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COVER FEATURE

Psychology's response to climate change



INSIDE

Primary care system set for major reforms

Development of graduate attributes for
the discipline of psychology

Survey of clients receiving psychological
services under the Better Access initiative



Challenging assumptions in the psychology of climate change

By Professor David Uzzell

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David Uzzell, Professor of Environmental Psychology, conducts research and is a consultant in the area of sustainable development for the European Union, the UK Government, local and regional governments, as well as the Economic and Social Research Council. This article describes some of his recent research and provides a context for his Keynote address at the forthcoming APS Conference which will raise critical questions for psychology and psychologists working on climate change and sustainable development.

Climate change is no longer a contested issue. What is contested is what we do about it. Governments now recognise that climate change and its consequences need to be addressed by changing peoples' behaviour and everyday practices; technological fixes alone will not be enough. When one appreciates the extent of the causes and consequences of climate change it is clear that psychology should be playing a key role.

Climate change is already having a direct effect on people and places, for example, through a greater frequency and intensity of storms, flooding, tidal surges, and high temperatures. The heat-wave in 2003 was responsible for over 35,000 excess deaths in Europe. Climate change will have a secondary impact on food supplies either by destroying farmland or reducing crop yields, and changing the distribution of plant and animal diseases, as well as food-borne diseases, allergic disorders, and some vector and rodent-borne diseases (Menne and Bertollini, 2005). These in turn will require the introduction of expensive pesticides and herbicides which many communities will not be able to afford, and which will further damage the environment. Moreover, they will also lock farmers into a dependency relationship with international agrochemical companies, as many already are with patented and 'terminator' seeds (i.e., seeds modified to grow plants which themselves produce infertile seeds). Food security, national and transnational migration and inter-group conflict will be potential third level responses, along with other economic, social, political and health impacts. And then there will be psychological consequences, e.g., stress, anxiety, and PTSD.

The impact of climate change has been exacerbated by population growth and urbanisation, the development of megacities, and environmental degradation caused by human activities. In 2007, for the first time in history, more people were resident in urban than rural areas. The concentration of people into smaller areas and building in unsuitable places (e.g., flood plains) makes communities much more vulnerable to natural hazards. In December 1999, flash floods in Venezuela killed more than 30,000 people, many in modern high-rise buildings, as a result of unplanned development. The catastrophic impact of climate change may extend way beyond the regions of the immediate disasters. The Asian tsunami, for example, which caused over 300,000 deaths, also accounted for the greatest loss of life ever of Swedish citizens from a natural disaster, killing nearly 550 and injuring some 1,500 Swedish holidaymakers.

The psychological landscape of climate change concern

What is the psychological landscape on which we are working and seeking to encourage more sustainable lifestyles that recognise the global as well as local impact of environmentally damaging behaviours? In a series of international collaborative studies undertaken in Australia, Ireland, Slovakia and the UK, members of environmental groups, environmental science students, and children were asked about the seriousness of, and their sense of responsibility for, various environmental problems in terms of their impact at the local, national, continental and global level (Uzzell, 2000).

The first question posed was, "How serious do you consider various environmental problems at various areal scales", to which respondents checked their answer on a 5-point scale (5 = serious). Without exception in each study, people considered environmental problems at the global level to be more serious than those at lower spatial levels.

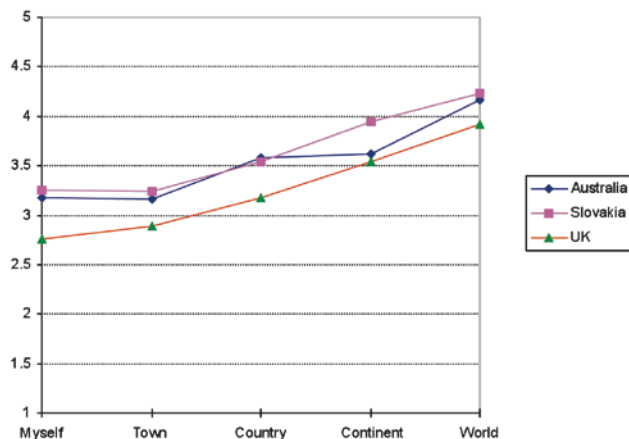


Figure 1. Perceived seriousness of environmental problems at varying areal levels (5-point scale, where 5=serious)

We also sought to identify the areal threshold of attributed personal and institutional responsibility for the environment. We found that feelings of responsibility for the environment were greatest at the neighbourhood level and decreased as the areal level became more remote.

Although people felt that they are responsible for the environment at the local level, this is precisely the level at which they perceived minimal problems. The areal level which they perceived has the most serious environmental problems is the areal level about which they felt least personally responsible and powerless

to influence or act. So we are faced with the paradox that government and civil society organisations (i.e., NGOs) are trying to raise the public's level of environmental concern and change their behaviours at precisely the level which the public see as unproblematic. This study was recently repeated amongst British and Swedish students (Uzzell & Rätzl, 2008). In addition to the same distal effect, we found a temporal effect too, i.e., students thought that environmental problems will be significantly worse in 20 years time at the local and country levels, although no worse at the global level.

