Standards of proficiency for applied psychologists
Professional Liaison Group (PLG)
12 October 2007

QAA Undergraduate Psychology Subject Benchmark Statement

Executive summary and recommendations

Introduction

At the group's last meeting, the group requested that the Quality Assurance Agency (QAA) benchmark statement for undergraduate programmes in Psychology should be provided at the next meeting for reference.

A copy of this document is appended.

Decision

This paper is to note. No decision is required.

Background information

None

Resource implications

None

Financial implications

None

Appendices

None

Date of paper

None

Psychology

Subject benchmark statements

Subject benchmark statements provide a means for the academic community to describe the nature and characteristics of programmes in a specific subject. They also represent general expectations about the standards for the award of qualifications at a given level and articulate the attributes and capabilities that those possessing such qualifications should be able to demonstrate.

This *Subject benchmark statement*, together with the others published concurrently, refers to the bachelors degree with honours.

Subject benchmark statements are used for a variety of purposes. Primarily, they are an important external source of reference for higher education institutions when new programmes are being designed and developed in a subject area. They provide general guidance for articulating the learning outcomes associated with the programme but are not a specification of a detailed curriculum in the subject. Benchmark statements provide for variety and flexibility in the design of programmes and encourage innovation within an agreed overall framework.

Subject benchmark statements also provide support to institutions in pursuit of internal quality assurance. They enable the learning outcomes specified for a particular programme to be reviewed and evaluated against agreed general expectations about standards.

Finally, *Subject benchmark statements* may be one of a number of external reference points that are drawn upon for the purposes of external review. Reviewers do not use *Subject benchmark statements* as a crude checklist for these purposes however. Rather, they are used in conjunction with the relevant programme specifications, the institution's own internal evaluation documentation, in order to enable reviewers to come to a rounded judgement based on a broad range of evidence.

The benchmarking of academic standards for this subject area has been undertaken by a group of subject specialists drawn from and acting on behalf of the subject community. The group's work was facilitated by the Quality Assurance Agency for Higher Education, which publishes and distributes this *statement* and other *statements* developed by similar subject-specific groups.

In due course, but not before July 2005, the *statement* will be revised to reflect developments in the subject and the experiences of institutions and others who are working with it. The Agency will initiate revision and, in collaboration with the subject community, will make arrangements for any necessary modifications to the *statement*.

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Academic standards - Psychology

1. Introduction

Psychology is one of the most popular subjects in UK higher education. The most recent statistics indicate that there were nearly 40,000 students studying psychology at all levels in UK institutions of higher education in the 1999/2000 session. Psychology appeals to students from a wide range of backgrounds. Some 75 percent of students are female, 30 percent are mature students and a similar percentage have non-traditional qualifications. There are also significant numbers of ethnic minority students.

All the indications are that psychology students are well taught. Between 1996-2000 nearly all UK psychology departments were subject to review by the QAA. In its subject overview report on psychology, published in 2001, the QAA says that 'the quality of teaching is high' and notes the 'high progression and completion rates'. It picks out for specific commendation 'the supportive and friendly environment created by departmental staff', and also comments on 'the high added value achieved by students with non-traditional entry qualifications in psychology'.

Psychology degrees usually last for three years (four years in Scotland). Most institutions offer single honours degrees in psychology, although it is also common to combine psychology with another subject as a subsidiary or minor area of study, and to study psychology as one component of a joint honours degree where both subjects carry equal weight. The present document and the threshold and modal statements it contains apply to single honours degrees; an appropriate subset will apply to combined and joint programmes. The choice of areas to cover in combined and joint programmes will vary from institution to institution depending on factors such as the discipline with which psychology is combined and whether accreditation is being sought from the British Psychological Society.

