Moving Beyond the Enduring Dominance of Positivism in Psychological Research: An Australian Perspective

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Abstract

Almost since its inception, the dominant narrative of modern psychology has embraced positivism through its insistence that psychological science is objective, generalisable, and value free (or neutral). Consequently, quantitative research and in particular, experimental designs, are privileged over other forms of enquiry and other epistemologies, methodologies, and methods remain marginalised within the discipline. Alternative epistemologies and methodologies remain predominantly at the margins within psychological research yet have resulted from the growing dissatisfaction with the dominance of positivism. We argue that the enduring hegemony of positivism needs to be opposed to enable psychology to genuinely understand the antecedents of, and provides meaningful sustainable solutions for, complex human issues without being constrained by a narrow focus on method. We discuss how psychology in Australia can move towards embracing methodological and epistemological pluralism and provide a number of suggestions for change across the interrelated areas of accreditation, curriculum, the Australian Psychological Society, and research.

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Psychology and the Research Enterprise: Moving Beyond the Enduring Dominance of

Positivism

Almost since its inception, the dominant narrative of modern psychology has

embraced the positivist orientation of the natural sciences and has been slow to adopt

alternative epistemological and methodological approaches. Several parallel features of

the current climate combine for a timely (re)examination of the research endevour

within Australian psychology. First, psychology courses are accredited by the

Australian Psychology Accreditation Council (APAC) in order to ensure greater

uniformity of registration for the practise of psychology (Littlefield, Giese, &

Katsikidis, in association with members of APAC, 2007). Second, the Excellence in

Research for Australia (ERA) initiative (formerly the Research Quality Framework

[RQF]) provides a metric-based system for assessing the demonstrable quality and

impact of Australian research. In addition, the Council of Australian Governments'

[COAG] (2006) twin decisions to allow clients of psychologists to access Medicare

rebates as well as providing funded postgraduate places in clinical psychology, in order

to improve Australia's mental health. These recent developments provide a clear link

between research, curriculum, and evidence-based practice within psychology in

Australia. However, questions remain as to the definition of quality science and

scholarship and what constitutes legitimate knowledge and evidence.

In this paper we outline a case for why psychology needs to forgo the

dominance of the epistemology of positivism[1] and provide suggestions for how this may

be achieved. First, an overview of the history of positivism and the antecedents of its

relationship with psychology is presented. Second, the evolution of the relationship

between psychology and positivism is outlined. Third, we discuss the hegemonic role of

positivism in contemporary psychology, and in particular, we emphasise the Australian context. Next, we argue why Australian psychology needs to embrace epistemological and methodological pluralism and conclude with suggestions for change across the interrelated areas of accreditation, curriculum, the Australian Psychological Society, and research.

The Epistemology of Positivism: An Overview and History[2]

The epistemology of positivism asserts that knowledge is objective and value-free (or neutral) and is obtained through the application of the scientific method. The aims of positivism are description, prediction, control, and explanation and the overarching goal of positivism is the production of universal laws (Leahey, 1992). The central research methodology of positivistic research is the experiment. Utilising Popper's (1934/1959) notion of falsification, positivism yielded a hypothetico-deductive approach to understanding the world, whereby some variables are operationally defined, others are controlled, still others are manipulated, and predictions are clearly stated on an *a priori* basis (Patton, 2002), enabling cause and effect relationships to be identified. The reliability and validity of the data are then determined by the replication of the experiment and the generalisability of the findings. The fixation on quantifying psychological phenomena occurred so that the research could be considered objective and 'true', in accordance with the tradition of Western science (Mitchell, 2003).

The foundational theorist of positivism was Auguste Comte[3] who in 1848 founded the *Société Positiviste* (Crotty, 1998). He believed that all sciences required a universal method of inquiry. This unifying method of inquiry became known as the scientific method, and its features were shared across varied disciplines including mathematics, physics, sociology, biology, and psychology. Despite Comte's suspicion

of mass quantification and 'blind' objectivism (Crotty, 1998), experimental designs and the search for universal truth irrespective of the broader context became synonymous with positivism.