As soon as someone says "climate change", people are already beginning to turn off. They place it in a box marked "someone else's problem" or "a problem I will deal with in the future". But as we have seen, there is no community in the world

that is not at risk from climate change. Likewise, there should not be a single profession in the world for which it is not a relevant part of their work in terms of the contribution they can make to mitigation or adaptation responses.

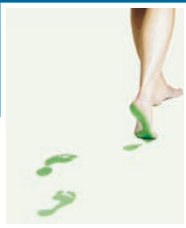
Most psychological research on climate change has concentrated on mitigation, e.g., the public's level of environmental concern; personal and lifestyle characteristics of, and the barriers to, action; internal and external influences on specific types of environmental behaviours; the role of values, beliefs and habits on environmental behaviour; the effectiveness of different interventions (e.g., tailored information, goal setting, feedback, modelling) on specific types of environmentally responsible behaviours (e.g., energy consumption, recycling, travel mode). Much of this work, following the lead of government policy, has been individualistic and reductionist focusing on strategies for behaviour and lifestyle change. The government response to this research has been a concentration on top-down strategies relying on coercive behaviour change through incentives and penalties, education and attitude change programs. Recently, in response to psychological research, more 'social' subtle strategies have been employed drawing on social marketing techniques, social norms and identity approaches. There has also been a growing amount of work which has sought to set environmental damaging behaviours in a societal/cultural context, examining the relationship between affluence, materialistic values, wellbeing, community engagement and ecologically damaging behaviours (Kahneman et al, 2006; Kasser, 2002).

In contrast to the overtly articulated behaviour changes approaches, there has been a grassroots community-led counter movement called 'transition culture' which has recognised that change can only come about when people themselves want change. It has sought to answer the question, "What does happen to this town when we can't afford oil anymore and how can we build resilience and wean ourselves off our dependency on oil

(Hopkins, 2008)?" This work has been much influenced by DiClemente's (2003) Stages of Change model which was originally devised in relation to addiction treatment.

There has been significantly less work on the psychological consequences and effects of climate change and adaptation responses. A recent report for the UK Government refers to mental health issues in relation to climate change (Kovats, 2008). Interestingly, it has started to be recognised by counselling psychologists even as a source of eating disorders and relationship difficulties (Rust, 2008). Morrissey and Reser (2007) have reviewed the mental health implications of natural disasters which are a consequence of climate change in rural Australia and the importance of preparedness and community health, wellbeing and preventive mental health initiatives. ▶

'We are faced with the paradox ... [of] trying to raise the public's level of environmental concern and change their behaviours at precisely the level which the public see as unproblematic.'



Cover feature

Psychology's response to climate change

◀ Challenging assumptions

Notwithstanding the research undertaken on attitudes and behaviours with respect to reducing carbon emissions and encouraging more sustainable lifestyles, assumptions are often made by those in central and local government as well as civil society as to who are most interested in and supportive of sustainable development actions, and who are appropriate targets for, and what methods are most effective in, changing attitudes and behaviours. The remainder of this article describes some of the key findings from research which I have found important to communicate to policy makers in order to challenge the assumptions they make in devising policies and programs.

1. Everyone experiences similar barriers to acting sustainably

There are many publics; they all have different reasons for adopting or resisting pro-environmental behaviours. If people seem to be acting in environmentally damaging ways it may be a product of their attitudes and behaviours, but it may also be a function of the conditions in which those attitudes and behaviours are formed. Different strategies will be required for different groups depending upon the different barriers they erect to sustainable behaviour. In a study examining the barriers to changing from disposable to modern reusable cloth nappies, it became clear that different groups of parents had different constraints and needs – convenience, self belief, experience, initial institutional (e.g., hospital) support, incentives, information for spouses, stigma and cost (Uzzell & Leach, 2003). One way of thinking about these barriers, the kind of strategies that are required to overcome them, and the prioritising of them as target groups is to define these groups in terms of 'would, could, can't, don't and won't'.

	Would	Could
Won't	X	Secondary target
Can't	Primary target	X
Don't	Primary target	Secondary target

Figure 2. Who would, could, can't, don't and won't target group framework

The 'Woulds' are people who are likely to have a positive attitude towards, say, using cloth nappies but their willingness to make this choice is reduced by some practical and probably external barrier.

The 'Would but can't' parents may have financial constraints on choosing cloth nappies as the initial outlay can be high.

The 'Would but don't' recognise the importance of the environment, but do nothing – perhaps they don't know what to do, are confused, do not have the confidence, or feel intimidated by others.

The 'Coulds' have fewer practical barriers – it is attitudinal and lifestyle considerations which need to be overcome; for them, it is more a question of choice. As this group requires more time and effort to overcome their resistance, they might be identified as secondary targets.

The 'Could but won't' parents have the financial means but prefer to spend their income in a different way, or they don't think

recycling communicates the right image, e.g., a van coming to collect nappies.

'Could but don't' parents have the ability, knowledge and means, but they just can't be bothered or they oppose it as a matter of principle, e.g., "Why should I be told what to do?" or "I pay my city tax – they should collect my waste".