In order to obtain employment as a professional psychologist further postgraduate study and supervised training are required, normally lasting a further three years. At the end of this time it is possible to become a Chartered Psychologist specialising in one of the areas of professional psychology such as clinical, educational, occupational, health, counselling or forensic psychology. In order to proceed to postgraduate training in professional psychology, a student's first degree must be accredited by the British Psychological Society as conferring eligibility for the Graduate Basis for Registration. Graduates from non-accredited courses can achieve the Graduate Basis for Registration by taking the Society's Qualifying Examination or an accredited conversion course. Regular reviews are conducted by the British Psychological Society to ensure that accredited degrees continue to reach the necessary standards.

Psychology students proceed into a variety of careers. Three months after graduation two thirds of psychology graduates are in paid employment with another quarter undertaking postgraduate study. A significant number (though less than one fifth of the overall number of graduates) ultimately gain employment as professional psychologists. Many of the remainder work in teaching, industry, social services, the media, information technology, computing, marketing and government agencies.

Because of the wide range of generic skills and the rigour with which they are taught, a training in psychology is widely accepted as providing an excellent preparation for a number of careers. In addition to subject skills and knowledge, graduates also develop skills in communication, numeracy, teamwork, critical thinking, computing, independent learning and many others, all of which are highly valued by employers.

2. Defining principles

The principles guiding a single honours degree programme in psychology are as follows:

(a) the aim of the degree should be to produce a scientific understanding of mind, brain, behaviour, and experience, and of the complex interactions between these;

(b) the degree should present multiple perspectives in a way that fosters critical evaluation;

(c) the degree should lead to an understanding of real life applications of theory to the full range of experience and behaviour;

(d) the degree should develop an understanding of the role of empirical evidence in the creation and constraint of theory and also in how theory guides the collection and interpretation of empirical data;

(e) the degree should include the acquisition and knowledge of a range of research skills and methods for investigating experience and behaviour, culminating in an ability to conduct research independently;

(f) the degree should develop knowledge leading to an ability to appreciate and critically evaluate theory, research findings, and applications.

3. Nature and extent of the discipline

Psychology is an empirical science which aims to understand how and why people act in the ways they do and to apply that knowledge in a wide variety of settings.

The discipline spans studies ranging from the observations of basic neural mechanisms to analyses of complex human relationships. The antecedents of modern-day psychology can be found in both biology and philosophy, but its methods of enquiry have developed not only from these disciplines but also from other natural, social and mathematical sciences. Psychology is a broad subject area; but, whatever the particular topic of study and wherever the origins of its methods, it attempts to analyse and explain behaviour in a systematic, reproducible way. There is often a virtuous circle between theory and empirical data, the results of which may find their expression in applications to educational, health, industrial/commercial and other situations.

Students of psychology are invariably exposed to a variety of topics and methods, ranging from how brain cells communicate with one another to the concept of the self. UK courses differ in some respects and their emphases necessarily reflect the interests and expertise of their staff as well as the resources at their disposal. Section 4.a.iii, however, indicates those elements deemed to be core to the discipline, which all single honours students are expected to study.

In covering these core topics students will be exposed to standard information, traditional methods of scientific enquiry and sophisticated statistical analyses. In addition, they also need to be aware of the exciting new developments in the field, for example, in health and counselling psychology, behavioural genetics, computational modelling, life-span development, discourse analysis and critical theory. Discussions on issues concerning areas such as evolutionary psychology, functional brain imaging and human-computer interaction help to introduce students to the highly diverse opportunities and avenues for future exploration provided by a degree in psychology.

A single honours degree in psychology should indicate that its recipient has acquired the generic skills outlined in Section 4.b.iii, and possesses knowledge of: the way people develop abilities to perceive, think, feel and act; what motivates them; in what ways they differ; and how they interact in groups. It should also signal the fact that graduates can demonstrate an understanding of how and why normal experience and behaviour may be affected by physical and mental illness. The respective influence of genes and environment on behaviour, and the interactions between them, is another major concern of psychology.

To summarise, psychology is a discipline concerning experience and behaviour which is of immense range and depth. It has evolved its own methodologies from those found in cognate areas. A degree in psychology implies an understanding of historical and contemporary psychological research alongside an appreciation of past and current theoretical efforts to integrate and interpret empirical findings. To achieve this requires students to gain critical thinking skills developed within a context of rigorous empirical methodology.

