

# Psychological literacy and The Emperor's New Clothes

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*Despite the widespread use of the term psychological literacy, it is argued in this paper that it lacks a clear definition and empirical support. The claim that all psychology students possess psychological literacy in the sense of knowing the main ideas and concepts is relatively uncontroversial. However, the claim that they also possess a wide range of generic skills is open to question since most of the skills are ones that all graduates might be expected to possess. The more ambitious claim that a training in psychology produces 'global citizens' is at best aspirational, with little indication that it corresponds to current reality. In order to be useful the concept needs both clearer definition and empirical research to justify the claims made.*

**Keywords:** *psychological literacy; generic skills; undergraduate degree.*

**I**LAY NO CLAIM TO BE AN EXPERT on psychological literacy. When I retired in 2009 the term had not really entered common usage or even common consciousness. That has all changed in the last few years: it has now entered the psychologists' lexicon and even from my slightly detached perspective I have heard the term used on many occasions. I have even attended a conference (the International Conference on Psychology Education, held in Arizona in 2014) where it was one of the main themes. But I have often been left wondering what it really is, whether it can be defined, whether it contains anything new, and whether it relates to what today's graduates possess. It was considerations such as these that led me to put pen to paper (or rather fingers to keyboard) after many years of wordlessness. The existence of the Special Issue of this publication spurred me to do this now rather than later. I recognise that I may be out of date with many of my ideas, but, in my naivety as an external commentator, I believe that the issues I raise are genuine, and that responding to them might make the concept of psychological literacy both clearer and more useful.

## Definitions of psychological literacy

There are many definitions of psychological literacy. In my study of the literature I have detected three main, but rather different, aspects to the concept. As originally used, the term referred to a knowledge of the essential literature or knowledge-base in psychology. In later definitions it was expanded to include the sorts of generic skills that a knowledge of psychology ought to impart, skills that are deemed to be useful in guiding personal behaviour and should improve employment prospects. More ambitiously, the term is also used to include much more wide-ranging skills that can be applied to society in general. It is worth examining these rather different (though overlapping) definitions in turn.

The original use of the term is generally attributed to Boneau (1990). In an interesting study, he asked writers of textbooks to indicate what they thought were the most important concepts in their area of psychology. Boneau's list of the 'Top 100' concepts makes interesting reading from a vantage point nearly 30 years on. Concepts from psychophysics (e.g. absolute threshold, just noticeable difference) and from Gestalt psychology figure prominently in this list; one suspects they would not do so if the study were repeated today. From the present perspective, however, of more interest is

Boneau's use of the term psychological literacy to refer to the most important concepts that should be contained in the study of psychology. In this original sense, then, the term in effect summarises the basic or essential knowledge that students of psychology should possess.

The second main use of the term psychological literacy stems from the National Conference on Undergraduate Education held in 2008 under the auspices of the American Psychological Association. A key publication coming out of this conference is that of McGovern et al. (2010) in which the authors attempted to define what psychological literacy means. They summarise the qualities that all psychology graduates would be expected to possess:

- having a well-defined vocabulary and basic knowledge of the critical subject matter of psychology;
- valuing the intellectual challenges required to use scientific thinking and the disciplined analysis of information to evaluate alternative courses of action;
- taking a creative and amiable skeptical approach to problem solving;
- applying psychological principles to personal, social, and organisational issues in work, relationships, and the broader community;
- acting ethically;
- being competent in using and evaluating information and technology;
- communicating effectively in different modes and with many different audiences;
- recognising, understanding, and fostering respect for diversity;
- being insightful and reflective about one's own and others' behavior and mental processes. (p.11)

The first bullet point on this list is essentially the type of literacy described by Boneau, in other words knowledge of the key areas of the discipline. The remaining items can be characterised as general skills. In other words, the undergraduate degree is assumed to fit students with a wide range of useful

skills as well as factual and conceptual knowledge.

