Competence-based training and assessment by portfolio: the health psychology model

Competence-based training and assessment by portfolio: The health psychology model

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Abstract

All UK postgraduate qualifications in applied areas of psychology will soon be competence-based. This will improve the professional recognition and esteem of applied psychology, and make it easier to transfer qualifications between psychology and other disciplines, and between psychology sub-disciplines. However, the changes pose considerable challenges because there is very little clear evidence about the effectiveness of competence-based training and portfolio assessment. Health psychology has led the development of competence-based training in psychology with the 'Stage 2' qualification in health psychology, and this article considers postgraduate health psychology training in the context of what is known about competence-based training and portfolio assessment in professions such as medicine, nursing and education. This raises a number of questions for professional training and qualifications in psychology.

Key words: Competence; competency; portfolio; assessment; health psychology

INTRODUCTION

In competence-based training, the abilities that are required for effective performance in a professional discipline are specified, and trainees provide evidence that they have demonstrated those abilities at the required level. This should mean that successful trainees are demonstrably able to perform effectively in their jobs and that the public can be assured about the level of professional competence within the discipline. Competence-based training in England and Wales began with the 1985-6 Review of Vocational Qualifications, which led to the National Vocational Qualification (NVQ; Hargraves, 2000), and has for some time been the basis for certain nursing and midwifery qualifications (McMullan *et al*., 2003).

The British Psychological Society (BPS) has been developing National Occupational Standards that are defined by competences that can be interpreted or 'contextualised' for particular settings. The goal is to have generic competences in applied psychology, with more specific competences relevant to each BPS Division. This should facilitate 'lateral transfer' between psychology sub-disciplines such

as health psychology, forensic psychology and occupational psychology, and provide opportunities for the training in each sub-discipline to be recognised by other disciplines. The Division of Health Psychology and the Faculty of Public Health, for example, are agreeing a structure of competence equivalence that will enable Chartered Health Psychologists to work as accredited specialists within the Faculty of Public Health, which should help to develop and expand the interdisciplinary field known as 'public health psychology' (Vinck, Oldenburg & von Lengerke, 2004; Wardle, 2000; Wardle & Steptoe, 2005). The Division of Clinical Psychology has already adopted a competence-based training model that includes psychological assessment, psychological formulation, psychological intervention, evaluation, research, personal and professional skills, communication, teaching, service delivery and other transferable competences (MPTB, 2003). Defining competences that are shared between applied psychology sub-disciplines could provide a step towards even closer integration of applied psychology training, along the lines proposed by Kinderman (2005).

Defining applied psychology competences also helps to internationalise psychology training. For example, Bieschke, Fouad, Collins & Halonen (2004) proposed that 'scientific practice' could be a core competence for international psychology training. Postgraduate psychology trainees in the US demonstrate competence in at least two areas of practice, and Burgess *et al*. (2004) recommended that as an international model. The proposed European Diploma in Psychology is also competence-based in that a guiding principle of the qualification is that it will be awarded on the basis of 'demonstrated competence in the performance of professional roles during supervised practice' (www.efpa.be/start.php).

There are a number of subtle but significant differences in the meanings attached to terms such as 'competence' and 'competency' in the wider educational literature, however, and the distinctions between different types of 'competence-based' or 'competency-based' training models have potentially important implications for the development of postgraduate training in psychology. In this article we explore some of those implications with particular reference to UK health psychology training.

MODELS OF COMPETENCE AND COMPETENCY

'Competence' and 'competency' have both been used to refer to behaviours, performance, knowledge, skills, capability and other qualities and states of the 'competent' person (Short, 1984). Based on a review of the literature, McMullen *et al*. (2003) identified three broad conceptualisations of competence that provide a framework for comparing most contemporary approaches to competence-based training. These were the behavioural approach, the generic approach and the holistic approach. There is, however, very little empirical evidence about the superiority or otherwise of competence-based training compared with more traditional training methods, and much less about the relative effectiveness of different approaches to competence-based training. Most evaluations are mainly descriptive and reflective, for there are few opportunities for controlled comparative studies.