4. Knowledge and skills

4.a. Subject knowledge

4.a.i Preamble

Psychology has an established tradition of empirical enquiry linked with theoretical development, which has led to important applications in many fields and which has profoundly influenced professional practice. Thus, as has already been observed, in addition to acquiring knowledge of the main areas of the discipline, psychology students also need to have a sound knowledge of, and the proven ability to use appropriately, a variety of research methods and approaches. Knowledge of this kind as well as its application can best be acquired and demonstrated through extensive and progressive laboratory and field work at all levels up to and including the exit honours standard.

The acquisition and demonstration of conceptual knowledge within the core areas, together with an understanding of the empirical bases of the discipline, are necessary features of any honours degree programme. Most importantly, the ability to integrate ideas and empirical findings both within and between core areas will be expected. The ability to extrapolate and comprehend the applications of knowledge within the areas of psychology will also be a feature of each programme.

4.a.ii Knowledge domains

It is not the intention to be overly prescriptive in defining the subject knowledge acquired by students; nevertheless, there are certain core areas within the discipline which should each receive significant coverage. Students should also be exposed to novel developments in the discipline, including those that at present do not command consensus.

An understanding of the relations between psychology and cognate disciplines (such as biology, sociology and psychiatry) is important, together with an appreciation of the assimilation within the discipline of themes, theories, methods and findings from areas external to the discipline. An appreciation of the integration which can occur within the subject is relevant, for example, to the emergence of cognitive neuroscience from the previously separate areas of cognitive and biological psychology.

The acquisition of knowledge of psychology is progressive and therefore study of the main areas will continue across undergraduate degree levels with opportunities for more specialised, in-depth study at final honours level. It is anticipated that there may be more variation in the subject areas covered at the more advanced level reflecting areas of expertise within departments. By honours level, students will be expected to demonstrate facility and familiarity with empirical methodology through the completion of an extended project and its report.

The core knowledge domains within psychology include research methods, biological psychology, cognitive psychology, personality and individual differences, developmental psychology and social psychology, though students will be exposed to other areas as well. In addition to these core areas it is expected that students will gain knowledge of conceptual and historical perspectives in psychology.

4.a.iii Examples of topic areas within core domains

The examples in the topics which follow are given to indicate the scope of each of the areas. They are intended to be neither prescriptive nor exhaustive, and it is recognised that the topics covered will vary from institution to institution and over time. Knowledge both of the areas and of the links between them is expected, as is an understanding of appropriate applications. Ethical, theoretical and practical research issues arise in each of the knowledge areas within psychology:

- biological psychology, eg biological bases of behaviour, hormones and behaviour, behavioural genetics, neuropsychology, sociobiology and evolutionary psychology;
- cognitive psychology, eg perception, learning, memory, thinking, language, consciousness and cognitive neuropsychology;
- developmental psychology, eg childhood, adolescence and life-span development, development of attachment, social relations, cognitive and language development, social and cultural contexts of development;
- personality and individual differences, eg abnormal and normal personality, psychological testing, intelligence, cognitive style, emotion, motivation and mood;
- social psychology, eg social cognition, attribution, attitudes, group processes and intergroup relations, close relationships and social constructionism.

It is expected that all the main sub-areas listed below will be covered.

- Research methods in psychology, ie research design, the nature and appropriate statistical analysis of data, psychometrics and measurement techniques, and quantitative and qualitative methods.

It should be noted that qualitative methods are understood broadly here, and might include protocol analysis, interviews, grounded theory and discourse analysis.

4.b Skills

4.b.i Preamble

Psychology is distinctive in the rich and diverse range of attributes it develops, drawing, as it does, on skills that are associated both with studying the humanities (eg critical thinking, essay writing) and the sciences (hypothesis-testing, numeracy).

