

Psychology and Education for Sustainable Development: Psychology Network final report

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0 Method and caveats

The information contained in this report was obtained via:

- telephone and email discussions with six ‘experts’: academic staff currently working for psychology, geography, architecture and sustainable development departments in UK higher education institutions who have considerable experience and expertise concerning both psychology and sustainable development,
- telephone discussions with a member of the British Psychological Society,
- informal discussions with members of UK psychology departments, and
- online and other research.

These sources, particularly the experts, were chosen specifically to meet the objectives of this Phase One report. The opinions and attitudes expressed in this report should not therefore be presumed to represent those of the psychology community as a whole – though they may in fact do so. A much larger project researching the opinions and attitudes of the wider community is intended for Phase Two, after which a more representative picture will emerge.

In this report, quotations for which an explicit reference is provided are taken from published material, details of which can be found in the bibliography. Quotations without explicit reference are from discussions with experts, and are presented without reference to preserve anonymity. Individual experts are referred to using plural pronouns for similar reasons.

All URLs and other online details are correct at time of submission.

1 Relevance and definitions

1.1 Overview of psychology as a discipline in the context of ESD

That psychology can make a contribution to Education for Sustainable Development (ESD) should need little argument. At root, psychology is the study of how and why humans (and other animals) think and behave as they do, and of the ways in which these thoughts and behaviours can and cannot be changed. Indeed, it is almost impossible to see how the development of ESD could proceed successfully *without* taking psychology into account. If one wants, for example, to have higher education providers and consumers understand the need for ESD, or implement ESD practice, or promote the ESD agenda, an understanding of how and why people think the way they do will be crucial. So too an understanding of how and when one can change the way they think.

However, while it may well be clear that psychology should be a central contributor to the development of ESD in UK HE, it is perhaps much less clear just what the details of this contribution should be. Psychology is an extremely multifarious discipline, and there is much within psychology that would potentially be of use. Nonetheless, it is possible to determine a number of sub-disciplines within psychology that promise particular insight given the Higher Education Academy's ESD agenda. The rest of this section provides an outline of these sub-disciplines in this context.

1.1.1 Environmental psychology

The most relevant sub-discipline is *Environmental Psychology*, and most current ESD-related work within psychology is undertaken in connection with this area. The standard definition is provided by De Young (1999, p. 1):

environmental psychology examines the interrelationship between environments and human behaviour. The field defines the term environment very broadly including all that is natural on the planet as well as social settings, built environments, learning environments and informational environments. When solving problems involving human-environment interactions, whether global or local, one must have a model of human nature that predicts the environmental conditions under which humans will behave in a decent and creative manner. With such a model one can design, manage, protect and/or restore environments that enhance reasonable behaviour, predict what the likely outcome will be when these conditions are not met, and diagnose problem situations.

The field develops such a model of human nature while retaining a broad and inherently multidisciplinary focus. It explores such dissimilar issues as common property resource management,...the effect of environmental stress on human performance, the characteristics of restorative environments, human information processing, and the promotion of durable conservation behaviour. The field of environmental psychology recognizes the need to be problem-oriented, using, as needed, the theories and methods of related disciplines (e.g., psychology, sociology, anthropology, biology, ecology).

Most of the experts who contributed to this report are currently engaged in teaching and research related to environmental psychology. However, not all of these experts are employed by psychology departments. Rather, some are employed by geography, architecture and other departments, and use their knowledge of environmental psychology to inform practice in these disciplines. The reasons for this, and the associated benefits and difficulties, are discussed in greater detail below (see sections 3 and 4).

1.1.2 Social psychology

There are (at least) three other sub-disciplines of particular relevance to psychology and the Academy's ESD agenda. The first of these is *Social Psychology*, a

useful summary of which can be found in Hogg and Vaughan (2005), from which the following definition has been extracted:

Social psychology is ‘the scientific investigation of how the thoughts, feelings and behaviours of individuals are influenced by the actual, imagined or implied presence of others’ (e.g., Allport, 1935). Moreover, for many social psychologists it is this last kind of influence that is considered both the most important and the most complex, for it addresses the fundamental social nature of our experiences as humans. Consider that fact that many of us do not drop litter, even if no one is watching and even if there is no possibility of ever being caught. This is because we, through the agency of society, have constructed a powerful social convention or ‘norm’ that proscribes such behaviour. Such a norm implies the presence of other people and ‘determines’ behaviour even in their absence. Similarly, the fact that we consider coins and many other things to have value also relies on implied presence, because the value of something generally (though not always) depends on what others think, even if those others are not present at the time of valuation.

Social psychology seeks to explain how individual human interaction and human cognition influence culture and, in turn, are influenced by culture. Social psychologists study an enormous range of topics, including conformity, persuasion, power, influence, obedience, prejudice, bargaining, social categories, intergroup relations, crowd behaviour, social conflict, social change, the physical environment, decision making, leadership, communication, attitudes, violence, and altruism. Of course, social psychology is not the only discipline to study such topics, but social psychologists are in a position to offer unique and detailed insight into both these topics individually, and the inter-relations between them.