The behavioural approach originated in the UK's National Council for Vocational Qualifications (NCVQ) programme. Here, the emphasis is on the job, the terminology is generally 'competence' and 'competences', the assessment criteria are defined in terms of performance, and the assessment is in terms of action and behaviour. The main strength of this approach is that assessment is potentially more reliable and objective because competence can be operationalised as the successful performance of specified tasks or operations. It is also claimed to lead to greater transparency and accountability. The limitations are that competence may be fragmented and linked too closely with the context in which it is demonstrated. In the field of medical education, this

approach has been criticised because of its emphasis on threshold standards of performance, whereas, it is claimed, competence should be viewed merely as the first step in the progression towards professional expertise, which also requires much higher order abilities and understandings (Talbot, 2004).

In the generic approach, which originated in the US McBer programme, the emphasis is on the person, the terminology is generally 'competency' and 'competencies', the assessment criteria are defined in terms of underlying attributes associated with expert performance, and the assessment is in terms of individual capability, with less emphasis on the context in which that capability is applied. The main strength of this approach is that it appears to focus on important underlying attributes rather than superficial aspects of performance. The limitations are that the attributes underlying competent performance may be difficult to assess, and assumptions about the transferability of competence from one context to another may not be valid. This approach may suffer from some of the same limitations of skills-based approaches in higher education, where the concept of transferability has turned out to be highly problematic and skills have been claimed to have little meaning when abstracted from their context (Bridges, 1993; Hinchliffe, 2002).

In the holistic, or interactive, approach, which originated in Australian health care training, the underlying attributes of the practitioner are combined with the context in which they are applied, and the concept of competence is seen as dynamic and developing, with much emphasis on the interactions between the learner and their environment. This approach is critical of the use of fixed statements of competence: 'while the written statement [of competence] takes on the identity of an external fixture, competence in practice is constantly evolving in a dialectical relationship between performers, actions and culture' (Hodkinson, 1992, p. 33). The main strength of this approach, as described by McMullen *et al*. (2003), is that it incorporates ethics, values, the need for reflective practice, and the notion that there is more than one way of practising competently. The main weakness is that those aspects of competence may be difficult to assess.

Of those three broad approaches to competence, the generic approach may appear to be the most applicable to postgraduate psychology training, because a major aim for UK psychology is the transfer of competences between disciplines and sub-disciplines. As we explore later, however, UK health psychology training seems to incorporate many of the positive features of the holistic approach, while addressing some of the potential difficulties of that approach in relation to assessment. US postgraduate psychology training may also have holistic features, for it has been described as 'combined-integrated' and is said to provide a more flexible and adaptable workforce of psychologists (Burgess *et al*., 2004).

THE HEALTH PSYCHOLOGY MODEL

A small but growing number of qualified health psychologists now work as practitioners in health settings. The numbers of health psychology practitioners needs to increase, for the demand for psychological services among patients with physical (as opposed to mental) illnesses is considerable (Nichols, 2005). Training was identified several years ago as a vital element of that expansion: 'The future development of health psychology as a profession depends on putting theory and policy into practice through the implementation of high quality training' (Marks *et al*., 1998, pp. 158-159). Postgraduate training for health psychologists is presently in two stages. The first stage is the study of the theory and research that is the health psychology 'core curriculum', which is usually achieved by completing a taught MSc course in health psychology. The second stage is achieved through supervised practice and the demonstration of competence in four core units of competence (generic professional practice, research, training and consultancy) plus two optional units of competence

from a choice of eight (see table 1). This model is being reviewed by a BPS Division of Health Psychology working group at the time of writing. Exact recommendations have not been formulated, but it seems likely that the model will move towards incorporating certain optional units of competence within the core generic professional competences, and streamlining the wording and evidence requirements for each competence.