In addition, the nature of the discipline, and the kinds of learning opportunities that it provides, allow students to develop a special blend of generic skills which can be underpinned by their own formal knowledge of psychological processes. For example, communication skills can be enhanced by knowledge of theories of communication, critical thinking can be underpinned by knowledge of cognitive biases, and group work can be supported by knowledge of group processes.

Studying for a single honours degree in psychology provides graduates with a diversity of skills that prepares them not only to pursue postgraduate studies in psychology (thus becoming professional or academic psychologists) but also to enter a variety of employment areas. For convenience these skills have been divided into subject and generic skills. Subject skills are those that relate closely to the subject knowledge and/or are an integral part of any psychology degree; these skills are described in section 4.b.ii. Generic skills are transferable skills which are not so closely tied to the subject matter of psychology; these are covered in section 4.b.iii. However, it is important to bear in mind that this distinction is a fairly artificial one since the distinction between subject and generic skills is not clear-cut. In addition, many of the subject skills - research design, methods and measurement, statistics - have direct application in professions outside psychology, and many of the generic skills are essential in the work of a professional psychologist.

4.b.ii Subject skills

Single honours psychology graduates should be able to:

- apply multiple perspectives to psychological issues, recognising that psychology involves a range of research methods, theories, evidence and applications;
- integrate ideas and findings across the multiple perspectives in psychology and recognise distinctive psychological approaches to relevant issues;
- identify and evaluate general patterns in behaviour, psychological functioning and experience;
- generate and explore hypotheses and research questions;
- carry out empirical studies involving a variety of methods of data collection, including experiments, observation, psychometric tests, questionnaires, interviews and field studies;
- analyse data using both quantitative and qualitative methods;
- present and evaluate research findings;
- employ evidence-based reasoning and examine practical, theoretical and ethical issues associated with the use of different methodologies, paradigms and methods of analysis in psychology;
- use a variety of psychological tools, including specialist software, laboratory equipment and psychometric instruments;
- carry out an extensive piece of independent empirical research. This will include: defining a research problem; formulating testable hypotheses/research questions; choosing appropriate methodologies; planning and carrying out a study efficiently; demonstrating awareness of ethical issues and current codes of ethics and conduct; demonstrating ability to reason about the data and present the findings effectively; discussing findings in terms of previous research; evaluating methodologies and analyses employed and implications for ethics; and, where appropriate, collaborating effectively with colleagues, participants and outside agencies.

4.b.iii Generic skills

Single honours psychology graduates should be able to:

- communicate effectively. Effective communication involves developing a cogent argument supported by relevant evidence and being sensitive to the needs and expectations of an audience. This is accomplished through specific demands to write both essays and scientific style report writing, and through experience in making spoken presentations to groups. The standard of written language should be at an acceptable standard with respect to grammar, punctuation and spelling;

- comprehend and use data effectively. This is accomplished through the significant core of research training in a psychology degree that acquaints graduates with understanding, analysing, and presenting complex data sets;
- use computers, ie be computer literate. Psychology students are introduced to, and become familiar with, computers early in their training and will display, at the very least, skill in the use of word processing, databases and statistical software packages;
- retrieve and organise information effectively. Psychology graduates will be familiar with collecting and organising stored information found in library book and journal collections, and in computer and internet sources;
- handle primary source material critically;
- engage in effective teamwork;
- problem solve and reason scientifically. The research process which is at the centre of studying psychology enables graduates to identify and pose research questions, to consider alternative approaches to their solutions and to evaluate outcomes;
- make critical judgements and evaluations. The need to take different perspectives on issues and problems, to evaluate them in a critical, sceptical manner to arrive at supported conclusions, is emphasised and taught throughout a psychology degree. The importance of looking for similarities and general principles to increase the power of the analysis is also stressed;
- be sensitive to contextual and interpersonal factors. The complexity of the factors that shape behaviour and social interaction will be familiar to psychology graduates and will make them more aware of the basis of problems and interpersonal conflict. They should also be more sensitive to the importance of enhancing co-operation to maximise the effectiveness of individual skills as shown in group work and team building;
- become more independent and pragmatic as learners. Taking responsibility for one's own learning and skill development is increasingly expected throughout a psychology degree where an emphasis on learning to learn is stressed. In particular, psychology degrees normally culminate in the completion of an independent, empirical inquiry where a pragmatic approach to a time-limited project is required.