In the early decades of the 20th century, the Vienna Circle, consisting of philosophers, mathematicians, physicists, and logicians, advanced the philosophy of logical positivism, which resulted from the marriage of empiricism and formal logic (Leahey, 1992). An important outcome of the Vienna Circle was the verification principle. In logical positivist terms, verified knowledge becomes factual. Spirituality, religion, ethics, opinions, beliefs, assumptions, and feelings (i.e., the unverifiable) had no role in the scientific endeavour. These were considered nonsensical in the search for the accurate and certain truth. As a result of Nazism, the Circle disbanded before World War II as members sought retreat abroad, which aided the spread of logical positivism around the globe. As a result, logical positivism dominated the research endeavour in many disciplines throughout the 20th century, including psychology.

Positivism and Psychology: Evolution of the Alliance

In the dominant narrative of modern psychology, Wilhelm Wundt is regarded as the founder of psychology as a discipline (Greenwood, 2003). In 1879 he established the first psychological research laboratory in Leipzig, Germany. Trained in physiology, Wundt applied the research methods of physiology to the study of consciousness, including the systematic manipulation and control of variables. However, Wundt's use of the term 'experiment' was considerably broader in definition than contemporary scientific usage. Among his research methods was introspection, a technique used to elicit subjective phenomenological data, but this was criticised for lacking scientific rigor. Wundt acknowledged the limitations of applying his experimental methods to

social phenomena such as norms, culture, and social structure (Greenwood, 2003; Toulmin & Leary, 1985), and despite Wundt's assertion that eclectic methods should be used to study human phenomena, the experiment soon became the dominant research methodology within psychology.

The appropriation and application of the epistemology and methodologies of the natural sciences to social and psychological phenomena occurred to position psychology as a scientific, and therefore legitimate, discipline (Gergen, 1985; Leahey, 1992; Rosenau, 1992).The uncritical and unquestioning adherence to empiricism and the corresponding disinterest in the philosophy of science has been labelled, "the cult of empiricism" (Toulmin & Leary, 1985, p. 594). Logical positivism and radical empiricism led the way for the rise of behaviourism, which is generally considered to be psychology's dominant theoretical position during the early 20th century. As a result of the alliance, mainstream psychology adopted a hypothetico-deductive approach to investigation.

Although debates concerning these developments within psychology were rare, particularly in the United States (Toulmin & Leary, 1985), Sanford (1903) described the application of methods from physics to psychology as a "dumb compulsion" (p. 106). Still, the influence was immense; Watson (1913/1994) described the behaviourist view of psychology as "a purely objective experimental branch of natural science" (p. 248). In addition, the language of research became rather mechanistic (Toulmin & Leary, 1985). For example, behaviourist researchers began to refer to their participants as reagents (Rosnow, 1981)[4]. The focus converged on phenomena that could be directly observed (i.e., behaviour), despite the natural sciences routinely studying unobservable

phenomena such as energy (Gergen, 1985). Consequently, mental phenomena such as consciousness, memory and so on were deemed inappropriate for psychological study.

In the latter half of the 20th century, the notion that mental phenomena could be inferred by observable phenomena via the use of operational definitions (Gergen, 1985; Leahey, 1992) gained ascendancy and led to the development of cognitive psychology and its associated information-processing paradigm (Newell, 1985). Gleitman (1985) cynically stated that cognitive processes became legitimate phenomena for psychological study when they were established in rats. Rather than using Wundt's introspection methodology, research into cognitive processes occurred via the use of rigorous experimental methods. Despite cognitive psychology's promise to move towards expanding the domains considered appropriate for psychological study, positivism and experimental methodology remained dominant.

Although an area of research long before the middle of the 20th century, social psychology emerged as a specific discipline in the 1950s and 1960s. It was thought that social psychology, the branch of the psychology with a specific emphasis on social issues, would equip psychologists with answers to social problems. Despite this aim, the dominant epistemology in social psychology remained positivistic in nature (Gergen, 1985). In fact, experimental methods are so central to social psychology that the sub-discipline is often referred to as experimental social psychology (Gergen, 1978; Stam, Radke, & Lubek, 2000).

Rosnow (1981) wrote of the crisis in social psychology, consisting of the artefact crisis, the ethics crisis, and the relevance crisis. The artefact crisis describes the notion that the limitations inherent in experimental methods are a function of the methods themselves. The artefact could be separated into two types – experimenter

effects (e.g., the placebo effect, unconscious suggestion by the researcher, errors in recording observations, self-fulfilling prophecies, 'biases' in data interpretation, intentional 'distortion' of findings, and experimental environment) and participant effects (e.g., participants' expectations, demand characteristics). He argued that these effects are not minor nuisances but are issues that seriously affect the research process and consequently, the research outcome. Social psychologists attempted to overcome the artefact crisis by engaging in deception, which was elevated to an art form[5] (e.g., Asch, 1951; Haney, Banks, & Zimbardo, 1973; Milgram, 1963).