The third type of psychological literacy is hinted at by McGovern et al. but has been most clearly articulated by Cranney and others. For example, Cranney, Botwood and Morris (2012) define it as 'the general capacity to adaptively and intentionally apply psychology to meet personal, professional and societal needs'. This type of psychological literacy involves applying psychology for the advantage of society in general. As Mair, Taylor and Hulme (2013) put it, 'they are 'global citizens' (Stevens & Gielen 2007) who are able to apply their subject knowledge and associated skills and attributes to problem solving and interacting with the everyday world around them.' The Australian website devoted to psychological literacy phrases it even more graphically: 'The 'mountain top' in the development of psychological literacy is Global Citizenship, which, put simply, is the capacity to think and behave as if the whole world is one's home, to be shared with all people who care about the world's future.'

I recognise that it is somewhat artificial to force these definitions into discrete categories, and in reality it is more of a continuum. However, for purposes of exposition I think such categorisation is useful and it might be helpful to give these different types of literacy names. The original, Boneau, use of the term we might call knowledge literacy; the second usage we might call skills literacy; while the third usage we can call cultural literacy. Clearly these differ in what they entail and in how ambitious they are in their claims. It might be helpful to think of these in terms of today's psychology undergraduates: we might expect that all of them will acquire the basic knowledge of psychology, and we might hope that some of them will apply their knowledge to develop their personal skills; but how many of them would we expect to become global citizens? The three types of literacy are a little like Maslow's hierarchy of needs, in that knowledge literacy is required before the skills can be applied,

and both knowledge and skills need to be present before they can be applied to the benefit of society.

This very brief overview has demonstrated that there is no single or agreed definition of psychological literacy, and indeed the picture is no doubt much more complicated than I have painted it. As Mair et al. (2013) acknowledge in their overview, 'there is no agreed definition of the term'. There are, however, dangers in having such a wide range of definitions of psychological literacy: while it allows a host of behaviours and skills to be brought under a single umbrella, one is left with the feeling that it can be all things to all people. And a term which can be adapted to everyone's point of view runs the risk of becoming vacuous.

Another approach to the issue of definition is to look at what would NOT be included as psychological literacy. There are a number of skills and attributes which might have some foundation in psychology, including: leadership; teamwork; persuasion; lie detection; social interaction; decision making; counselling; child rearing and parenthood; personality assessment; reading the thoughts of other people; self-presentation; and no doubt many others. A consideration of whether these should be included or not might at least set the boundaries for psychological literacy. There is at the moment a case going through the English courts considering whether bridge is a sport, and therefore eligible for central funding, with persuasive arguments on both sides. Assessment of boundary cases is important in agreeing on a definition, though, of course, there will always be instances which could fall on either side. But most fuzzy concepts (such as sport) have core instances upon which everyone would agree. It might be useful to determine what these are in the case of psychological literacy.

A further perspective on the meaning of psychological literacy comes from the study by Roberts, Heritage and Gasson (2015). They devised measures of all nine of the attributes covered in McGovern's analysis

and presented these to psychology students. If psychological literacy is a single dimension then these should presumably all be correlated with each other, but they were not. Factor analysis pulled out three factors which they called reflective processes, generic graduate attributes and psychology as a helping profession. The factors that they extracted are no doubt in large part due to the precise tests they selected, and one can quibble at the tests used since they are almost all short, self-report measures. But I suspect that their conclusion – that there are different dimensions to psychological literacy – is almost certainly correct.

### **Precursors to psychological literacy**

Is psychological literacy something new, discovered (or at least named) only in the last few years, or is it something that has been there all along which has just given a new name? The answer differs depending on which type of psychological literacy is being discussed.

Knowledge literacy has arguably been around ever since psychology has been studied as a discipline. That is not to say that we know what the core knowledge is, and indeed this changes over time, but there have been a number of attempts to characterise the essential knowledge and concepts. In the UK, for a long time the British Psychological Society's syllabus for its qualifying exam gave a general indication of the key areas of psychology but it never had any official status outside the Society.