5. Teaching, learning and assessment

5.a Preamble

It will be seen from the above that a degree in psychology covers specific subject knowledge (including core areas of the discipline), subject skills and generic skills, with a particular emphasis on independently conducting and reporting empirical research.

Programmes must be designed so as to ensure that students acquire the skills and knowledge as outlined above, and need to demonstrate that the learning, teaching and assessment methods are fit for that purpose.

Psychology has always paid considerable attention to methods in teaching, learning and assessment, and it is recognised that there are a great variety of ways in which material can be presented and skills developed. These are not static, but continually evolve and change with technological as well as pedagogical developments, including developments in the use of information technology and other media.

It is impossible, however, for students to develop an understanding of psychology without carrying out a significant amount of practical based (including statistical analysis) learning and associated assessment, and completing a substantial piece of original individual research in psychology as part of their programme. Practicals in the discipline cover a wide variety of methodologies, including both quantitative and qualitative methods.

Students should show an awareness of the ethical concerns within the discipline, especially in the conduct of empirical studies.

5.b Teaching and learning

There are general principles which should shape any provision, including the notion of progression through the various levels of the programme in terms of increasing academic content, understanding and complexity. Not only will the development of knowledge occur, but graduates will be able to take a more critical stance to the theories, findings and approaches of the discipline. In terms of teaching and learning, this will typically involve a change from initially supported and guided study to more independent and self-directed study. Throughout, there should be due emphasis given to active learning and the acquisition of both generic and specific skills and abilities.

There are many different forms of teaching and learning, including laboratory classes, workshops, lectures, seminars, individual tutorials, guided reading, independent study, email discussion groups, student groups, distance learning, individual project supervision, dissertation, etc.

It is recognised that these categories are not mutually exclusive; lectures may, for instance, involve student activities and opportunities for dialogue. As well as developing familiarity with literature and published research the use of other media should be encouraged.

5.c Assessment

The choice of assessment methods should be clearly related to the learning objectives. Assessment methods may include formal examinations (which can be seen, unseen, open-book), multiple choice tests, assessed essays, practical reports, other reports, information technology use, case studies, portfolios, dissertations, and formal assessment of performance in oral presentations and debates, including seminar and individual presentation. To ensure that the full range of skills being developed by a programme can be demonstrated, a diversity of assessment methods is encouraged. Assessment criteria need to be clearly spelled out, and should contain the expectation that critical thinking skills will develop progressively.

The assessment schedule must be clearly specified and linked to objectives, with suitable safeguards to ensure the authenticity of learning and to define clearly the limits of co-operative learning.

Students must be able to demonstrate that they are conversant with the core aspects of the discipline, which should normally be covered in the assessment schedule. A student of psychology must successfully complete a series of practical reports throughout their programme. These will culminate in an independent, empirical project reporting on a substantial piece of research (or a piece of work which delivers the same learning outcomes of equal quality). The project will normally involve the collection of original empirical data from participants. In exceptional circumstances, other types of work (for instance computational modelling or the carrying out of a meta-analysis) may be acceptable, provided that the rigorous application of high level research skills can be demonstrated. In addition, statistical competence must be an integral part of each programme.

Assessment procedures should not disadvantage disabled students and should have regard for the good practice guidelines published by the QAA. They should also be sensitive to equal opportunities requirements, for example as referred to in the QAA *Code of practice* on assessment.

6. Benchmark statements

6.a Preamble

The following benchmark statements are divided into two categories. **Threshold standards** are the minimal standards necessary for a student to graduate with a single honours degree in psychology. **Modal standards** are those which a typical psychology student would be expected to attain. The statements are phrased in terms of what knowledge or skills a graduate at that level (threshold or modal) would be expected to be able to demonstrate.