Research within social psychology therefore has much to offer ESD. There is also a close fit between some aspects of social psychology and various aspects of environmental psychology, and this crossover can also be fruitfully employed for ESD-related work. Indeed, there is already a certain amount of environmental-cum-social psychology research being done on ESD-relevant topics, including research into students’ attitudes and behaviours with regard to recycling, community attitudes and behaviours in the context of local transport issues in Surrey, and the attitudes and behaviours of new residents in an ecologically sustainable housing development in Devon (see section 2.1 for more details).

1.1.3 Community psychology

The second additional sub-discipline is *Community Psychology*, described by Mark Burton (2005) as a practice-oriented sub-discipline underpinned by a concern for (a) *justice*, in particular social justice and human rights, including the right to have a more equal and equitable distribution of resources, the right to equality and fair treatment, and the right to self determination; (b) *stewardship*, which involves a number of duties and responsibilities including a duty to look after our world and the people in it, a duty not to waste things, people's lives, or time, and a duty to think long-term and to make things last longer than us; and (c) *community*, which reflects the different hopes and desires that people have, including hope for companionship, love, acceptance and tolerance, hope to be included and for diversity to be welcomed and celebrated, and the hope that we will be accepted for who we are.

The principles which govern community psychology practice include (a) an *ecological approach* that recognises the importance of the historical, environmental and situational context of people's lives, and thus enables community psychologists to anticipate the impact of change more widely; (b) a *systems perspective*, in which knowledge about how the social system operates helps community psychologists understand the multiple causes of social problems at a global and an individual level, and which entails that community psychologists are interested in the perspectives of different stakeholders, and in analysing and using power in all its manifestations at different points in the social system; (c) an *interdisciplinary agenda*, in which community psychologists recognise the artificial boundaries between different professional and academic disciplines, and thus bring to their work a commitment to understand problems in different ways and to work with others for better understanding and better use of resources at a local and a global level; and (d) *evaluation*, whereby community psychologists can identify positive and negative aspects of change and contribute important information for both project improvement and for the most efficient use of resources.

As with social psychology, potential connections between community psychology and ESD should be clear. As indeed should the connections between community psychology and social and environmental psychology. Moreover, community psychologists are also ideally placed to act as a two-way conduit between, on the one hand, communities and individuals, and, on the other, theorists and other policy makers, in the context of changing our environment and our attitudes toward this environment. Involving community psychologists in future ESD work may therefore provide one fruitful avenue for successfully embedding ESD within the psychology community.

1.1.4 Evolutionary psychology

The final sub-discipline is *Evolutionary Psychology*, an area that offers a more theoretically-oriented approach to certain aspects of ESD, and also provides certain insights that may prove useful for the pragmatic application of ESD programmes and practice. A useful summary of the history and underlying rationale of evolutionary psychology can be found in Simpson, et al. (2005), from which the following has been extracted:

Evolutionary biology has proved an overwhelmingly successful twentieth-century descendant of Darwin's (1859, 1871, 1872) nineteenth-century work. Consequently, the latter half of the twentieth century has seen two significant attempts to apply the theory and methodology of evolutionary biology to human behaviour and cognition. The first of these was sociobiology (Alexander 1974; Wilson 1975, 1978), which in turn gave rise to what is now called 'behavioural ecology'. Work in both of these areas initially focused explicitly only on the possible evolutionary function of *observable* behaviour. The second attempt extended ideas from sociobiology and behavioural ecology to the likely *underlying causes* of observed behaviour, and resulted in the development of what is now termed 'evolutionary psychology' (Tooby and Cosmides 1992; Barkow et al. 1992; Pinker 1997, 2002). Here the focus is not on human behaviour *per se*, but on the cognitive mechanisms that underwrite it.

Evolutionary psychologists argue that natural selection has equipped us with numerous evolved, domain-specific cognitive adaptations, and that these adaptations enable us as individuals to produce rapidly a variety of behaviours, which are more or less appropriate to whatever our current situation requires. Under this interpretation, what have been selected for over evolutionary time are cognitive mechanisms whose interactions can reliably generate behaviours that are positively correlated with our evolutionary fitness. And while these cognitive mechanisms evolved as a result of selective pressures in our distant past, they can nonetheless generate behaviours appropriate to more contemporary environments. In other words, evolution has provided us with certain innate, domain-specific faculties and mechanisms which then interact with our current beliefs in local conditions to cause our behaviour. Human behaviour and cognition are thus both *enabled and constrained* by our evolutionary history and the selective pressures that this involved.

One consequence of the evolutionary psychology perspective is that the evolved cognitive mechanisms that it proposes may generate behaviours which, while they were adaptive at one time in our evolutionary history, are now non-adaptive due to novel factors in our current circumstances. This is the cognitive equivalent of the fact that our evolutionary drive to consume and store fats and sugars whenever possible now underwrites the high levels of obesity in the modern world resulting from the easy availability of fat-and-sugar-rich diets (Galef 1996). We have, to put it simply, “stone-age minds in a space-aged environment” (Dunbar 1999, p. 784), and consequently there is the potential for a mismatch between our evolved cognitive capabilities and our current environmental circumstances.