The ethics crisis grew out of concern for the physical and psychological safety of the participants in these studies, as well as the potential for distrust of researchers and the discipline as a whole (Rosnow, 1981). Psychological research and practice with an applied focus and/or multiple levels of analysis are not readily addressed by ethical codes (O'Neill, 1989). In addition, codes of ethics have been criticised for being reactive rather than proactive – they are altered only after issues and problems with them are identified – and for serving the interests of researchers rather than the researched (Prilleltensky, 1997). Finally, researchers might strictly adhere to an ethical code but the research may still be exploitative (see Fielder, Roberts, & Abdullah, 2000; Hall, 1997; Smith, 1999).

Rosnow's (1981) third criticism is the relevance crisis. By the 1960s, doubts surfaced as to the ability of psychological research to contribute to an understanding and amelioration of social ills. In his presidential address to the American Psychological Association, Miller (1969) implored psychologists to become more relevant to social issues and human welfare. Criticisms were levelled at the pervasive and nearly ubiquitous use of experiments and at participant samples, which almost invariably

consisted of undergraduate psychology students (Cook, 1985; Toulmin & Leary, 1985).

Jahoda (1981) argued that "hypothetical relations between precisely defined concepts

from which predictions can be deduced" (1981, p. 186), are not suitable for application

to complex human phenomena and Scherer (1992) was critical of research where;

> …subtle and methodologically fancy manipulations of minor variables in
>
> relatively artificial settings or pretty path analyses of large but superficial
>
> data sets may delight colleagues and rigorous journal editors but will find
>
> little attention elsewhere. (p. 11)

Today, commentators continue to point to the absence of the 'social' in contemporary

social psychology (e.g., Greenwood, 2004; Stam, 2006). Despite claims that the crisis in

social psychology is "over" (e.g., Aronson, 1998, p. 2), Stam (2006) argued that the

criticisms central to the crisis were simply ignored.

Positivism and Psychology Today: The Maintenance of the Hegemony

Within contemporary psychology, positivism remains in a privileged position.

Even a conservative reading of postmodernist perspectives to psychology would present

an immense scholarly challenge to the hegemony within the discipline and would be

distressing (Rosenau, 1992). Lather (1991) argued that positivism is fortified by the

"self-designated guardians of orthodoxy" (p. xvi) who maintain the hegemony of this

epistemology while alternatives are devalued or dismissed. A simple perusal of

psychology textbooks or a search of websites of Australian schools and departments of

psychology highlights a distinct bias towards positivism within the curriculum as

evidenced by the focus on the experimental and quasi-experimental methods and

teaching of statistical analysis techniques for the analysis of quantitative data.

Supplementing the bias towards positivism is the focus of the textbooks and curriculum which acts to celebrate, romanticise, and mythologise the positivist history of the discipline. For example, Harris (1997) examined the original reports of classic psychological studies and compared the reports with the ways in which those studies are typically represented. According to most psychological textbooks, Watson and Raynor (1920) easily created a rat phobia in Little Albert, and his fear readily generalised to all things 'fluffy' and/or white. Yet according to the original paper, Little Albert's fear was difficult to produce, temporary, and was not linked to the colour or texture of objects. Asch's (1951) study had anti-Fascist implications in terms of investigating the circumstances in which people do not conform to the majority rather that when they do. However, the study was 'rewritten' over time because Asch's communist and Leftist leanings rendered the paper highly political. Harris (1997) concluded that reframing the research aims and findings promoted the relatively new field of psychology as experimental, empirical, conceptually rigorous, and apolitical, which all served to enhance the ascendancy of the positivist epistemology.

This hegemony of positivism is sustained by the accreditation requirements established by the Australian Psychological Society (APS), and more recently, the national accreditation body, APAC. APAC's (2008) *Rules for accreditation & Accreditation standards for psychology courses* describe the various graduate attributes (see section 3.1.7) that need to be incorporated into the undergraduate degree. The second of these graduate attributes is devoted to psychological research and refers to the "characteristics of the science of psychology", "the research methods used by psychologists", and the ability to "formulate testable hypotheses [and] operationalise variables", conduct "a range of practical laboratory experiments", and "make valid and

reliable measurements" (APAC, 2008, pp. 10-11). The language reinforces the dominance of the positivist position to the marginalisation, if not exclusion, of other forms of enquiry that are also rigorous and perhaps have a greater potential for applied impact.