These threshold statements apply to students in single honours psychology. Students on combined or joint honours programmes will be expected to achieve an appropriate subset of these standards and of those for their other discipline(s).

6.b Subject knowledge statements

6.b.i Threshold

- Understands the scientific underpinnings of psychology as a discipline.
- Recognises the inherent variability and diversity of psychological functioning.
- Can demonstrate a good knowledge and critical understanding of a range of influences on psychological functioning and how they are conceptualised across the core areas as outlined in Section 4.a.iii.
- Is knowledgeable about a number of specialised areas and/or applications.
- Can demonstrate knowledge of a range of research paradigms, research methods and measurement techniques, including statistical analysis.

6.b.ii Modal

- Understands the scientific underpinnings of psychology as a discipline, its historical origins, development and limitations.
- Recognises the inherent variability and diversity of psychological functioning and its significance.
- Can demonstrate systematic knowledge and critical understanding of a range of influences on psychological functioning, how they are conceptualised across the core areas as outlined in Section 4.a.iii, and how they interrelate.
- Has detailed knowledge of several specialised areas and/or applications, some of which are at the cutting edge of research in the discipline.
- Can demonstrate a systematic knowledge of a range of research paradigms, research methods and measurement techniques, including statistical analysis, and be aware of their limitations.

6.c Subject skills statements

6.c.i. Threshold

- Can reason scientifically and demonstrate the relationship between theory and evidence.
- Can adopt multiple perspectives.
- Can detect meaningful patterns in behaviour and experience.
- Can pose and operationalise research questions.
- Can demonstrate competence in research skills through practical activities.
- Can reason statistically and demonstrate competence in a range of statistical methods.
- Can initiate, design, conduct and report an empirically-based research project under appropriate supervision.
- Is aware of ethical principles and can demonstrate this in relation to personal study, particularly with regard to the research project.

6.c.ii Modal

- Can reason scientifically, understand the role of evidence and make critical judgements about arguments in psychology.
- Can adopt multiple perspectives and systematically analyse the relationships between them.
- Can detect meaningful patterns in behaviour and experience and evaluate their significance.
- Can pose, operationalise and critique research questions.
- Can demonstrate substantial competence in research skills through practical activities.
- Can reason statistically and use a range of statistical methods with confidence.
- Can competently initiate, design, conduct and report an empirically-based research project under appropriate supervision, and can recognise its theoretical, practical and methodological implications and limitations.
- Is aware of the ethical context of psychology as a discipline and can demonstrate this in relation to personal study, particularly with regard to the research project.

6.d Generic skills statements

6.d.i. Threshold

- Can communicate ideas and research findings by written, oral and visual means.
- Can interpret and use numerical, statistical and other forms of data.
- Is computer literate, at least in the use of word processing, databases and statistical software.
- Can approach problem solving in a systematic way.
- Is aware of contextual and interpersonal factors in groups and teams.
- Can undertake self-directed study and project management in a supportive environment.
- Recognises the need to assess their own skills and to harness them for future learning.

6.d.ii. Modal

- Can communicate ideas and research findings both effectively and fluently by written, oral and visual means.
- Can comprehend and use numerical, statistical and other forms of data, particularly in the context of presenting and analysing complex data sets.
- Is computer literate and is confident in using word processing, database and statistical software.
- Can solve problems by clarifying questions, considering alternative solutions and evaluating outcomes.
- Is sensitive to and can react appropriately to contextual and interpersonal factors in groups and teams.
- Can undertake self-directed study and project management in order to meet desired objectives.
- Is able to take charge of their own learning, and can reflect and evaluate personal strengths and weaknesses for the purposes of future learning.

Notes:

[1]QAA *Psychology Subject Overview Report* - Q05/2000.

[2]QAA *Code of practice, Section 3: Students with disabilities. October, 1999.*

[3]QAA *Code of practice, Section 6: Assessment of students. May, 2000.*

All these can be found on the QAA web site (www.qaa.ac.uk).

Appendix 1

Membership of the benchmark group

Dr Peter Banister	The Manchester Metropolitan University
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