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Connecting research to action: Perspectives on research utilisation

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ABSTRACT

In contemporary knowledge societies, scientific research has been emphasised as a key component of effective and accountable service provision. This paper examines commonalities and distinctions between two discourses of research utilisation, 'evidence-based practice' (EBP) and 'knowledge production/utilisation' (KPU) – the former more prominent in informing the social work canon, the latter with some potential to do so. Specifically, it considers how and where these discourses are now coming together, through a focus on 'knowledge mobilisation', 'implementation', and 'innovation', and a shared emphasis on the role of organisations in bridging the gap between research and action. It hopes to contribute to the movement towards greater research use in social work and enhance understanding of the mechanisms by which research is connected to action.

Keywords: EBP, knowledge production, knowledge utilisation, research utilisation/use, implementation, dissemination

INTRODUCTION

When it comes to considering research utilisation, in the main, social work has been more informed by the discourse of evidence-based practice (hereafter EBP) and less by that from the related interdisciplinary field of knowledge production/utilisation (hereafter KPU). Research utilisation is broadly concerned with the inter-related processes of forging the connection

between research, policy, and practice and how the components, participants, mechanisms, contexts, and outcomes are conceptualised, theorised, modelled, measured, and so on. In some senses, the study of research utilisation is still in its infancy. There is relatively little empirical work that evaluates how effectively research utilisation strategies achieve tangible change; most is small scale and qualitative, and examines stakeholder accounts rather than actions or impacts (Stevens et al., 2009). In other senses, the field is not new. It emerges from a wide spectrum of disciplines, including health, management science, education, information science, sociology, geography, and, social work, and is far from homogenous. Terminologies used frequently intersect and confuse, with the same terms used to convey different meanings, or different terms to convey the same. Usages within the same discourse have also shifted over time, some incidentally and some through debate. Exponents and critics of EBP alike, for example, have argued about its distinction from, or identity with, ‘evidence-informed’ or ‘evidence-guided’ practice. Within KPU discourse, writers commonly speak interchangeably of production and utilisation, or use other terms altogether (Backer, 1991; Estabrooks et al., 2006, 2008; Knott and Wildavsky, 1980). Graham et al. (2006) attempted to distinguish between knowledge translation, knowledge transfer, dissemination, knowledge exchange, and research diffusion; Eccles et al. (2009) referred to implementation science, and Cooper and Levin (2010) to knowledge mobilisation and innovation.

Given this hybridity, for this discussion we clarify and keep consistent our use of terms, albeit these do not always correspond with the authors’ original. We use research utilisation as the umbrella term to encompass the discourses of EBP and KPU, since, regardless of nomenclature, in essence all these authors use these terms to discuss how research-based knowledge travels to and leads to change in the fields for which it is intended. Importantly, both knowledge (as used in KPU discourse) and evidence (as used in EBP) mean research-based or empirical knowledge. Our discussion touches upon the weight accorded by each

discourse to practitioner, user, organisational, and contextual knowledges brought to professional practice (Morago, 2010) but our primary focus is on research and its connection to practice. So by knowledge production we mean the activity of generating empirical research findings; by knowledge transfer we mean the movement of research knowledge or evidence from one place to another; knowledge translation refers to the mediating interventions to shape knowledge products to enhance their accessibility, relevance, or usability in practice; by knowledge use or utilisation, we mean the tangible ways in which knowledge is taken up, adopted, implemented, and used in practice. We speak generically of the ‘connection between research and action’, where we wish to convey both linear and non-linear research-to-action approaches, and, following Graham et al. (2006), we refer to ‘action’, since this expression can encompass utilisation at individual, interpersonal, and organisational levels. Looking ahead, attention to ‘action’ may encourage exploration of what is done, not just what is said.

Within the literature, two mainly distinct discourses can be discerned: ‘EBP’ and what we can best describe as ‘KPU’. These discourses are not hermetically separate, but, we argue, can and should be distinguished. To do so, inevitably we polarise somewhat at first, introducing more nuance as we discuss their increasing points of convergence. We begin by setting each discourse in context of the ‘two communities’ who respectively produce and use research. We propose that, as each discourse considers the two communities, in combination they envisage four worlds. To show this, we examine the established characteristics of each discourse, highlighting key features in their distinctive treatments of the research-to-action process. We then turn to more recent developments that appear to be bringing about some convergence between them, towards bridging or even dissolving the research/practice gap, placing particular emphasis on the role of organisations in bringing about innovation and change. Finally, we consider the implications for social work, in particular the benefits of extending beyond the discourse of EBP to engage with wider developments in the research utilisation field.