The specific positions, methodologies, and analyses that students should be introduced to are not specified in the Accreditation Standards, and as Sullivan (2008) commented, "it is possible that many Australian departments argue that the history and philosophy of psychology have been introduced and examined as part of *each* unit or that advanced theoretical electives address this requirement" (p. 66, italics in original). However, his analysis demonstrated that 11 schools and departments of psychology in Australia have no units with substantial theoretical content and where it does exist, it is usually limited and lacking depth, and therefore students are unable to identify the hidden assumptions that provide the foundation to their professional practice. Attention to theoretical questions within psychology is often regarded as being "flaky", "vague", "controversial", "difficult", "unnecessary", "too political", and akin to "navel gazing" (Sullivan, 2008, pp. 7-9); We need to move beyond these myths that act as distinct barriers to methodological and epistemological pluralism within the discipline.

Additionally, COAG's (2006) reforms to mental health services have resulted in a two-tiered system whereby all registered psychologists can provide general psychological services but where specialist level service provision, and access to a higher level of Medicare rebate funding, is reserved solely for clinical psychological services (Littlefield, 2006). A parallel decision saw the establishment of an additional 200 funded places in clinical psychology while other postgraduate psychology training programmes did not receive the same consideration. Although the funding model was

later adjusted to enable seven of the remaining eight psychology specialisations access to the higher level of cluster funding[6] (Littlefield, 2007), one might argue that the damage had been done. The "discriminatory" and "inequitable" (Littlefield, 2007, p. 6) decisions have unforeseen (though not unforeseeable) consequences[7] resulting in the narrowing of postgraduate training opportunities for students and the consequential narrowing or the focus and orientation of the discipline as a whole. Privileging one form of psychology, especially one that adheres to the dominant scientist-practitioner model with its accompanying positivist frameworks, reinforces the dominance of this philosophical orientation and marginalises alternate, but equally legitimate epistemological and methodological perspectives. The result of these changes are already becoming apparent with the Chair of the APS College of Sports Psychologists recently stating that the College, and the specialist postgraduate courses it approves, are both "under threat" (Ievleva, 2008, p. 19). It is highly likely that some of the other Colleges and specialist courses are facing the same tensions.

Initiatives such as the Excellence in Research for Australia (ERA) scheme indicate that numerical ratings systems, such as journal impact factor and the quantity of citations, are now of utmost importance in assessing the impact and quality of research. These systems are viewed as easy-to-use and 'objective' and as such, are rapidly gaining influence (Cheek, Garnham, & Quan, 2006). As a result, researchers working within emerging fields or from non-traditional epistemologies and methodologies may experience greater difficulties in promoting the quality of their research, gaining competitive funding, and achieving promotion, which further marginalises already marginalised research(ers) and further strengthens the status quo (Cheek et al., 2006; Rappaport, 2005). Indeed, research is becoming increasingly an entrepreneurial activity

whereby researchers within the psy-complex are 'rewarded' for maintaining the prevailing state of affairs (Parker, 1999; Rose, 1996). Importantly, the ERA initiative is designed to prevent any advantage of one discipline or study area over others (Carr, 2008; Universities Australia, 2008), but the extent to which it will be successful in achieving equity remains to be seen.

Within Australia and elsewhere, much of the attention to concerns such as epistemological dominance, the promotion of social justice, and challenging and changing the status quo, occurs under the umbrella of critical psychology (Austin & Prilleltensky, 2001; Riggs, 2004), yet these concerns remain marginalised with Australia (Sullivan, 2008). This is likely to be because Australian psychology and its various sub-disciplines have largely taken their lead from influences elsewhere, particularly North America[8] (Cooke, 2000; Garton, 2006; O'Neil, 1987). As a result, the discipline underplays the philosophy of science and theoretical concerns, focuses almost exclusively on the scientist-practitioner model, and is dominated by experimental approaches and clinical and social psychology (Cooke, 2000; Gridley, Fisher, Thomas, & Bishop, 2007, Lipp et al., 2006; Taft & Day, 1988).

