facilitator and autistic person being facilitated, they showed that it was the facilitator producing the messages, not the autistic person (Mostert, 2001).

Another kind of evidence, the statements of authorities, vary in quality depending on the knowledge and true expertise of the authority. For example, in 2005 US actor and scientologist Tom Cruise stated that he had studied the history of psychiatry and knew that psychiatric treatments were harmful. In response, Dr James H. Scully, medical director of the American Psychiatric Association, argued that many studies had showed that it was the facilitator producing the messages, not the autistic person (Mostert, 2001).

In contrast, pseudosciences like astrology do not change despite much research showing they are wrong and do not work (Bensley, 2002). When was the last time you heard an astrologer say, ‘We just got the results of some new research and we have revised the personality description of Virgos’?

5. Consider how much evidence is available
The more data or observations going into the results of a study, the more you can trust the results, assuming the study is of good quality. Likewise, the more good studies replicating the same result, the more you may trust the results and the hypothesis they support. For example, of the 37 studies Rotton and Kelly (1985) reviewed on the relation between the phases of the moon and abnormal and deviant behaviour, they found only a few low-quality studies that supported the ‘lunar lunacy’ hypothesis, suggesting it has weak support.

6. Draw conclusions consistent with the best evidence available
As you learn more about psychology, favour those theories, hypotheses and practices with the most high-quality evidence supporting them, but remain sceptical. As new and better studies are done, you can look forward to improvements in theory and practice that are even more consistent with the data.

7. Seek feedback and reflect on the quality of your thinking
As you study psychology, check your thinking to see if you are following the suggestions. Ask other people to critically comment on your writing and work. Try to remain open-minded about criticism and learn what you can from their feedback.

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Setting up a student research group
Terry Hanley and Clare Lennie

We have over 100 students at the University of Manchester engaged in master’s- and doctorate-level research into counselling and related areas, and we set up the Counselling Research Group (CRG) to support these individuals during their studies. Creating the group was a proactive response to student feedback requesting more contact with the university and peers whilst undertaking research projects. It reflects a holistic approach to education, catering for both the academic and personal requirements of students. It provides students with an accessible supportive peer group that can be used to present and discuss work, or just meet and have a coffee with others facing a similar challenge. The group meets quarterly for a four-hour period during a weekday evening. It also ends each year with a full-day student research conference and links in to a short courses programme that has been developed within the department. The session content is student-led, and input ranges from the formal to the informal. We regularly get 30 or so students and outside researchers attending, and feedback has generally been positive. In keeping with the ethos of the group, funding was sought from Learnhigher to more formally evaluate its impact.

Those who had not attended the groups reported two major blocks for them – practical difficulties with times, and the whole idea of the group being unattractive. We decided to alternate the days of the group and to create an online element for disseminating the work presented. It was also suggested that we provide more detailed information about the group [both the literature created to promote the group and by talking to each student cohort].

Those who attended the group generally valued the practical [‘hearing what others are doing’] and psychological support [‘contact with similarly minded people’] which the group provided, and found it useful to network professionally. On the downside they sometimes questioned the relevance of some of the sessions to the work that they were undertaking. They also found the room to be a little uncomfortable due to the amount of people attending (a factor that had surprised us too!).

Reflecting upon the group has raised a number of areas for us to work on, but we think the CRG has been a successful experiment. We hope that others may be interested in developing similar groups, and anyone in and around the Manchester area is very welcome to pop by and attend ours.

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