In the context of the current report, one can see that such a mismatch may well underwrite the widespread adoption and acceptance of the kind of non-Sustainable practices that ESD aims to address, and may also present a significant barrier to the addressing of such practices in the short and long term (for a more detailed discussion, see Jackson 2000, 2002, 2003).

Social, community and evolutionary psychology thus provide three sub-disciplines of psychology in addition to environmental psychology that enable insight into ESD, and that may also offer opportunities to embed ESD into the psychology curriculum. However, there is as yet little ESD-specific work being done in these areas. In consequence, these sub-disciplines do not provide the main sources of data for the current report.

1.1.5 Summary

These outlines provide an indication of the potential range and depth of the contribution that psychology can make to ESD. They also show the extent to which quantitative, qualitative, practical and theoretical approaches within psychology all have something significant to offer in this context. Of course, this is not to claim that each of these sub-disciplines is clearly or uncontroversially defined, nor that there are no real or meaningful disagreements within each sub-discipline. However, what is the case is that there is much within and across each area that is widely agreed, and that can make a significant contribution to the Academy’s ESD agenda. This is particularly true of environmental psychology, and it is from this domain that the majority of the information for the current report has been taken.

1.2 Definitions of SD

The most frequently used definition of SD within psychology is the definition developed in the Brundtland report (1987, p. 43): “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. One expert also stated that they sometimes supplement this definition with a three-element Venn diagram, with elements labelled ‘environment’, ‘individual’ and ‘socio-cultural context’. Another expert stated that they emphasise that “the concept of sustainable development cannot be studied from a mono-disciplinary perspective. It is essential to be aware of political, economic and natural-technical developments as well”.

However, all experts stated that providing a useful or easy-to-handle definition within the context of psychology was problematic, and that this difficulty also served to hinder the development of (E)SD-related work in psychology. For example, one expert argued that “For most people [working in psychology], ‘sustainability’ means green issues – they don’t think of social and economic dimensions. And yet it’s probably at that level that psychology can make more of a contribution”. Similarly, a second expert said that they “pulled back from trying to conceive a psychology of SD a few years ago, because of the widespread confusion [they were] meeting amongst academics and practitioners...about what precisely [SD] has meant”.

It seems therefore that definitions of SD currently being used in psychology are thought to be problematic in themselves, and are also thought to hinder the undertaking of ESD-related work. Providing a more suitable definition, or making such definitions more widely known to those working in psychology, could therefore offer considerable benefit for the purposes of embedding ESD into the psychology curriculum.

2 Pedagogy, courses and available resources

2.1 Delivering ESD

In general there is little ESD within psychology. Where ESD is present, it is most usually delivered as one aspect of an environmental psychology course or module, and is typically delivered through a combination of lectures and project-based work.

2.1.1 Lectures

As one would expect, lectures for psychology students that form part of a sustainability-focussed psychology module or that are run by a Sustainable Development Institute involve the detailed presentation of SD-specific theory and research findings. However, it is also the case that some pro-SD psychology lecturers do not teach SD *per se*. Rather, these lecturers use SD-relevant examples to illustrate the more general psychology principles that are being taught. For example, a lot of SD-specific research is done using a ‘social dilemmas’ framework, so when social psychology lecturers teach about social dilemmas in general, they use sustainability

issues to provide relevant examples. Similarly, the (dis)connections between attitudes and behaviours can be well illustrated by using SD-specific research on recycling: most people have a pro attitude toward recycling, but their actual behaviour often does not manifest this. One expert argued that using SD-specific data in this way is “the easiest way to teach [SD], and,...sometimes, the easiest way for students to understand something [SD-related], rather than teaching them huge, broad, big ideas, which are difficult to apply in a setting”.

It seems therefore that the most common way in which ESD is currently delivered in psychology lectures is via the use of SD-related examples to illustrate certain more generic aspects of psychology. The development and judicious use of appropriate, well-structured SD-related examples and case studies would perhaps therefore provide one way in which ESD can be successfully embedded into the psychology curriculum.

2.1.2 Projects and dissertations

The most substantial ESD within psychology occurs in the context of student projects and dissertations. For example, undergraduates in one psychology department study a course on ‘environmental risk management’ which:

specifically focuses on sustainability issues. Probably about a quarter of the final year undergraduate course in Environmental Psychology... focuses on this issue. As part of their assignments students are asked to write an essay or research proposal in which they discuss what psychology can do to help explain or change certain environmental problems.

Similarly, undergraduates taking the environmental psychology option in one geography department are encouraged to do SD-related projects that focus on people’s behaviours and attitudes concerning a (student-chosen) localised initiative that has tried to get local people to engage in SD. In this instance, about 50% of the students’ assessment is based on this project. Finally, one psychology department aims to get Master’s students to do “projects and dissertations on real world things. [For example,] the University has eco-policies, and the students audit them – not just as an exercise, but because the University’s governing body want to know how [the policies are] going, and to form policy on the basis of this”.