A Way Forward: Embracing Epistemological and Methodological Pluralism

Several commentators (e.g., Cook, 1985; Gergen, 1999; Lincoln & Guba, 2000; McGuire, 1983; Riggs, 2004; Rosnow, 1981) have argued for methodological, theoretical, and epistemological pluralism that more readily capture the complexities and contexts of psychological phenomena. Sheehan (1996) summarised three concerns outlined by the Australian Research Council, the premier research funding body in Australia that serve to emphasise the narrow focus of psychology. The Council stated that Australian psychology is monocultural, avoids epistemological and ethical

concerns, and has not reached its potential concerning its applied relevance to social issues. These concerns have been recently highlighted by Riggs (2004) and Ranzijn, McConnochie, Day, Nolan, and Wharton (2008). The dominance of positivism has the potential to reinforce the position that psychology offers little relevance to the understanding or solution of complex social issues. This shift towards pluralism need not negate or compromise the systematic pursuit of knowledge. Indeed, we do not reject the experimental method per se; rather, we acknowledge that a particular type of research question might be best answered by one approach over another. However, the problem lies in the uncritical acceptance of one epistemology, methodology, or method over all others.

Achieving epistemological and methodological pluralism requires holistic and complex changes within psychological training, practice, and research. We need to recognise that the necessary processes of change require multiple strategies at multiple levels. The implementation of these strategies will require working partnerships between research psychologists, practicing psychologists, APS, APAC, schools and departments of psychology, funding bodies, and employer groups. Achieving methodological and epistemological pluralism is likely to spark controversy, be met with resistance, and will take time. In order to move beyond the dominance of positivism, we provide a number of suggestions for change across the interrelated areas of APAC accreditation and curriculum, the APS, and research.

The processes and standards on which accreditation of schools and departments of psychology currently exist need to be applied more flexibly. The language of the Accreditation Standards is not explicitly exclusionary but in practice they are interpreted narrowly. In addition to the writing of APAC's (2008) *Rules for*

accreditation & Accreditation standards for psychology courses, the frame of reference for the application of them is likely to be positivist and as a result they are likely to be interpreted and applied narrowly. As a result, APAC's *Rules for accreditation & Accreditation standards for psychology courses* require revision so that the methodologies and epistemologies of the research endeavour are positioned as equally legitimate and systematic. If conducted appropriately, all methodologies allow interpretation, explanation, and prediction from the data. We need to acknowledge that that methodologies and methods differ in their epistemological, ontological, rhetorical, and axiological assumptions (Creswell, 1998) and that all have their own strengths and limitations.

Further, the histories and philosophies of psychology and the research traditions that emerged as a function of psychology's adherence to positivism should feature clearly and explicitly in the foundational undergraduate curriculum. It is important first to understand how psychology as a discipline developed and how its emergence at a specific historical time situated it in a particular contextual space that resulted in the discipline developing in the manner it did and the consequences of its development. The focus on research *methods* needs to be replaced with an emphasis on the entire research framework that articulates the pathway from epistemology to theoretical position to methodology to method (Crotty, 1998). We recommend the inclusion and analysis of the philosophies of science, the histories of psychology, and a wide range of epistemologies, methodologies, and methods into the psychology curriculum so that students graduate with a research repertoire that not only provides them with strong research skills across paradigms but equips them with a language that differentiates between *theory* and *theoretical framework* and between *methodology* and *method*. By

positioning this knowledge as the foundation to the curriculum students are in a position to critically evaluate research (and practice) approaches and therefore acquire essential analytical skills in the process.

Of course a significant barrier to the implementation of the above suggestions is the limited number of academic psychologists with the skills and knowledge to actually embed the above suggestions into the psychology curricula. In addition to APAC's (2008) *Rules for accreditation & Accreditation standards for psychology courses*, the design, development, and implementation of the psychological curriculum is influenced significantly by staff interests and skills (Lipp et al., 2006). Redressing the barrier would take time, but could be promoted through strategies such as targeted recruitment, team teaching, collaboration between disciplines, mentoring, workshops, and use of appropriate texts which would develop the critical mass required for sustained change. Professional development in this area is essential not only to ensure the epistemological shifts that we call for but also to ensure that the academics training the new generation of psychologist do not breach the APS's (2007) *Code of Ethics* by teaching a subject (or aspects of a subject) that is outside of their area of competence. The recent reviews of the training of psychologists (e.g., Littlefield et al., 2007) looks specifically at *models* of training but we argue this remit should be expanded to include the epistemology and pedagogy involved in the training of psychology students also.