More recently, national 'benchmarks' have been produced in the UK for all the main subject areas of study at degree level (e.g. QAA, 2010). I had the (slightly dubious) privilege of chairing the group which drew up the first benchmark statement for psychology in 2000, an enterprise which brought protests from some members of the profession. The inclusion of qualitative methods in the guidelines proved especially problematic. However, the howls of protest that we had given too much emphasis to such methods were balanced by an equally

strong protest that we had given too little attention to them. The planning group took this as indicating that we had probably got the balance just about right!

Not everyone would agree on what the key terms and concepts are, and many would argue (often quite correctly) that the content tends to reflect white, Western, and male ideas and values. But surely the claim that there is some essential content to a psychology degree would gain universal assent. Thus knowledge literacy has been around for a long time, even though we have not yet achieved a full consensus on what that knowledge should be.

Skills literacy has also been around for a while. Nearly 30 years ago, Arnold et al. (1987) advocated a reorientation of psychology degrees to place more emphasis on skills development. We suggested that reading and listening skills, writing skills, oral presentation skills, numeracy and research skills, computing skills and even social and interpersonal skills could be successfully developed in the context of a psychology degree. Other writers have produced similar lists (e.g. Hayes, 1996) and – importantly – have added thinking skills such as problem solving and critical evaluation to the list.

There may have been an element of wishful thinking in these papers, since I don't think any of the authors would claim that psychology students graduated with all these skills – and even if they did, many of the students would probably not realise they had acquired these skills! There was clearly an element of curriculum development in these papers in that they attempted to encourage skills development and make them more obvious in the degree programmes.

While not perhaps leading to the rapid changes to the psychology degree that these authors might have hoped for, these ideas did not fall on deaf ears and there has been a gradual change. If we look at the psychology benchmark statement (QAA, 2010),

it states that psychology graduates should have skills of oral and written communication, computer literacy, information collection and organisation, critically examining material, teamwork, scientific problem solving and critical thinking, personal planning and project management. This is an impressive list of skills, even though we cannot be sure that all graduates acquire them. Thus skills literacy is not something new, though recent discussions of psychological literacy may have helped to clarify the nature of the skills and expand the range of skills that psychology students are purported to acquire.

It is, however, worth noting that other disciplines also lay claim to developing these skills, and indeed many of these skills are arguably ones that any graduate would be expected to possess. For several years now, there has been an attempt to define what are the main graduate attributes (or, to use a recently-coined and rather ugly term, to define 'graduateness'). A major aspect of this has been to define generic, or employability, skills. A document published by the QAA indicates that all graduates should have the following skills/attributes: understanding a complex body of knowledge; analytical and problem-solving skills; evaluation of evidence, arguments and assumptions; sound judgement; effective communication; personal responsibility; and decision making (QAA, 2008). There is, of course, considerable overlap between this list and the qualities that are included in definitions of psychological literacy.

While there are clear antecedents to both knowledge and skills literacy, cultural literacy (global citizenship) is much newer. As far as I can tell it is only recently that this has been articulated as part of psychological literacy; hence it is here that the real novelty of recent formulations of psychological literacy lies. But as we shall see, it is also here that some of the main issues surrounding the concept arise.

### **Do our students possess these skills?**

A reading of the QAA (2010) benchmark statement for psychology suggests that all psychology students should develop a range of skills and knowledge as part of their degree studies, but do they? Again it makes sense to consider the three types of literacy separately when considering this question.

Knowledge literacy I think we can more or less take for granted. The syllabuses that are produced and the content of the classes taught all try to cover the main ideas and concepts in psychology, and in many countries there are national guidelines as to what that content should be. There may be slight differences of emphasis, but the common ground in all these syllabuses gives confidence that the basic material is covered. Furthermore, most of the assessment systems that we use, whether these are essay-based or multiple choice, are designed to ensure that students have a reasonable grasp of the core material. I suspect we might be surprised by how little psychology some of our graduates know, but I will not dwell on this.