Depending on the category in which these groups fall, we need research to find out how to overcome these barriers and then tailor appropriate intervention strategies. In terms of the 'effort to effect' ratio, it may not be worthwhile targeting particular groups; they will be so resistant that the amount of resources required far outweighs the potential benefits. Furthermore, they may come on board later when they see their neighbours have adopted the new practices.



A baby uses on average 5,000 disposable nappies in their lifetime

2. The young are most supportive of pro-environmental actions

It is commonly assumed that young people are the most supportive of pro-environmental actions. In 2000, we undertook a major study of attitudes towards waste minimisation in Surrey which involved interviewing over 9,000 people and sending questionnaires to 16,000 Surrey residents (Lyons, Uzzell & Storey, 2001). It was found that young people (age 18 – 35 years) in the sample:

- were the most strongly opposed to changing their behaviour as they considered being forced to recycle was an infringement of individual freedom. They resented being told what to do and admitted that if they felt under pressure to recycle they were less likely to do it.
- objected to penalties for not recycling and joked about the "recycling police and a police state", and about having bins with alarms fitted that went off when you threw out a recyclable item.
- considered that recycling and pro-environmental behaviour change should not be a priority because they perceived few immediate, serious and tangible benefits or costs to the individuals concerned.
- considered that the environmental effects of waste generation were too distant to motivate change, and small lifestyle changes were seen to have "zero effect" on what is regarded as a global problem.

Understandings and beliefs about environmental change have to be seen in the context of individuals' wider set of understandings and beliefs about society, as well as whether they see themselves as active and willing participants in change or simply victims.

3. Recycling has a positive image

How do people see those who do recycle? For the focus group members in the same study, most of the role models associated with recycling were negative. The prototypical recycler identified by the young people was an "old man in his fifties with a beard or a woman in a tie-dyed t-shirt and dungarees". The young parents had various stereotypes of people who recycle: an eco-warrior image, Swedes or other Scandinavians, outdoors types, people who buy IKEA furniture or someone who is perfect. The middle-aged group described a recycler as "someone boring". Four years later we found evidence of a slight shift in the image of a recycler (Nigbur, Uzzell, Lyons & Muckle, 2005). A recycler was seen as a likeable, energetic person; someone who has strong environmental beliefs but is also slightly idealistic; an older, female, locally employed person with a family, car and a garden. However, the old stereotypes still remain – they would be a "do-gooder", left wing, green-voting, hippy type. It may be that as the urgency and acceptability of recycling takes hold then such stereotypes will disappear, but when trying to make people adopt 'recycler identities', it is important to be conscious of the self-presentational implications.

4. Children will change their parents' attitudes and behaviours

It has become a cliché to say "we should concentrate our efforts on children as they will change their parents' attitudes and behaviours". This 'pester factor' suggests that as a consequence of learning about environmental issues at school, children go home and nag their parents to save energy and conserve water, and the hapless parents eventually relent.

Funded by the EU, a cross-national research study was undertaken to test whether children can have the kind of catalytic effect on their parents and the wider community as is often claimed (Uzzell, 1999). The research concluded that the role of children in encouraging sustainable behaviours in the family occurs only rarely, typically in more middle-class and better educated families. For it to happen the environment has to be regarded as an appropriate topic for discussion within the home, the child's concerns about the environment should be valued by the parent resulting in 'expert' status for the child, while the parent should be willing to adopt the role of pupil. In the majority of homes we found low levels of concern about environmental problems, with parents having little knowledge about environmental problems and in some cases negative attitudes towards education, low levels of motivation and poor self esteem in respect of their educational role. It cannot be assumed that simply giving children environmental change information and relying on a process of osmosis will lead to enhanced concern and action.

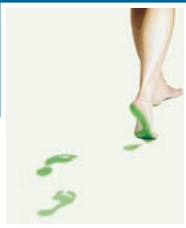
Conclusions

Psychologists are in a position to challenge the folk wisdom, wishful thinking and assumptions which often inform government and civil society policies concerning human behaviour and environmental change, and offer theoretically-informed and evidence-based climate change mitigation and adaptation policies and actions. Climate change offers research and practice challenges for *all* psychologists. In order to be effective however, psychology too has to change. It has to accept that it does not operate in a vacuum and cannot save the world by itself. One of the critical lessons learnt in environmental psychology has been the need to position behaviour within its larger social, environmental, economic and political context. Therefore, not only do different areas of psychology need to work collaboratively together, but psychologists need to work in inter/transdisciplinary modes and thereby broaden and deepen their concepts. ■

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Cover feature

Psychology's response to climate change

Lessons learned in developing Our Water Our Future Behaviour Change Framework

By Karen Spehr MAPS and Robert Curnow MAPS
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Increasingly, government departments are approaching psychologists with requests for assistance to help change community behaviour. There is a growing awareness amongst those delivering environmental programs designed to address climate change that their initiatives must demonstrate measurable improvements in behaviour, particularly when program expenditure is subject to such public scrutiny.