As this last example shows, one important factor here is that the project and dissertation work that students do is perceived by all those involved to have a tangible impact. Moreover, this impact can extend beyond the students’ own University environment. One expert from a geography department reported that “West Somerset council wanted a report and recommendations [on an SD-related issue], and for the most part they implemented them.” Similarly, the same department “just got a contract from the city council to find out why students flatly refuse to recycle their waste. The council really want to know, and [the report] really gets out there”. Finally, one psychology expert reported that:

a lot of our teaching is guided by the research we do...many of our research projects are funded by local authorities or other institutions

which specifically require answers to sustainability issues... On various occasions students have actively participated in collecting data for these research projects and have therefore helped local authorities to deal with these issues. A few examples are a study funded by the local authority on recycling, a study on local transport and pollution and a study on bus use at the university.

Localised, real world, project-based work therefore provides the main opportunity for students to engage with SD as part of their psychology education. Moreover, such work does seem to make a significant contribution to the sustainability-literacy of the student body. As one expert put it: “case studies and demo projects are a good idea”. However, this expert then added that the fact that their psychology department provided such opportunities means that “we are the exception” not the rule within the psychology community. Making such opportunities more widely available may therefore provide one of the most profitable ways in which to embed ESD into to the psychology curriculum.

2.2 *Existing courses and ESD*

2.2.1 Undergraduate level

Psychology and psychology-related undergraduate courses on offer in 2005/6 in which ESD may figure significantly are (source: UCAS website):

The University of Bolton

Environmental Studies and Psychology: 3 year; Full Time;
Qualification: Honours BSc

University of the West of England, Bristol

Environmental Science and Psychology: 3FT Hon BSc

Canterbury Christ Church University College

Psychology with Science of the Environment: 3FT Hon
Science of the Environment and Psychology: 3FT Hon
Science of the Environment with Psychology: 3FT Hon

Glasgow Caledonian University

Psychology: 4FT Hon BSc
Psychology - Environmental Science: 4FT Hon BSc

University of Hertfordshire

Environmental Studies/Psychology: 3FT Hon BSc
Psychology/Environmental Studies: 3FT Hon BSc

Keele University

Applied Environmental Science and Psychology: 3FT Hon BSc

The University of Manchester

Built and Natural Environment and Science and Psychology: 3FT Hon BA

Oxford Brookes University

Environmental Sciences/Psychology: 3FT Hon BA/BSc

University of Ulster

Environmental Science and Psychology: 3FT Hon BSc

Environmental Science with Psychology: 3FT Hon BSc

University College Worcester

Psychology with Environmental Management: 3FT Hon BSc

There may also be other psychology degrees that offer modules, options or courses in environmental psychology or social psychology that involve some degree of (E)SD, though it is impossible to determine which these may be (without engaging in exhaustive search of all 2000+). Psychology undergraduates at some universities may also be able to take SD-related modules given by departments other than psychology as an ‘unrestricted module option’ during their degree.

2.2.2 Postgraduate level

There is an Environmental Psychology MSc offered by the Department of Psychology at the University of Surrey in which SD figures prominently. This department is the main provider of postgraduate ESD for psychology in the UK, and is one of the most significant such providers in the world. In addition, the Department of Geography at the University of Exeter is currently finalising details of a new MSc in Sustainable Development for which there will be a significant environmental psychology component, and one expert is also involved in a proposal for a European MSc/PhD programme on environmental psychology that will involve significant SD elements. However, while such developments will no doubt improve opportunities for SD-related work within psychology at the postgraduate level, it seems that there are still very few such opportunities currently available. Discussion of student demand for such courses can be found in sections 4.1-2 below.

2.3 *Existing resources*

There are a small number journals within psychology that publish SD-related research suitable for use as a teaching resource for psychology courses (see section 3.1 below). However, most experts agreed that it can be “difficult to get your hands on stuff”, not least because in some instances host institutions do not subscribe to some of the relevant journals. This difficulty was thought to be particularly acute with regard to teaching-oriented resources (as opposed to resources for research purposes). One expert working in a psychology department said that they were “not aware of any specific resources for education and sustainable development. Although much of the teaching we do is linked to research conducted within our department”. A reliance on internally generated resources was also reported by most other experts.

3 The broader intellectual environment: journals, bodies, pressures and barriers

As one would expect, there is much that could be said regarding the intellectual environment in which psychology-related ESD occurs in the UK. However, this report will focus primarily on those aspects of this environment that were particularly prominent during discussions with experts and other members of the psychology community. A more comprehensive analysis will be provided during Phase Two of this project, if required.

3.1 Journals and other publications

There are several journals that publish material concerning SD and psychology, including: *Environment and Behaviour*, *The Journal of Social Issues*, *The Journal of Environmental Psychology*, *The Journal of Architecture and Planning Research*, and *Applied Psychology: An International Review*. Indeed, one expert commented that it even though environmental psychology and SD are not considered mainstream interests:

it's not harder to get published...there's *The Journal of Environmental Psychology...*, *Environment and Behaviour*, *The Journal of Architecture and Planning Research*. All of those do publish work on the application of psychology to environmental issues and sustainability issues...Then one can go outside psychology journals. There are behavioural science journals, sociology ones, planning ones, and...applied psychology journals. I was recently the co-editor of a special issue of *The European Review of Applied Psychology*...all about ...sustainability.