Table 1. Stage 2 health psychology units of competence

Core units of generic professional competence
Implement and maintain systems for legal, ethical and professional standards in applied psychology
Contribute to the continued development of self as a professional applied psychologist
Provide psychological advice and guidance to others
Provide feedback to clients
Core units of research competence
Conduct systematic reviews
Design psychological research
Conduct psychological research
Analyse and evaluate psychological research data
Initiate and develop psychological research
Core units of consultancy competence
Assessment of requests for consultancy
Plan consultancy
Establish, develop and maintain working relationships with clients.
Conduct consultancy
Monitor the implementation of consultancy
Evaluate the impact of consultancy
Core units of training competence
Plan and design training programmes that enable students to learn about psychological knowledge, skills and practices
Deliver such training programmes
Plan and implement assessment procedures for such training programmes
Evaluate such training programmes
Optional units of competence
Implement interventions to change health-related behaviour
Direct the implementation of interventions
Communicate the processes and outcomes of interventions and consultancies
Provide psychological advice to aid policy decision making for the implementation of psychological services
Promote psychological principles, practices, services and benefits
Provide expert opinion and advice, including the preparation and presentation of evidence in formal settings
Contribute to the evolution of legal, ethical and professional standards in health and applied psychology
Disseminate psychological knowledge to address current issues in society

Much of the controversy about competence-based training relates to a tension between what Barnett (1994) called 'two rival versions of competence', with academic competence being mainly concerned with knowledge and understanding (knowing that), and operational competence being mainly concerned with practical effectiveness (knowing how). This tension lies behind many of the critiques of the behavioural approach to competence-based training, and the holistic or integrative approaches to competence can be viewed as attempts to reconcile academic and operational aspects of competence. In UK health psychology training, that tension is avoided by making an explicit distinction between stage 1, which focuses mainly on knowledge and understanding of the core curriculum (academic competence), and stage 2, which focuses mainly on effective professional performance (operational competence). In this article we are mainly concerned with stage 2 health psychology training.

Stage 2 health psychology training can be undertaken either through a university programme or the BPS stage 2 health psychology qualification. To take the BPS qualification, trainees must find a BPS-approved supervisor, register a supervision plan, and then produce a portfolio of evidence that the relevant competences have been demonstrated. In both cases, the emphasis is on supervised practice in settings where qualified health psychologists would be expected to work. A survey of graduates of MSc Health Psychology courses showed that over half intended to register for stage 2 training, and the main obstacles they reported were finding relevant work experience, developing supervision plans, and funding the cost of registration (Evans, 2004).

University stage 2 programmes and the BPS stage 2 qualification both involve exactly the same core units of competence, which are further explicated in 73 detailed competence statements (BEHP, 2001). The number and level of specification of competence statements give the model a rather behavioural appearance and make fragmentation of competence a potential risk. Ashworth and Saxton (1990) suggested that elements of competence can fragment or atomise an occupational role, so that the sum of the parts adds up to less than the whole. 'The constant search for elements that can be reliably and validly assessed can lead to the reification of the statements of those elements, which become ends in themselves as groups spend endless hours trying to get them "right"' (Hodkinson, 1992, p. 32). However, two key features protect the stage 2 health psychology training model from the types of criticism directed at the behavioural approach to competence-based training.

First, the statements of competence are not specified in relation to particular settings or contexts, and there is considerable flexibility in how they can be demonstrated. The supervision plan is the mechanism by which trainees translate or 'contextualise' the required competences into the activities they will actually perform in their places of work, and this part of the process makes the training resemble the holistic model outlined above. (The down side of this is the possibility of over-contextualisation, and specialism within a very narrow area of work.)

Second, trainees do not need to produce separate evidence for each statement of competence, for competence is assessed through a much smaller number of written reports submitted in a portfolio. The competence statements act as a guide to what the reports should demonstrate. Also, all trainees take a viva voce examination that is designed to probe their understanding of how their own demonstrations of competence relate to the wider context of professional health psychology.