This article outlines a consultancy conducted for the Victorian Government to develop a 'framework' to drive behaviour change in community water consumption. A number of valuable lessons were highlighted over the course of the project and although not necessarily new to us after 20 years of work in the field, they nevertheless distilled some practical truths which may assist other psychologists delivering programs to address climate change.

The project

The project was led by the Department of Sustainability and Environment and communication managers from Melbourne's four water businesses, working cooperatively to reduce community water consumption as part of the *Our Water Our Future* (OWOF) campaign. Our company was engaged to develop a framework to drive and measure behaviour change and facilitate decision making in a suite of activities, including industry-based water saving initiatives in garden centres and schools. The framework was to guide the establishment of new programs but needed to apply to existing programs, as yet unevaluated (and therefore unproven) from a behavioural perspective.

The resulting eight-part OWOF Behaviour Change Framework (BCF) was designed following consultation with stakeholders in the water industry. Social marketing and behavioural principles were used to understand target group behaviour, identify clear behaviour-related objectives, and design programs and evaluation processes directed by both prior and action research outcomes, with implementation continuously modified by monitoring and evaluation. The BCF was implemented using an action learning partnership with our first 'lesson' occurring early in this process.

Lesson 1: When working for the environment, remember the proverb 'physician heal thyself'

Step 1 of the BCF observed that, with the best of intentions, many so-called 'education' initiatives can degenerate into a group of 'us' (the educated) trying to exhort 'them' (the uneducated) to change, setting up added resistance.

To this end, in the 'training' phase of the framework, we (both client and psychologist) examined our own water use behaviour in the home and workplace. If we couldn't make the changes we were asking for, then what sort of impact could we realistically have? And how effective a change agent would OWOF really be if its stakeholders' buildings, work practices and employees weren't demonstrating its environmental goals? Among our project group, the organisational hurdles to making internal changes were large and many challenges at the personal level proved more problematic than they first seemed. From a personal viewpoint, the often delayed installation of solar panels and water tanks in our office suddenly became an embarrassing top priority.

In working to facilitate environmental behaviour change, it is essential to be seen to practise what you preach, or risk your credibility. It is also crucial to help project stakeholders do the same.

Lesson 2: Adjust to the reality of organisational constraints in applying the scientist-practitioner model

Unexpectedly, the use of the scientist-practitioner model was not a familiar approach for our non-psychologist 'behaviour change' managers. Concepts basic to the BCF, such as developing behavioural objectives against which to measure progress, proved to be unexpectedly challenging as it became quickly evident that programs with the espoused aim of changing behaviour were actually knowledge or attitudes-based initiatives (often with an over reliance on focus groups to direct decision making). Furthermore, there were no stakeholder plans for programs already in the implementation and political pipeline to be discontinued, so expectations about likely achievements in behaviour change needed to be heavily managed.

However by not insisting on a purist approach we were able to more effectively influence subsequent decision making. For example, a proposed program where plumbers were to act as point-of-sale change agents to increase water leak checks and install water saving devices, used preliminary BCF research to identify plumbers' perceptions and actual behaviour on site and also householder perceptions of benefits, e.g., "*Plumbers could help me act on something I've been thinking about for a while*" (benefit) and "*Plumbers are just trying to sell me something*" (barrier). The most salient barrier to the proposal though, turned out to be the industry shortage of skilled plumbers where the added 'work' of influencing water saving was seen by plumbers

as impractical and undesirable in view of workload constraints. OWOFF stakeholders had therefore tested their assumptions about the ease with which plumbers could provide point-of-sale influence and had 'hard' data to modify the 'good idea'. Often unwieldy, this process did yield long-term benefits in skills acquisition among stakeholders, who now had first hand experience in the pitfalls of succumbing to the temptation to forge ahead without testing ideas first.

Lesson 3: Don't underestimate the value of providing and receiving mentoring from clients

From project inception there was a need for our clients to mentor us in acquiring water industry knowledge not covered in our review of many industry publications and stakeholder interviews. Often there was basic information to learn, e.g., that only .01 per cent of the world's water is stored in fresh and saltwater lakes and rivers! Client mentoring was also key to improving our understanding of organisational dynamics and their impact on behaviour change efforts. Change strategies obvious from a psychological point of view for instance, were sometimes seen as too radical or far too expensive, e.g., installing in-home smart water meters.

Mutual mentoring meant that the application of the BCF was experienced as a genuine partnership, with shared benefits including sustained motivation and effective ongoing program refinement and delivery. A number of mentoring partnerships have continued beyond the project in programs such as *Water Saving Garden Centres* and *Water Learn It Live It*.

Lesson 4: Effective facilitation of behaviour change can be undermined by factors outside your control

Despite the existence of detailed project briefs outlining both consultant and client roles and responsibilities, various factors outside our control impinged on the effective facilitation of the BCF – in particular, cross-organisation coordination of behaviour change efforts and staff turnover.