The APS can also play an important role in the realisation of epistemological and methodological pluralism. The American Psychological Association has a Division called the Society for the History of Psychology and the British Psychological Society has a History and Philosophy of Psychology Section. We echo Sullivan's (2008) proposal for the establishment of an interest group within the APS devoted to the

history and philosophy of psychology. In this way the APS would have an instrumental role in providing space and voice to the discussion, debate, and dissemination of the philosophical and historical underpinnings of psychology, which in turn would likely facilitate the integration of methodological and epistemological pluralism into the psychology teaching and research practices within Australian universities[9].

In addition to the suggestions outlined above, we propose a parallel research agenda to determine the ways in which psychology in Australia (and elsewhere) might move towards embracing methodological and epistemological pluralism. A number of questions require further scrutiny – how do graduates from undergraduate and postgraduate psychology programmes rate the relevance and utility of their research training? Do they really have critical thinking skills? What is the current status of various methodologies and epistemologies within psychology? Paralleling research conducted in North America (Dawda & Martin, 2001), what are the current inquiry beliefs of Australian psychologists? What are the attitudes towards methodological and epistemological pluralism within various sectors, including Australian schools and departments of psychology, APS, and APAC? What factors are likely to facilitate, and what barriers are likely to impede, attempts towards methodological pluralism? How might these barriers be overcome? How might the efficacy of such changes be measured? The answers to these questions have the potential to facilitate methodological and epistemological pluralism within psychology in Australia and elsewhere.

Conclusion

The purpose of this paper was to promote an historical understanding of the development of psychology, demonstrate its continued adherence to positivism, and

highlight the emergence of alternative epistemologies and methodologies. We demonstrated how and why positivism has been privileged, discussed the consequences of such a restrictive view of psychological science, and presented arguments as to why, and how, psychology might move beyond the hegemony of positivism. Within psychology, there is a growing dissatisfaction with positivism and its underlying assumptions such as objectivity, reality, and universality. The products of positivist research, resulting from abstracted, systematic, and rigid methods, do not adequately represent or apply to the 'real world'. Nietzsche (cited in Giroux, 1983) argued that it was not science per se but the power of the scientific method *over* science that was the hallmark of the 19th century. Little has changed as we enter the 21st century except that psychology is still to fulfil its potential as a science that is relevant to the 'real world'. Alternative epistemologies and methodologies remain predominantly at the margins within psychological research, yet these highlight the importance of context, which should not be relegated to the background, 'controlled' for, or ignored.

Notes

[1] Crotty (1998) distinguishes between the epistemology of objectivism and the theoretical perspective of positivism. He does however state that objectivism and positivism are similar and linked by the search for universal laws. Indeed, many authors use the terms synonymously, and many write of the epistemology of positivism.

[2] This manuscript is by no means an exhaustive account of the history of psychology. For a full treatment of the history of the discipline, readers are referred to texts devoted to the examination of the history of psychology (e.g., Leahey, 1992).

[3] Although Comte did not coin the term 'positivism', he was instrumental in its popularisation (Crotty, 1998).

[4] Borrowed from chemistry, a reagent is a constant that produces an invariant reaction (Rosnow, 1981).

[5] Other techniques were utilised such as the double blind experiment, wherein neither the researcher nor the participants are aware of which participants are assigned to which levels of the independent variable (Martin, 2008). However, the double blind experiment does not overcome all experiment effects (Rosnow, 1981).

[6] Organisational psychology programmes lack sufficient 'clinical elements' and thus are unable to access the higher funding available to all other speciality psychology programmes.

[7] O'Neill (1989) provides a discussion of the differences between unforeseeable and unforseen consequences and their ethical implications.

[8] While Australian psychology initially took its lead from Britain (Garton, 2006), these developments were considered "scattered and insubstantial" (Cooke, 2000, p. 7).

[9] It needs to be noted, however, that the APS has long attempted to mitigate, to varying success, the tensions created by the often-disparate needs of academics and practitioners (Cooke, 2000). The formation of Interests Groups was, in part, to provide a structure for discussion and action concerning social issues (Cooke, 2000). While the Interest Groups continue to focus on applied areas beyond the academy, there are exceptions, including the Teaching, Learning and Psychology Interest Group which was established in 2007.

Acknowledgments

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