That said, a second expert noted that:

a lot of research on SD in psychology seems to struggle with being both fundamental and applied. Most research that is published in high ranking journals is experimental and fundamental and less applied (even in journals such as *Applied Social Psychology*). Multidisciplinary research is even more difficult to get published simply because the nature of this research often leads to a necessity to 'water down' mono-disciplinary rules. However, I do believe this is changing and that environmental psychology is progressing into marrying the two demands.

Work on psychology and ESD is also regularly published in the form of reports and other consultation documents produced for a variety of stakeholders including local and national governments, local communities, businesses, and other interested parties.

In one sense then, there appear to be few substantial barriers to publishing SD-related Psychology research in one form or another. However, all experts agreed that despite the apparent (relative) ease with which such work could be published, there were indeed significant publication-related difficulties that (these experts claimed) must be addressed if ESD is to be properly embedded into psychology curricula.

3.2 *The Research Assessment Exercise*

All experts claimed that there exists a major tension between the requirements of the Research Assessment Exercise (RAE) and the nature of the publications through which work on psychology and SD is currently disseminated. More specifically, experts commented that:

The RAE focuses ever more tightly on citation indexicals, and...applied orientation/research is at the moment...not valued as highly as lab-based studies... This puts [the RAE] out of step with HEFCE guidelines, and also with ESRC policy which emphasises a broad approach to evaluation...such as feeding research outputs back to stakeholders.

The RAE clearly places no emphasis on any kind of dissemination other than publication in journals, and in the kind of journals that are not likely to be consulted by those in business, the community, government and so on.

The problem [with publishing in the journals that publish work on psychology and SD] is that (a) you don't get the impact factor, because either the impact doesn't exist, or it's low because the readership of the journal is so low anyway, and (b) it's not on the RAE panel's radar. They just say 'It's not like *The British Journal of Social Psychology*'...so that's the problem with those journals. There are journals out there, but they're not given equal status.

I have to publish in geography, and that's it. And I have to publish...So anything in psychology journals doesn't count...I've got a paper coming out in *Environment and Behaviour* but it will mean nothing to geography [in the context of the RAE]. They are not interested in that at all. [Articles in psychology journals] don't mean anything; they wouldn't help me keep my job.

It seems then that the RAE – in its current form – presents a substantial obstacle to the development of SD-related work in psychology. Significant changes to some aspect(s) of the RAE may therefore be required if ESD is to be more widely or more deeply embedded into psychology curricula.

3.3 *Other tensions*

Moreover, significant tension exists not only within the context of RAE-relevant publication, but also across many other areas of the current intellectual landscape. One expert noted that there are “often contradicting pressures from multidisciplinary applied research, which is easier to get funded, and mono-disciplinary, fundamental research, which is easier to get published”. A second expert stated that in geography “we've undergone a major shift in intellectual thought from quantitative work of the 60s and 70s toward a more cultural approach”, which means that those who do quantitative behavioural research are very unfashionable. “Geography as a discipline now considers that attempting to characterise and explain people using statistics, as psychology does, is fundamentally wrong”. This means that

some psychology-driven papers on SD are rejected from geography journals on the basis that “they are statistical work, and [reviewers] don’t like this”.

The fact that work on SD is predominantly both applied and cross-disciplinary therefore presents psychologists working inside and outside psychology departments with a number of significant problems, particularly given the current intellectual climate in UK higher education. However, most experts stated that these problems were unlikely to deter them from continuing with SD-related work. Many also thought that the intellectual landscape may be slowly changing in their favour, given the increased prominence of SD issues within both higher education and in society as a whole. Nonetheless, it is as yet unclear how much change can or will occur, or what the most desirable changes would be from the perspective of the Academy’s ESD agenda. It is also impossible to determine how many psychologists are deterred from engaging in SD-related work as a result of the current intellectual climate, or how much this climate will result in serious resistance to embedding ESD with psychology curricula over the next ten years.

3.4 *The British Psychological Society*

3.4.1 Current ESD policies and practice

The British Psychological Society (BPS) is the representative body for psychologists and psychology in the UK, and is charged with national responsibility for the development, promotion and application of psychology for the public good. As such, the BPS is also the accrediting body for psychology courses in the UK. A BPS history and current strategic plan are appended to this report as .pdf files, and further information can be found at: <http://www.bps.org.uk/>

Attitudes among psychologists toward the BPS are extremely varied. So too the connections between, on the one hand, the formal BPS requirements for the Graduate Basis for Registration (GBR) qualifying examinations and, on the other, the actual contents of individual institution’s accredited psychology courses. However, the aspects of these relations that appear particularly salient within the context of this report are that (a) neither SD nor environmental psychology form any part of the current syllabus for the GBR qualifying examinations, and (b) there is currently no section, division or other special interest group within the BPS specifically concerned with either environmental psychology or SD issues.

There are a number of potential explanations for this. The BPS argues that the main reason that SD does not feature in the syllabus for the GBR qualifying exams – and, indeed, the main reason that ESD “is not an issue that has really been on the agenda” within the BPS – is that “for most psychologists, [SD] is not particularly on the radar”. Similarly, the absence of environmental psychology from the GBR syllabus is largely because environmental psychology “is not a particularly well established area of psychology compared with the more traditional areas”, and this is also the reason offered for the lack of any division or other special interest group concerning environmental psychology at the professional level. However, one expert argued that the current situation exists (at least in part) because environmental psychologists “have never sought to get [environmental psychology] recognised by

the BPS... [because] we didn't want to be told what to teach by people who, generally speaking, don't know anything about environmental psychology”.