TWO COMMUNITIES, TWO DISCOURSES, FOUR WORLDS

Two communities theory

Repeated claims are well recognised, on the one hand that practitioners make too little use of research (De Goede et al., 2012; Hanney et al., 2003; Landry et al., 2007) and on the other that researchers pay insufficient attention to making their findings known, useful, and usable (Cooper and Levin, 2010; Nutley et al., 2007). When addressing this challenge, the research utilisation literature frequently envisages two communities or cultures: those who generate research and those who might use it.

The ‘two communities’ theory (Caplan, 1979; Wingens, 1990), emerging from one strand of KPU discourse, provides a helpful lens through which to scrutinise both cultures and their disparities. According to this theory, researchers’ and practitioners’ differing priorities are shaped by the different cultures in which they operate. By and large, when it comes to knowledge production, academic environments and researchers privilege inner science, peer review publication, and citations as the indicators for quality and prestige (Cooper et al., 1997; Estabrooks et al., 2008; Hannan et al., 2000; Jacobson et al., 2004). Academic esteem and incentive systems have historically placed much less value on practice or policy relevance or ‘service to society’, and historically researchers have not been rewarded for active engagement in knowledge transfer (Allen, 2002). For the same reasons, according to the two communities theory, even where researchers make some efforts to communicate their research, this is predominantly through one-directional ‘engineering’ (Landry et al., 2001) or ‘producer push’ (Cooper and Levin, 2010), and the knowledge intended for use is not necessarily the knowledge needed by users.

Seen through this lens, practitioners, policy makers and planners are a separate community. Their priority is relevant research and evidence, with practical applicability that

assists in service planning or problem solving and evaluates outcomes to justify professional decisions, actions and public expenditure. Would-be research users prefer a ‘demand pull’ or ‘user pull’ model, whereby they solicit research on topics as and when needed, directly to inform practice or policy (Brown, 2012; Stevens et al., 2009). Hence, the argument goes, many organisations and policy makers tend to rely on think tanks and commissions, rather than academic researchers, for fit-for-purpose information (Rigby, 2005).

The two communities theory has not been without criticism, in particular that it accentuates the barriers between knowledge producers and users, rather than the potential to surmount them through, for example, collaborative research (Greenhalgh and Wieringa, 2011; Wehrens, 2013). Further, modification is needed to take account of recent shifts in some academic knowledge production environments, such as the UK, where increasing value is attributed to research impact and knowledge exchange. Also, in applied fields such as social work, public bodies tend to fund research that speaks directly to policy or practice, so incentives towards producing applied knowledge can be higher.

Notwithstanding these reservations, the two distinct communities can be readily discerned, and the shared goal across the research utilisation field is to forge the research-to-action connections between them. However, arguably EBP and KPU discourses hold different understandings of research utilisation, based on their different understandings of the research-policy-practice nexus. As a result, across the two communities, the two discourses in combination effectively envisage four worlds, populated respectively by knowledge producers and users (KPU) and researchers and policy makers/practitioners (EBP). Each discourse, and the worlds they conjure, is discussed next.

Evidence-based practice

Derived from evidence-based medicine pioneered by Sackett et al. (1996), EBP has spawned a huge area of scholarship relating to research-based policy and practice in allied fields. EBP can be described as the process in which the practitioner, drawing on the best available research evidence, ensures the best possible decisions are made, actions taken and services provided. Practitioners are encouraged to adhere to an evidence hierarchy which places at the top gold standard systematic reviews and randomised controlled trials, albeit that other forms of research evidence may be admitted when these are not available; indeed non-experimental and qualitative research are increasingly recognised and appraised by some exponents of EBP (for example EPPI Centre, 2014). As a process of enquiry, EBP appears to be flourishing in the USA more than elsewhere, and relatively little social work research produced outside the USA sits high in the EBP evidence hierarchy (Webber, 2014). However, as a discourse pertaining to research use, EBP is more widely prominent in contemporary social work policy, practice and research. This is not to say the principles of EBP are uncontested: they have generated much debate and some confusion. Not least, the recent exchange between Gitterman and Knight (2013a, 2013b) and Thyer (2013) exemplifies concerns about the extent to which EBP, as its critics hold, prescribes tried-and-tested interventions and stymies professional art and judgment, or, as its exponents defend, allows room for practitioner appraisal, integration with clinical expertise and other knowledges, service-user values and situated circumstances. Nonetheless, exponents and critics alike will accept that EBP discourse conventionally places greatest emphasis on the ‘inner science’ (Shaw and Norton, 2007) of research intended for use. ‘Outer science’ usability matters too, as developments such as the Cochrane Collaboration Consumer Network (Cochrane, 2014) attest; but outer science has been less prized in itself, since something may be highly usable but singularly ineffective.