The evidence concerning skills literacy is not quite so clear. As indicated earlier, many of these skills are ones that all graduates might be expected to possess. Hence two questions seem to suggest themselves. Firstly, do psychology graduates develop these generic skills to a higher standard than other students? Secondly, are there certain generic skills that only psychology students acquire?

In response to the first question, there are plausible reasons to believe that psychology students might be better able to develop many generic skills than other students. After all, topics such as problem-solving, thinking, decision making, language and communication are all areas that are likely to be covered at a theoretical level in the psychology curriculum and thus provide an underpinning for the development of skills in these areas. Some of these skills might be promoted in other disciplines (for example, thinking skills in philosophy, communication skills in English) but the theoretical analysis is likely to be more thorough

in psychology and the combination of skills that are potentially included is surely unique.

Empirical evidence on this question is hard to come by since there seem to have been few studies (at least ones that I could find) which directly compare different disciplines on these dimensions. This may reflect my own ignorance of the literature: there have been so many studies using psychology students as participants that I am sure that embedded in some of these there are data on this question. However, much of this data may be incidental to the main issues being investigated in the research. As just one example, one of the leading researchers on human reasoning, Keith Stanovich, has on a number of occasions, found differences in reasoning performance between different areas of study, but has never actually published these (Stanovich, personal communication, 2015).

In one of the few examples of studies of discipline differences that I could find, the results are not especially encouraging. Burke et al. (2014) found that the study of psychology helped develop thinking skills about psychological topics, but that philosophy (and not psychology) led to an improvement in generic thinking skills. If this pattern of results were to be replicated it would provide one answer to both of the two questions raised. It would suggest that a psychology degree improves thinking about psychology-related issues but does not transfer to critical thinking in general, at least not as well as it does in philosophy students. It would, however, be extremely dangerous to generalise from just his one study. And indeed there may be a whole range of other studies of discipline differences, not just in thinking skills but in the whole range of skills mentioned by McGovern et al., which have found different results – but I have been unable to find them.

If we turn to cultural literacy the picture is even murkier. I suspect that, as with other skills, there is little evidence to either support or refute the claim that these skills

are any better developed in psychology graduates than in those from other disciplines. Indeed, in the case of cultural literacy it is not clear what sort of evidence could be adduced. In their battery of tests designed to assess cultural literacy, Roberts et al. (2015) used the Psychology as a Helping Profession Scale (Gervasio, Wendorf & Yoder, 2010) to measure the application of psychological principles in personal and social life. This may go some way towards providing a useable measure, but being a 'global citizen' surely goes some way beyond this.

This illustrates a much wider problem in that there are few easy-to-use ways of assessing the development of skills, with the possible exception of critical thinking skills where there is a wealth of research. The work of Roberts et al. is a useful starting point but they were constrained by having to use simple, self-report measures in order to make their research manageable. Rather more sophisticated measures will be needed if we are to investigate more convincingly the development of generic and cultural literacy in psychology students and those in other disciplines.

Hence evidence that psychology graduates are uniquely equipped with what I have termed skills and cultural literacy is hard to come by. It would be surprising if they did not show superiority in evaluating psychological knowledge, concepts and practices, but presumably all graduates are better at evaluating their own discipline than others.

### **Do psychology degrees effectively promote psychological literacy?**

A related question is that of whether we promote the development of skills literacy and cultural literacy in psychology degrees. To me as a relative outsider it is not clear that we do. It is generally agreed that assessment is key to both motivating students to acquire skills and to ensuring that they have developed some kind of competence in them (e.g. Halpern, 2013). A quick trawl through the websites of UK universities reveals that traditional modes of assessment such as essay-

based exams and, to a lesser extent, multiple choice questions, still predominate. I suspect that most of these are designed to test knowledge rather than skills. Increasingly over the years there has been a move towards more continuous assessment and some of this may well be skills-based, but it is impossible to tell from the websites. If, as I suspect is the case, we place too little emphasis on the assessment of skills, it is likely that students do not give them the priority they deserve. There have been interesting suggestions as to how the attributes associated with psychological literacy can be assessed (e.g. Butler & Halpern, 2013; Cranney et al., 2013) but it is far from clear that these suggestions have been widely adopted.