It seems, therefore, that a variety of factors from across the psychology community have resulted in the current absence of formal recognition or other policy concerning ESD or environmental psychology on the part of the BPS.

3.4.2 Possible future policies and practice

However, despite the current absence of any formal recognition or other policy concerning ESD or environmental psychology, the BPS nonetheless feels that “it would be entirely possible” to embed ESD within psychology curricula “presuming there is the will to do it”. Indeed, the BPS noted that:

we have a number of areas within the GBR syllabus where one could, if one wished, work in sustainability. For example, conceptual and historical issues [e.g., can psychology be politically neutral? Can it be morally neutral?], cultural psychology, and others... There is [therefore] scope for the existing syllabus to be complemented by the inclusion of sustainability, if it was felt to be something that was appropriate and helpful and needed.

Moreover, the BPS also noted that while considerable further research is required to establish the most fruitful ways in which ESD could be embedded into psychology curricula, one possibility is that “a statement could be included in one or more of the [psychology] benchmark documents... and the Society could, if it was felt appropriate, include something in its accreditation criteria”. The BPS further noted that (at least) one other subject area has already introduced as an accreditation requirement the guideline that ‘where appropriate, the principles of sustainability should be introduced’, and that the BPS “could see scope for doing [something similar] within the Society’s guidelines”.

All of that said, the BPS also observed that there is always considerable pressure from the government and other special interest groups to include, improve or increase coverage of particular topics within psychology curricula, and that it is often very difficult (and perhaps sometimes impossible) for the BPS to produce guidelines that meet all such demands. In particular, there is always the complex and contentious issue of which topics or requirements should be removed from existing curricula or guidelines in order for the suggested inclusions or improvements to be made. In consequence, if ESD is to be embedded into psychology curricula via formal inclusion in benchmark statements or accreditation requirements, then one significant task for the Academy will be to “show the relevance of” and the crucial need for ESD within psychology.

It seems, therefore, that whilst the BPS currently has little formal engagement with either SD issues or environmental psychology, the involvement of the BPS may well be one possible though highly complex element in any successful embedding of ESD within psychology during next decade.

3.5 *Other bodies*

There are, however, a number of other bodies within psychology that do already engage with environmental psychology to a significant degree. Both the *American Psychology Association* (APA) and the *Canadian Psychology Association* (CPA) have an environmental psychology division, as does the *International Association of Applied Psychology* (IAAP). There are also several international bodies that focus on environmental psychology including the *International Association of People-Environmental Studies* (IAPS) in Europe, the *Man-Environment Relations Association* (MERA) in Japan, the *People and Physical Environment Research Organization* (PaPER) in Australia and New Zealand, and the *Environmental Design Research Association* (EDRA) in North America. All of these bodies produce reports, organise conferences, and provide other resources and support concerning research into environmental psychology. As such, these bodies provide the main national and international foci for SD-related work within the psychology community. However, these bodies appear to provide relatively little in the way of materials and resources explicitly developed for the teaching of SD within psychology courses.

3.6 *Other barriers*

Several additional barriers were also mentioned concerning both the production and promotion of SD-related psychology work, and the embedding of ESD within psychology curricula. For example, one expert currently working in an architecture department pointed out that:

students are not always sure what to do with the knowledge they acquire – within architecture, students are often interested in SD, but are unsure whether designing around SD principles will ‘compromise their designs’ – indeed this is what they are sometimes told by so called 'star' architects ...This leads to a paradoxical situation where students want to design ‘sustainable buildings’, but in order to excel in their field, they need to be careful not to make ‘sustainability’ a statement.

Another expert pointed out that the Academy’s ESD programme has perhaps not come at a very good time. Departments are building up to the 2008 RAE; Quality Assurance Assessment (QAA) is on going, and as a result most academics feel that everyone is constantly checking up on them. Moreover, staff feel that what they are employed to do – and what they want to do – is teach *psychology*, and not ‘whatever constitutes the current government agenda’. In general, most staff see it as “neither feasible nor desirable to expect staff to include sustainability issues in all their teaching”, and one member of staff expressed the worry that “the QAA will begin to focus on Sustainability benchmarks, and that somewhere in my statistical modelling module I’ll need to give over some time to sustainability perspectives, or my course will not reach the benchmarks”. Should such attitudes be widespread – and it appears that they may well be – there is likely to be considerable resistance to embedding ESD within psychology. Minimising or overcoming such resistance will be a major challenge for the Academy’s ESD agenda, and will require considerable skill and expertise. Possible ways in which to approach this issue are discussed in section 5.1.

4 Students' expectations and demands

No specific assessment of student attitudes toward (E)SD and psychology was undertaken for this report. Nor has any such assessment been performed elsewhere, as far as we are aware. However, the following points concerning students' experiences, expectations and demands in the context of (E)SD and psychology emerged over the course of discussion with experts and other interested parties.