The immense breadth of behaviour change efforts in the environment requires a coordinated approach across government, business and the wider community. During the critical stages of water shortages and associated restrictions the coordination of behaviour change programs could have been better streamlined, with the potentially powerful interactive impact of 'top down' legislation and 'bottom up' community action able to be more fully exploited. Implementation of initiatives associated with

"... the communicator must be aware of the psychological messages carried by other ongoing demand management policies. For example, many have saved water through 'responsibility' created by campaigns during the drought only to be apparently punished by price rises shortly afterward. Compliance on future occasions may be less likely."

Syme et al (2000), p564.

well developed strategic plans, e.g., the Victorian Government White Paper¹, are increasingly benefiting from a dedicated structure for supporting behaviour change that is able to reach across departments and coordinate efforts. Potentially, a lack of coordination can lead to different initiatives that are working towards the same goal having unintentional detrimental effects.

Also outside of our control were various staff changes which occurred during implementation of the BCF (in four years, 12 program or communication managers had been headhunted or had moved on). The action learning approach used to transfer BCF skills to staff and stakeholders often improved their capacity to facilitate behaviour change beyond the confines of the BCF project, making them valuable assets for other project teams. Although this had a direct impact on BCF implementation, the rate at which new staff adopted evidenced-based behaviour change approaches to complex issues was impressive. The positive nature of client-psychologist partnerships was key to dealing with the impact of these adjustments.

Conclusion

Looking back on our OWOFF project 'lessons', the common thread was the necessity for all participants to work as team members, in relationships which often transcended various organisational and practical limitations and where we all felt comfortable enough to share knowledge and skills with uses far beyond the project itself.

For psychologists to become effectively involved in behaviour change, other professionals and potential clients need to understand how psychologist partnerships would benefit in practice. (Consider the evaluation outcomes of water savings achieved by a retro-fit of showerheads, tap flow regulators, toilet cistern flush arrestors and leak repair done in 200,000(!) NSW homes, with a sample of 17,000 showing significant and sustained water savings compared to matched controls). The potential for psychologists to contribute to such a program by improving uptake and cost effectiveness has yet to be exploited. We can promote this involvement by first understanding the numerous achievements and contributions of other professions and groups working in the environment, forging partnerships, and continuing to effect change in our own homes, workplaces and neighbourhoods. ■

Community Change is a social research company specialising in behaviour change in the environment. The OWOFF Behaviour Change Framework can be viewed at www.communitychange.com.au.

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¹Our Water Our Future: Securing Our Water Future Together (2004). Victorian Government White Paper.



Cover feature

Psychology's response to climate change

Managing the impact of climate change in rural communities

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The impact of climate change has become an every day reality, many of us confronted by it as a result of extreme weather patterns or via the numerous reports in the media. In the past it has generally been discussed from an environmental or financial perspective, however recently there has been an increasing recognition of the impact of climate change on health and wellbeing, communities and quality of life (Horton & McMichael, 2008). In Australia, much of this discussion is based on anecdotal reports of the effect of the drought and natural disasters on rural and farming communities, and is anticipatory as to what we might expect in the future.

Reports on the effect of the drought on farming families have led to the belief that climate change is impacting on rural communities in terms of increased rates of depression and mental illness, and suicide. Research into mental health needs in rural Australia do not fully support this belief, as mental illness rates are reported as much the same in rural areas as in other parts of Australia. Suicide rates, on the other hand, have been consistently reported as higher in the farming population for some years (Judd et al, 2006; Kilkkinen et al, 2007). A range of biopsychosocial factors have been proposed to explain why the suicide rate is high in the farming population but as yet there is no definitive answer, and the impact of climate change on suicidal behaviour so far has only been inferred.

An explanation for these anomalies may lie in how rural communities express distress (and seek help) when challenged by the impact of climate change on their environment, way of life and wellbeing. New constructs such as 'psychoterratic' illnesses have recently been introduced into the literature in an attempt to describe what people experience with environment change. These constructs focus more on the experience of distress as opposed to the diagnosis of mental illness. For example, 'solastalgia' is a new concept that has been developed to promote understanding of environmentally-induced distress. It refers to the pain and distress caused by the loss of, or inability to derive, solace from a home environment which has been subject to physical desolation (Albrecht et al, 2007).

Demoralisation is a second construct that refers to non-specific psychological distress distinct from depression and other psychiatric disorders. Central to demoralisation is a breakdown in coping and this can lead to subsequent feelings of incompetence, helplessness, and hopelessness. Hopelessness has been identified as the hallmark of demoralisation and frequently associated with the wish to die (Clark & Kissane, 2002). Although it has not specifically investigated climate change, a study investigating the construct of solastalgia described individuals reporting similar symptoms to demoralisation (Albrecht et al, 2007). As such, demoralisation offers itself as a separate construct to explain the effects of climate change apart from the environmental impact per se.

We suggest that investigating rural mental health using traditional methods and assessment tools may result in misleading

rates of mental illness and fail to detect psychological distress underlying suicidal thinking and behaviour. Shifting the research focus away from the "depression-as-disease" model (Summerfield, 2008, p. 326) opens up opportunities to explore how climate change is experienced by individuals, and the community within which they live. The introduction of alternative models and innovative constructs in research design would have a twofold effect in terms of lessening the propensity to pathologise and stigmatise the individual, whilst at the same time

examining what individuals and communities are doing to cope with the challenges that face them. The sense of place that a community gives can highlight practical issues that impact on how services are delivered in rural communities, and identify strengths and resources otherwise overlooked.