These features make the stage 2 health psychology training correspond quite closely to the 'interactive' model advocated by Hodkinson: 'The important assessment judgements should be much more holistic, and should test more than work-based performance alone. In teacher education in my institution, classroom teaching is assessed as a holistic judgement, based on a competence

checklist. This is supported by a learning log or journal, which, together with tutorials, give access to learners' thoughts and reflections as well as actions, giving insights into their understanding and ability to theorise' (Hodkinson, 1992, p. 37).

In a recent survey of health psychology trainees taking the BPS stage 2 qualification (n = 16, 62.5% response rate), the mean overall rating of satisfaction with training was 78%, although many trainees thought the requirements of collating evidence for the portfolio were repetitious and cumbersome. Some trainees suggested promoting the use of digital media, implementing a web-based system for on-line submission of material, and offering workshops in portfolio management. There was also a call for one-to-one interventions with clients to be treated as core units of competence, rather than optional units as at present. Other respondents questioned the description of the stage 2 programme as a training model, as they viewed it more as 'supervision' (Towell, 2005, personal communication).

Supervision is a vital element of stage 2 health psychology training. Craig & Hitchins (2002) recently identified two challenges for supervision in psychology. One of those was to adapt supervision models derived from clinical psychology for other applications within psychology, and the other was to develop supervision across disciplines, including teaching, management and medicine. Both those issues are relevant to supervision of trainees across programmes where there may be common or overlapping competences, and where trainees may want to bridge or transfer between sub-disciplines in psychology.

ASSESSMENT BY PORTFOLIO

Portfolios are 'a collection of evidence that learning has taken place' (Snadden & Thomas, 1998, p. 192), and provide 'a structure and process for documenting and reflecting upon the work or achievements of the student's effort or progress in a given area' (Smith & Tillema, 2003, p. 625). The advantage of portfolios is that they require self-reflection, are inherently practice-based, and are suitable for learning that is learner-driven and linked to personal and professional development (Gordon, 2003; O'Sullivan & Greene, 2002; Tiwari & Tang, 2003). Derived originally from the graphic arts, portfolios can take a range of forms and are used in nursing (Webb *et al*., 2003), medicine (Wilkinson *et al*., 2002), dietetics (Weddle, Himburg, Collins & Lewis, 2002) and education (Baume & Yorke, 2002), among many other areas of professional training. Despite their widespread use, however, there is little hard evidence about their effectiveness. In the only randomised controlled trial that we know of, medical students studying the standard oncology curriculum and assessed by examination were assigned either to tutorials and the production of a voluntary portfolio, or to a control group. The examination results produced trends favouring the portfolio group, but no statistically significant differences (Finlay, Maughan & Webster, 1998).

Smith & Tillema (2003) identified four types of portfolio derived from a two-by-two classification system based on the setting (self-directed versus externally mandated) and purpose (selection or promotion versus learning or development) of the portfolio. The stage 2 health psychology portfolio attempts to combine these categories, for there are both self-directed and externally mandated aspects to its setting, and it is used to select individuals for the award of a professional qualification as well as providing a framework for learning and development. This is potentially problematic, for Smith & Tillema (2003) claimed that

> *not properly distinguishing between portfolio types can lead to mismatches of practice and confusing assessment tasks which can distort the associated and subsequent processes of selection or development (p. 628), and that*

> *the higher the stakes of assessment of the portfolio, the less valuable it becomes for professional development purposes (p. 646).*

One reason for this is the tension between formative and summative aspects of assessment by portfolio. McMullan *et al*. (2003) claimed that a major strength of portfolios is the focus they provide for discussion between student and tutor, but that students may self-censor their more sensitive learning experiences by writing what they think the assessor wants to read. This was supported by a description of portfolio use in medical education:

> *our own work with general practice registrars was clear in its description of the negative impact formal assessment would have on the material collected. For example, learners were unlikely to collect in a reflective journal incidents which had not gone well (Snadden & Thomas, 1998, p. 196).*

This is perhaps not surprising considering the evidence from trainees about their perception of the considerable time and effort needed to produce a portfolio, and the anxiety they experience about what evidence is needed (McMullan *et al*., 2003).