4.1 *Within Psychology*

As detailed in section 2, opportunities for students to receive explicit tuition in SD within psychology are extremely limited. Moreover, the lack of opportunity to study environmental psychology at undergraduate level has a negative impact on the number of psychology graduates wishing to study environmental psychology at postgraduate level. For example, the modular MSc run by the Department of Psychology at the University of Surrey provides all students with the opportunity to study environmental psychology, but only one or two students each year choose to do so. According to one expert, the main reasons for this are that students' module choices are driven by:

- (a) the desire to get the highest marks possible, and environmental psychology represents a great unknown for students given that they are unlikely to have studied it at undergraduate level, and
- (b) the perceived need to take courses that are seen to benefit their chances of getting a job and/or their chances of obtaining professional accreditation or qualification.

It appears therefore that the lack of formal recognition by the BPS for environmental psychology (see section 3.4) plays a significant role in limiting student demand for SD-related psychology tuition at both the undergraduate and the postgraduate level (in addition, of course, to various other factors).

It is also worth noting in this context that over 80 percent of psychology graduates do *not* go on to enter professional psychology practice. It may therefore be the case that there are a significant number of psychology students who are interested in SD but who do not or cannot study SD at undergraduate or postgraduate level for reasons related to GBR qualification and accreditation, but who then gain little benefit from such qualification once they have graduated. Addressing this discrepancy may therefore result in a significant increase in psychology students' interest in, and demand for, ESD.

Indeed, there is some evidence that such an increase might occur. Many experts within psychology departments argued that there were significant numbers of non-psychology students enrolled on courses in, for example, management, engineering and architecture who are interested in studying SD and psychology. This, they claimed, is because these students believe that psychology offers the key to understanding people's attitudes to environmental and behavioural change, and to understanding people in a way that would be beneficial to their own subject. One expert argued that "there is enormous scope for psychologists to offer courses in these kinds of areas", and that "if we were to make these modules available to the rest of the

University, I guess we'd have a lot of people". Moreover, this does seem to be the case (see section 4.2). There may therefore be a greater ambient demand within psychology students for SD-related psychology courses than is currently apparent, if it is indeed the case that psychology students who would be interested in studying SD are prevented from doing so for reasons related to professional accreditation. However, much more research needs to be done before any decision can be made on whether this is so, or on whether appropriate changes to psychology curricula could be made without compromising either psychology as a discipline or its accreditation procedures.

4.2 *Other subject areas*

In contrast to psychology, demand for psychology and SD tuition from students in other subject areas appears relatively strong. One expert working in a geography department noted that in the context of student projects:

what interests [students] the most...is understanding what drives actual individual people...mainly because that's what most of them end up doing for projects. Most of them go out and ask people questions...And what they are doing, which is really good, is they are applying social psychological ideas to problems that social psychologists haven't traditionally looked at, such as...fairly-traded produce. Applying ideas that have conventionally been looked at in the context of recycling or energy saving and looking at [them] in other behavioural contexts.

Of course, applying psychological ideas within other subject areas is not problem free. In addition to the funding and publication problems already discussed (see sections 3.2-3), students from other subject areas can often find it difficult to get to grips with the technical details of psychology research. For example, much of the psychology research used by one expert is based on 'complex multivariate analyses', a psychology technique that this expert's students frequently struggle to understand. However, the expert also said that they usually attempt to present such research by focusing on the results rather than the method by which the results were obtained, and that this often serves to reduce confusion to some extent. Similar demands – and corresponding difficulties – were also reported by experts from other non-psychology departments. Overall, however, these experts shared the thought that “teaching psychology from outside a psychology context can be hard work, but it is generally very rewarding”.

5 **Desiderata and future work**

5.1 *Embedding ESD within psychology curricula*

5.1.1 Possible routes

This report has already outlined several possible routes by which ESD could be more thoroughly embedded into psychology in the UK. These include:

- providing a definition of SD that better suits psychology, or making existing suitable definitions more widely known to those working in psychology (section 1.2);
- involving community psychologists in ESD research and practice (section 1.1.3);
- developing appropriate, well-structured SD-related examples and case studies for use in non-SD-specific psychology lectures (section 2.1.1);
- making opportunities for localised, real world, project-based SD-related work more widely available to psychology students (section 2.1.2);
- making significant changes to some aspects of the relations between SD in psychology and:
 - the RAE (section 3.2),
 - the BPS and the GBR (sections 3.4 and 4.1) and
 - the wider intellectual environment within UK higher education (sections 3.3 and 3.6); and
- exploiting the interest shown by students from other subject areas for psychology-based SD (section 4.2).

These routes represent a wide variety of ways in which ESD could be embedded into psychology, and each presents its own challenges. Providing psychologists with suitable definitions, examples, case-studies and other resources will require considerable research in order to maximise ESD benefit while minimising disruption to existing curricula. Similarly, encouraging more SD-related project and dissertation work will have a significant impact only if such work can be properly integrated into the courses and communities concerned. Some work in these areas has already been done, particularly in the US (see, e.g., Scott and Koger, in prep). Integrating this existing work with the knowledge and skills of experts within UK higher education may therefore provide a useful first step.