Levels of psychological interventions

In conjunction with reviewing research design and methods to assess mental health needs in rural communities, we suggest that it is also important to consider mental health service delivery in rural communities. Small communities lacking ease of access to basic mental health type services cannot afford to have agencies operating with tight exclusionary criteria or a duplication of services. Both government and non-government organisations

'The impact of sense of place and communities upon wellbeing is crucial in rural settings and ... rural psychologists [need] to broaden traditional practice models to incorporate these ideas.'

need to be flexible, innovative, listen to community needs and actively work together to share skills, resources and essentially fill gaps. There is a need in many places to move beyond small town politics, personality and ideological differences for the good of the local community and wellbeing.

Allan, Ball and Alston (2007) suggest that rather than increase the amount of health services in rural areas, there is a need to concentrate on flexibility in service provision and work practices, role diversity for health and community workers and community profiling. We propose that psychologists working in rural communities consider a paradigm shift that integrates the principles of positive psychology and community approaches with clinical practice. This would occur within a shift of practice from purely 'individual-based treatment' models of psychology to a blend of three levels of intervention: facilitative, collaborative and consultative.

Facilitative role

Rural psychologists can lead the way in working as facilitators in rural communities to promote social cohesion and connectiveness, and stimulate community innovation and problem solving. By stepping outside traditional roles we can, for example, co-facilitate community events with relevant organisations to foster connectedness, impart information and stimulate discussion regarding climate change problems and solutions. It is hypothesised that using the local knowledge and expertise of the community to problem solve would help to promote working towards the collective good, and in doing so promote eudaemonic processes and resilience. This in turn would ameliorate tendencies individuals and communities may have towards feelings of helplessness and victimhood, and potential demoralisation. Such ideas may not be novel to some, and may even be practised in pockets of Australia, but there is little in the literature reporting on this type of approach as yet. Our experience is such that it is not common practice for psychologists working in government or non-government settings to work in such a manner.

Collaborative role

Recent literature on mental health service provision in rural communities points to the need for collaboration of service providers in order to enhance wellbeing in rural communities (Allan et al, 2007; Cooper, 2003) With some innovative thinking, flexibility within management and the fostering of good interagency relations, rural psychologists can work collaboratively with other organisations to deliver clinical, education and support services. Also, working with locally established and community specific organisations that already gather people together and function to promote connectedness may be a way to strengthen existing resources. Rural psychologists have a role to educate other rural workers and agencies in order to improve mental health literacy, support the community and enhance referral processes. This broadens the impact of psychology when compared to traditional models.

Consultative role

This follows the more traditional role of psychologists in the provision of mental health services. This would include

assessment, through to treatment and liaison but we would like to stress the importance of framing care in a social context. In addition to this, evidence supporting the principles associated with positive psychology is accruing and we believe this is important to enhance individual and community resilience.

Conclusion

There is now no doubt that climate change is occurring and for many rural Australian communities the impact in the last decade has already been devastating. Psychologically, the effects appear to be of psychological distress not particularly fitting with our traditional medical model diagnostic system. We suggest further research into concepts and models such as solastalgia, demoralisation and resilience may assist our understandings. The impact of sense of place and communities upon wellbeing is crucial in rural settings and we encourage rural psychologists to broaden traditional practice models to incorporate these ideas in a positive psychology framework with an integration of facilitative, collaborative and consultative methods. ■

Levels of psychological intervention in rural communities

Enabling role within the community

- Promoting social cohesiveness and connectivity
- Education and support for community groups
- Facilitating community innovation and problem solving

Collaborative role with other service providers

- Provide training in mental health literacy
- Support and supervision of case work
- Participate and assist in joint activities

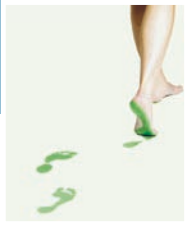
Consultancy role as a health service provider

- Complex case assessment and management
- Individual treatment and therapy
- Working with couples and families

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Cover feature

Psychology's response to climate change

Environmental psychology: An endangered species?

By Associate Professor Joseph Reser FAPS

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At a point in time when the APS is putting the environment on the priority action agenda, it is worth asking what has happened to the field of environmental psychology in Australian psychology education and training. This matter and question has a particular currency and relevance given the publication of the Carrick Institute *Teaching Psychology* report (Lipp et al., 2007), the recent formation of an expert group to review Australian psychology training, and of course, the political saliency and indeed critical urgency of the unfolding climate change challenge and its multiple and far reaching impacts.

What is environmental psychology?