One might also expect there to be an increase in the emphasis given to teaching some of the skills and attributes associated with psychological literacy. Worrell et al. (2010) provide some fascinating ideas and principles as to how this might be done, and there has been a surge in publications on how such teaching can be embedded within a psychology degree (see almost any recent issue of publications such as *Teaching of Psychology*, *Psychology Learning and Teaching*, and this publication). This is encouraging, but what remains to be seen is how widely and successfully such methods are adopted. In the UK at least, it is research that is the key to promotion, and hence there are relatively few incentives to read articles on teaching methods and put them into practice.

### **Do psychology teachers demonstrate psychological literacy?**

I hope it goes without saying the lecturing staff know the principal concepts in psychology and hence demonstrate psychological literacy in the basic sense. But how good are they at using the skills in their own practice? This is a question that I have raised on a number of occasions over the years, and the answer, I fear, is not very encouraging. Psychology lecturers should be able to use their knowledge of how people learn, com-

municate, think and interact to improve their own teaching and hence enhance students' learning. But it is only rarely that this happens.

A prime example of this is in student assessment. We know the requirements of a good assessment system: that it should be reliable, valid, and fair; but we also know that most of our assessment does not reach these standards. The reliability of marking psychology essays has long been known to be unreliable (e.g. Newstead & Dennis, 1994), with marks given to final year essays varying widely, even among highly experienced markers. There have been attempts to improve this through the introduction of explicit marking criteria (e.g. Elander et al., 2006) but these are unlikely to solve the problem, and may also inhibit creativity in essay writers. Multiple-choice exams, especially if computer-marked, have the advantage of being reliable but they are mainly of use in assessing knowledge rather than some of the other skills that a psychology degree is supposed to impart.

Assessments cannot be valid if they are not reliable. But even if our assessments are reliable, would they be valid? In other words, do they assess what they are supposed to assess? This begs the question as to what exactly students are expected to learn from their studies, but as we have seen in the previous discussion, many authors would claim that students should acquire a wide range of subject-specific and generic skills. Most assessment systems tap into core knowledge reasonably well, but skills are much more difficult to assess. As we saw in an earlier section, there are interesting suggestions as to what such assessment systems might look like, but little evidence that such methods are in widespread use. To give just one example, problem-based assessments have the potential to reflect the application of skills, but (in the UK at least), medicine seems to have adopted these much more readily than have psychology teachers. The challenge is even more marked with respect to cultural literacy: just how can global citizenship be assessed?

As to whether our assessments are fair, there is evidence that in some respects they may not be. There is some evidence that males and females may be assessed rather differently on essays (Bradley, 1984; but see also Newstead & Denis, 1990) and on projects (Dennis, Newstead & Wright, 1996). And there is evidence that many students get away with cheating (Newstead, Franklyn-Stokes & Armstead, 1992). There have been attempts to remove some of these biases, for example, through the use of blind marking (to make it less easy to identify the gender of the students) and computer systems such as Turnitin (to detect instances of plagiarism). It would be good to know that psychologists had been instrumental in making these changes, and indeed their research has made a contribution; but in truth the changes have been far from confined to psychology.

Assessment is only one example of ways in which psychology teachers might have employed their psychological literacy more widely. I could have given other examples such as the application of learning principles, memory techniques, social interaction, motivation theory and many others. I do not believe the situation is any better with these, though I know these areas less well than I do the literature on assessment.