It also seems that if such research and integration is to succeed, this work will need to occur in conjunction with some of the wider, subject-level changes highlighted above. The existence – or perceived existence – of substantial barriers to promoting SD within psychology will need to be addressed if anything more than a superficial inclusion of ESD within psychology is to be achieved. It is as yet unclear how such change could be implemented, or how much change should occur. Roundtable discussions involving all relevant parties will almost certainly be required.

Most importantly, however, **there is a clear need for a considerable amount of more detailed research to be undertaken before any of these routes are taken.** The psychology community is likely to be highly resistant to the inclusion of SD within psychology curricula (see section 3.6). Attempts to embed ESD within psychology are therefore likely to fail unless extreme care is taken to achieve such embedding in a sensitive and mutually beneficial manner. Mere provision of information and imposition of requirements is extremely unlikely to succeed.

5.1.2 Issues to be considered

In order to successfully embed ESD into psychology, several issues must be taken into account. These include:

- that most psychology staff currently see it as “neither feasible nor desirable to expect staff to include sustainability issues in all their teaching”;
- that most departments and staff are driven almost exclusively by RAE and other research requirements;
- that, as one expert put it, “most of my colleagues wouldn’t know where to start with incorporating SD into psychology [as they are not SD specialists], so they do need it to be spelled out.... And they haven’t got the time to do it themselves”. Nonetheless, staff may well be willing to incorporate SD into their courses provided they are given well researched and properly designed resources to do this, particularly if such resources makes their lives easier;
- that “methods of teaching [in psychology and other departments] are considerably different, as are the means of assessment. [For example,] Architecture staff are pretty ‘fixed’ within the ‘studio-culture’ method of teaching architects – the model is very top-down (Master-Apprentice). Psychologists are trained to be much more open about what they do (methodologically speaking), whereas architects in this country are trained in a similar way to artists. So whilst there will always be students who are actively interested in SD principles, unless there is some way of embedding scientific principles within an arts-based discipline, these interested students will sadly remain a minority. Having said all that,... psychology could benefit from the contextual focus of architecture – architects are trained to see things in a more holistic manner than psychologists often are, which theoretically lends itself well to a SD approach”; and
- that more recently employed staff may be less resistant to including ESD in their courses than some of the more established staff members.

Most importantly, however:

- “a gently, gently approach” is what is needed if SD is to be accepted and embedded into UK psychology programmes.

These routes and issues provide some sense of the work that needs to be done in the context of the psychology community in order to implement successfully the Academy’s (and the Government’s) ESD agenda. Successful implementation may well be possible, but achieving this will be neither easy nor quick. Rather, much hard work will be required if ESD is to be profitably embedded into psychology curricula over the coming decade.

Moreover, this work will not – and indeed cannot – take place in isolation from other action within higher education. The following section therefore outlines some of the more general considerations that members of the psychology community feel should be acknowledged in this regard.

5.2 *Embedding ESD within UK higher education*

There is a need for ESD to be embedded into higher education in way which is both discipline-specific *and* widely coordinated. Approaches which involve either

generic imposition from above or piecemeal implementation on the ground are unlikely to have sufficient motivation or momentum to succeed. Indeed, one expert argued that “initiatives of this kind need a champion” and, more specifically, that such a champion:

should be, at a University level, a senior member of the university who takes on responsibility for overseeing the programme, but in a department as well, it always needs someone senior to stand up and say ‘we should be doing this’ and to try to drive it. It’s not going to happen through a process of osmosis.

Indeed, this expert went on to argue that:

at the University level, such a post should be funded by HEFCE...to start the initiative and to demonstrate [HEFCE’s] support. Because [of] the breadth of work involved: you’re talking about, buildings, maintenance, purchasing, academic and curriculum matters, etc. It’s so very broad, and the cost savings generated by these policies would, I think, fund the post anyway, ultimately. So it’s not just good education, it’s good business.

Assessing whether such an approach is feasible is clearly beyond the remit of this report. However, most experts agreed that at the very minimum “people need some concrete examples” of successful ESD before they will be willing to actively promote the Academy’s ESD agenda. To this end, one expert suggested that “HEFCE should initiate some demonstration projects” to show how to implement ESD successfully, and to illustrate the benefits that will accrue at the individual, departmental and institutional levels. Similarly, “one of the roles of [the Academy] is to demonstrate...how [ESD] can be incorporated” at the subject level. Without such demonstrations, it is likely to prove much more difficult to develop the levels of staff and other support required to embed ESD into higher education successfully (recall also section 3.4.2).

6 Conclusion

This report provides an initial analysis of current ESD resources, practices and attitudes within psychology in UK HE. The sources from which this report has been compiled are neither sufficiently comprehensive or sufficiently representative for this report to be presumed to express the opinions and attitudes of the psychology community as a whole. Nonetheless, this report does highlight several issues within psychology that are of particular relevance to the Academy’s ESD agenda. This report also provides some sense of the perceptions of (E)SD and psychology that are held by a range of academic staff with considerable experience and expertise in these areas. As such, this report does provide a sufficient basis from which to engage in further research concerning embedding ESD within both psychology and higher education more generally. We therefore believe that this report can and, hopefully, will play a significant foundational role in the development of the Academy’s ESD programme.

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