Environmental psychology is an area of psychology which places particular emphasis on people-environment interrelationships and transactions. It is a well-established area of psychology which has been going strong since the late 1960s, with specific environmental psychology journals, courses, textbooks, handbooks, web sites, and postgraduate programs. The *Annual Review of Psychology* has published seven reviews of environmental psychology since 1982 (e.g., Sundstrom et al., 1996), with each review documenting burgeoning interest and developments in this field. Areas of specialisation within environmental psychology and bridging to other disciplines include environment-behaviour studies, urban and regional planning and design, environmental evaluation and impact assessment, environmental perception and cognition, environmental stress and adaptive responding, restorative environments, measuring and monitoring environmental perceptions and responses, place attachment and identity, clinical environmental psychology, disaster preparedness and response, conservation behaviour and sustainability initiatives, the effects of climate, ergonomics and behavioural design, and natural resource management.

The coverage of environmental psychology in Australian education

Undergraduate subjects in environmental psychology have been taught in Australia from the mid 1970s, with such offerings available at institutions such as the Australian National University, the University of Adelaide, the University of Queensland, the University of Sydney, the University of Melbourne, and James Cook University. Additional programs which subsequently launched environmental psychology subjects included those

at Edith Cowan University, Curtin University, and Southern Cross University. Postgraduate supervision in an 'Environment, Behaviour, and Society' program was also available at the University of Sydney within the Faculty of Architecture, Design and Planning, where several staff members are environmental psychologists. While environmental psychology clearly has never been a widely available subject offering across psychology programs, it is noteworthy that during the 1980s and 1990s there were periods when environmental psychology was taught in approximately 20 per cent of psychology programs in Australia.

The current situation for environmental psychology in Australia, however, is looking increasingly dire. It would appear that there are now very few Departments or Schools offering such a subject at an undergraduate level. Of the 37 Australian universities currently offering at least a three-year sequence of psychology units accredited by the Australian Psychology Accreditation Council (APAC), only two universities would appear to presently offer an environmental psychology subject – the University of Melbourne and Southern Cross University (Lipp et al., 2007)! A fourth year directed reading subject in environmental psychology is offered on an occasional basis at the University of New England. A spectrum of environmental considerations may of course also be covered within the subject matter of 'contemporary issues' in psychology programs, but such parenthetical coverage, where it exists, cannot in any adequate way address the history, scope, and diverse content of environmental psychology as a field.

Explanations and implications

Why has this happened? There are many reasons. At the same time that environmental psychology was becoming a much better known field of psychology and a prospective employment and career niche in North America and Europe in the 1980s, Australian departments had already embarked on a widespread streamlining of the psychology curriculum which concentrated on 'core competencies', offering fewer elective subjects within or outside of psychology, and maximising their own Effective Full-Time Student Units. Much of this was simultaneously driven and rationalised by increasingly prescribed APS Accreditation Guidelines (e.g., Lipp, 2007). This made it harder to introduce and ultimately retain a continuing subject in environmental psychology, and many psychologists on department committees debating the merits of such a subject were simply quite unfamiliar with what this field of psychology covered.

As well, of course, other departments and schools, such as geography and environmental studies programs, deemed 'the environment' as their exclusive domain. At the same time, and of equal importance, was the fact that there were few trained environmental psychologists in Australia, or psychologists with some training and/or experience in this area who were able and/or motivated to teach such a course. Other arguments in a more global context include the reality that the environment is implicitly a core consideration across all areas of psychology (and therefore should be an integral consideration in all psychology subjects and not a stand alone subject), and the fact that the breadth and scope of environmental psychology overtax the seemingly necessary limited focus of a 'discipline' of psychology and raise the spectre of a yet more fragmented field and profession (e.g., Sime, 1999; Stokols, 1995).

Is this current 'state of the environment' in the Australian psychology curriculum a real problem, a crisis situation? This is arguably a very consequential crisis and crossroads for our discipline and practice, as well as for the environment. The absence of such a subject, and/or the non-availability of a staff member with this background or expertise, means that students are not exposed to this important domain of psychology, they are very unlikely to undertake projects or develop an interest in this area, and they will graduate with very little by way of an environmental or ecological literacy or competency as psychologists. The social and contextual realities are less formal, but very consequential. Students will be far less likely to be discussing a particularly salient issue raised in an environmental lecture over coffee, they are less likely to browse the science or environmental shelves in the bookstore, or pick up that climate change or environmental management book, or even to see a connection between their chosen discipline and larger environmental considerations. This situation also means, of course, that there will be very few if any environmental psychologists coming through psychology programs in Australia, with the most obvious consequence of this being that there will be few prospective staff members with developed interests or expertise in environmental psychology or environmental issues.

The 'state of the environment' in Australian psychology, 2008

Where does this leave us? Psychology as a discipline and profession is based on the premise that behaviour is a function of individuals perceiving, experiencing, and interacting with their physical and social environment. Psychology has also been, to date, a crucial bridging discipline between the natural and social sciences, between the social sciences and the health sciences, in part because of this focus on better understanding the nature of people-environment transactions and experience, of quality of life

and quality of environment. The multiple and profound challenges of environmental degradation and climate change make this current neglect of the environment in the psychology curriculum particularly tragic and anomalous, and completely out of touch with student interests, professional needs, graduate opportunities, and planetary sustainability requirements.