In nursing education, one of the issues raised when portfolios were introduced was whether they assessed students' ability to write about their practice rather than the standard of the practice itself. There were also inconclusive findings about the potential of portfolios to integrate theory and practice. On the other hand, the very act of preparing a portfolio was claimed to promote ownership and responsibility, accountability and professionalism. One review concluded that it was essential for a portfolio to include a reflective component analysing the reported learning experiences (McMullan *et al*., 2003).

There is some evidence about the reliability of assessment by portfolio, which has tended to be low, with considerable inter-rater discrepancies (Baume & York, 2002; Pitts, Coles & Thomas, 1999; 2001). Pitts *et al*. (1999) reported that accurate summative judgements could not be made, possibly because of the highly personal nature of the portfolios. Snadden & Thomas (1998) commented that

> *assessment based on comparing students with each other and with issuing grades does not fit easily with portfolios which are essentially non-standardised (p. 197).*

On the other hand, Young (1999) reported high intermarker reliability, but the number of students was small and the grading was pass-fail. Reliability would probably be more difficult to achieve when student numbers (and therefore assessor numbers) were higher, and where discrimination between levels of performance was needed.

The portfolio that trainees submit for the BPS stage 2 health psychology qualification must include a practice and supervision log, a supervisor's report, records of completion of all the work, and supporting evidence including a logbook of professional practice, a 6,000 word systematic literature review, a 15,000 word report of empirical research, a video recording of a teaching session, consultancy case studies and a range of reports describing the achievement of specific competences (BEHP, 2001). Accreditation of prior learning (APL) allows individuals to present evidence of work previously completed that demonstrates relevant competences, and reflexivity is reflected in the assessment for each unit of competence.

This form of portfolio, coupled with very detailed competence statements to guide its assessment, means that the stage 2 health psychology training model has the potential to deliver the benefits of

an integrated, or holistic, approach to competence without sacrificing the quality of assessment. Before claims like that can be made, however, data will need to be collected on the actual quality of the training and mode of assessment. This could focus on a number of issues. One of those is whether any finer differentiation than a pass-fail judgement is possible in the assessment of portfolios. Another is whether it would be possible to disentangle the formative and summative aspects of the portfolio, so that, for example, more sensitive material was included for discussion with the supervisor but not in the version submitted for summative assessment. Smith & Tillema (2003) proposed three criteria for evaluating the use of portfolios. These were the clarity and explicitness of guidelines, the feasibility of the collection process, and the trust in the outcome. These could potentially provide the focus for future research on the effectiveness of the health psychology stage 2 portfolio assessment.

CONCLUSIONS

Competence-based training is the likely future for postgraduate applied psychology, and will soon be introduced by each BPS division that oversees postgraduate training, so that as the relevant competencies are defined, those that are shared between disciplines and sub-disciplines will emerge, making transfer between them easier. Health psychology has led the way in developing postgraduate training, and the discipline now has a professional training structure that could serve as a test bed for future training models. The two-stage process, with acquisition of a knowledge base followed by demonstrations of competence, provides opportunities for research on how trainees learn to integrate theory with practice and academic knowledge with more practical professional abilities. It is unclear, however, how the health psychology training model should be located within the broader framework of approaches to competence-based training in other disciplines. Presently it incorporates features of all three major approaches, but there is the potential to specify it more formally as an example of the holistic or integrative approach. Practitioner training is a cornerstone for achieving and maintaining recognition and esteem for any professional discipline and psychology is no exception. The competence-based training model for stage 2 health psychology should mark a significant step forward in psychology's contribution to improving health and the treatment and management of illness and disability, and could provide a model for the development and evaluation of competence-based training in other areas of applied psychology. However, considerable further development and evaluation will be needed before some of the potential claims that could be made for health psychology training can be asserted with confidence.

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