## **Conclusion**

In the title of this article I referred to *The Emperor's New Clothes*, the Hans Christian Andersen children's story in which it takes a little boy to notice that the Emperor's shiny new suit does not actually exist. Those who take offence at my use of this provocative title might take some comfort from the fact that I have paid the price for this choice, since Danny Kaye singing 'The king is in the all together' has been reverberating through my head the entire time I have been writing. But is the concept of psychological literacy, as hinted in the title, a vacuous one? Do our students graduate clothed in psychological literacy or are they, like Danny Kaye's king, 'all together as naked as the day that [they were] born'?

I do not want to suggest that the concept is completely vacuous, and indeed it may have numerous benefits in 'selling' psychology to employers and government agencies. However, the term is, in my opinion, bandied around too readily. For example, Cranney, Dotwood and Morris (2012) recommend that 'psychological literacy should be the primary outcome of the psychology major' though they acknowledge that some of the more ambitious aspects of the term are aspirational rather than current reality. And Trapp et al. (2011) put psychological literacy (in which they go so far as to include compassionate awareness, cultural competence and global citizenship) as part of what a psychology education should achieve, though without any clear indication as to how these aims might be achieved.

It is surely too soon to be making such wide-ranging claims when the concept does not yet have a clearly defined meaning. Furthermore, we have little evidence as to whether our students currently possess psychological literacy skills, nor even agreed ways of assessing those skills. Perhaps most depressingly, it may well be the case that those charged with developing students' psychological literacy skills do not possess those skills themselves.

So should we abandon the term? I think this would be going too far. What we need to do is to ensure that we have an agreed definition of what it means, even if this allows some variation around the edges. It seems unlikely that it is a single unitary concept so we need to know and agree what the dimensions are. The tripartite categorisation I have presented here is one, but only one, way of doing this. This is an empirical question, for which the work of Roberts et al. (2015) provides a starting point.

We also need to develop and agree ways of assessing psychological literacy. There are two aspects to this. Firstly there is the need to develop ways of assessing our own students' performance to ensure that the required skills and attributes are present; I suspect this will require rather more sophisticated ways

of assessment than most people currently use, and is likely to need measures of actual behaviour, not just written tests. Secondly, there is the need to develop ways of assessing such skills in a wider range of students if we wish to claim that our students are the ones who excel in these skills.

Additionally we need to develop proven ways of promoting psychological literacy in our students and to ensure that they are widely adopted. I am aware that such efforts have already started but clearly much more development work is required.

I will finish with a number of questions. If these can be answered satisfactorily (and many of them will require empirical data) then the concept of psychological literacy should have a healthy future.

- Can we agree on a definition of psychological literacy? I am sure that a single definition is both impossible and undesirable, since it is right that different degree programmes should emphasise different aspects of knowledge and skills. But surely there is a central core to the concept which could be agreed.
- Is psychological literacy a unitary concept? If, as I suspect, it is not, what are the main components? The answer to this question will require conceptual analysis and also experimentation, perhaps developing the work of Roberts et al. (2015).
- What elements of psychological literacy are attributes that all graduates would be expected to acquire, irrespective of discipline? Is there any evidence that psychology students acquire some of these generic skills any better than other graduates?
- What elements of psychological literacy are unique to psychology, or at least developed much better by a training in psychology?
- Is there any evidence that a psychology degree develops what I have termed cultural literacy?
- How can we make sure that our students do acquire psychological literacy, in other words how do we embed it into our

degrees? This will require developments both in the way the curriculum is taught and in the way it is assessed.

- How do we ensure that psychology teachers (many of whom are dinosaurs like me) develop their own psychological literacy to a level where they can pass this on to students?

I suspect I will not make myself popular with those working in the field by raising the points I have done in this article and by criticising the concept of psychological literacy. However, I think it is only fair to ourselves, to employers and – most importantly – to our students to be clear about the concept and what it is legitimate to claim about the skills acquired.

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