The crisis is not simply the seeming demise of environmental psychology as an available subject, but what this reflects and portends with respect to a foundational construct and framework, and indeed the sustainability of a credible discipline. Important considerations and tensions here clearly relate to the conflicting

pressures of a curriculum covering core professional competencies and corresponding accreditation requirements on the one hand, and the need for contemporary and socially relevant psychology programs that cover not only the diverse compass of psychology but areas of shared interdisciplinary relevance in the natural and social sciences and humanities. The current 'state of the environment' in the psychology curriculum contrasts sharply with a pressing need for psychology and social science graduates with environmental expertise and more applied, interdisciplinary, interests – in environmental and natural resource management, urban planning, environmental impact assessment and evaluation, and across multiple

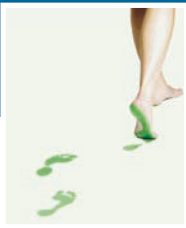
government, NGO, and private sector institutions and agencies. It is instructive that psychology is a crucial but typically missing disciplinary player in climate change mitigation and adaptation initiatives in Australia. 'Being useful', at the table, and making a much-needed contribution requires that psychology programs become far more serious about the environment. ■

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'The multiple and profound challenges of environmental degradation and climate change make this current neglect of the environment in the psychology curriculum particularly tragic and anomalous.'

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Cover feature

Psychology's response to climate change

APS responds to the climate change challenge

By Dr Susie Burke MAPS

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The APS aims to foster a greater involvement by psychology and psychologists across the spectrum of environmental issues and challenges facing Australians and the global community. Through the following initiatives, APS National Office staff and members of relevant Reference and Interest Groups are working to fulfil Australian psychology's commitment to an effective response to the challenge of climate change.

- An APS Position Statement *Psychology and the natural environment* (www.psychology.org.au/publications/statements/environment/) has been prepared, printed and distributed to relevant government agencies and NGOs. It has stimulated international interest that has led to the preparation of similar documents by other psychological societies.
- Two APS Tip Sheets have been prepared and are available from the website and in hard copy from the National Office. *Climate change – what you can do* (www.psychology.org.au/publications/tip_sheets/climate/) looks at common emotional reactions to climate change and provides suggestions for how people can manage these feelings, tips for people who want to do something about environmental problems but are having trouble getting started, and suggestions for helping people talk with others about these issues. The Tip Sheet has received quite a lot of media coverage, and is being used by some environmental organisations to help their staff. *Talking with children about the environment* (www.psychology.org.au/publications/tip_sheets/children_environment/) provides parents with tips on helping children to develop environmentally friendly values and behaviours, helping them to understand the environmental challenges we face, and allaying their anxiety about the threat of climate change.
- The APS made a recent submission to the Federal Government's Strategic Review of Climate Change Programs 2008. The submission – prepared by APS member Associate Professor Joseph Reser and the APS Public Interest team – emphasised the importance of climate change programs using multidisciplinary teams (including psychologists and other social scientists) to draw on years of evidence-based research into how to get humans individually and collectively to change the behaviours that are putting their local and global environments at such great risk.
- The APS sent two representatives – Dr Susie Burke and Dr Nicholas Voudouris – to the 2008 *Science Meets Parliament* forum, to discuss with parliamentarians the important role that psychology can play in climate change mitigation and adaptation. We emphasised the critical contribution of psychology in: promoting sustainable behaviour; understanding how the public makes sense of climate change problems, impacts and solutions; facilitating disaster preparedness and response; ensuring social justice and equity in climate change solutions; and facilitating dispute resolution.
- A major theme at this year's APS Annual Conference in Hobart is the role that psychology can play in addressing the challenge of climate change. One of the Keynote Speakers is Professor David Uzzell, a UK environmental psychologist who acts as a consultant to the European Union and the UK Government in the area of sustainable development. A Public Forum will be held at the Conference on the topic *How crucial is psychology in addressing the challenges of climate change?*. The Forum will bring together Australian psychologists and other experts with an involvement in environmental sustainability issues.
- The APS is participating in a climate change roundtable discussion together with several university-based mental health and climate adaptation groups, which is titled *Turning fear into action: The personal, cultural and political challenges of climate change* and will be held at Melbourne University and Monash University in August, 2008.
- The APS Disaster Preparedness and Response Reference Group is discussing ways of taking a more proactive role in the development of community education and training in the area of disaster and emergency management, including disaster preparation, psychological first aid, and skills for psychological recovery. The Reference Group is currently exploring a relationship with the Red Cross regarding the possible benefits of the two organisations working more closely together.
- The APS Psychology and the Environment Interest Group started up again in 2007, and currently meets by monthly audioconference. Members of the group are involved in a variety of different initiatives across the environmental domain. Projects include: writing articles for scientific journals and the popular press on the role that psychology can play in meeting environmental challenges; developing PD for members; working together with environmental NGOs to help staff deal with the stressors of working on environmental issues; participating in local council adaptation and mitigation endeavours; and presenting seminars that bring people from industry/government who are struggling with sustainability issues together with psychologists to explore issues and develop solutions. New members are very welcome! Go to the APS website for more information (www.groups.psychology.org.au/peig/). ■