EBP primarily envisages that expert researchers provide evidence to inform practitioners. Conventionally, it has concerned itself less with the context of knowledge production, or with how, even whether, evidence is actually used in practice. Indeed, it might be argued that EBP's adherence to the model of research experts from one world producing knowledge that is intrinsically excellent and intended for use, but not necessarily usable, in the other world, may accentuate rather than diminish the disconnect between research and action.

In so far as EBP discourse has conventionally paid attention to processes of moving research evidence into the practice world, this has been predicated on a 'push' model of linear transfer and instrumental research use, facilitated 'through centralised and formal efforts' (Yuan et al., 2010, p. 2). For EBP, the research-user world is one inhabited by practitioners who need to be well informed of best research evidence to underpin their decisions and actions. Typically, EBP efforts to achieve this have been technical and concrete rather than dynamic or interactive, with a premium placed on making research findings accessible through research protocols, summaries and guidelines.

Dissemination – actively spreading research information to those intended to use it in the practice world – is another key element of the knowledge transfer process. Within the EBP discourse, researchers' attention to dissemination has also been limited (Bellamy et al., 2006). Typically, dissemination too has been treated in a linear, instrumental way, usually through discrete events, such as conferences. Meanwhile EBP discourse has paid little attention to the processes of actual research uptake. There are signs of change, as later discussion will show. But first we turn, by way of contrast, to KPU discourse.

Knowledge production/utilisation

KPU discourse collectively addresses the full continuum of processes through which knowledge is produced and utilised in practice. It received a boost from Gibbons et al.'s (1994)

New Theory of Knowledge Production, which purportedly observed a change from traditional ‘Mode 1’ discipline-based research, to interdisciplinary, socially relevant and useful ‘Mode 2’ knowledge involving industry or service partnerships.

At the production end of the continuum, KPU is concerned with the development of knowledge that is usable, relevant and of value to the communities it is intended to serve. When it comes to research quality, it is ‘outer science’ (Shaw and Norton, 2007) that is privileged and seen as decisive for the public or social accountability of academic researchers (Delanty, 2001; Jacobson et al., 2004). At the utilisation end, KPU discourse is concerned with the uptake, adoption, implementation, and use of research knowledge, as change outcomes in the practice and policy worlds. So, for example, KPU looks directly at the nature and stages of research use. Several studies suggest the need to clarify and broaden understanding and measurement of research use, beyond instrumental use (direct application in, and impact upon, practice), to include conceptual use (altered understanding and thinking in practice situations) and symbolic use (superficially endorsing, but in practice ignoring research when it contradicts received wisdoms, dominant norms and political or resource priorities) (De Goede et al., 2012; Ginsburg et al., 2007; Wallin et al., 2012; Weiss, 1979). In line with this broadened understanding, KPU has also attempted to characterise and measure stages of research use, notably with Knott and Wildavsky’s (1980) scale conceiving a seven-stage progressive process involving ‘reception, cognition, reference, effort, adoption, implementation, and impact’ (p. 546).

In KPU discourse, the movement of research to action is seen to entail complex and multifaceted processes, and the focus is not just whether, but how and in what contexts, these can take place. Throughout, KPU also considers the factors – individual, organisational, cultural, and political – that affect these processes, and shape the worlds of knowledge producers and users. Importantly, the gap between the worlds of knowledge producers and

users appears less distinct here than for EBP, because KPU discourse directly concerns itself with bringing the two together, through processes that are interactive and dynamic, rather than technical and concrete. So, in common with EBP, there is extensive commitment to rendering research accessible, through jargon-free language, clear examples of practice relevance, and access to information technology (Estabrooks, 1999; Plath, 2006). Likewise, there is strong recognition that dissemination activities are most successful when research knowledge is not just transferred but translated to research users (Cooper and Levin, 2010; Hemsley-Brown and Sharp, 2004; Nutley et al., 2007; Sebba, 2013; Sin, 2008; Stevens et al., 2009). But distinctively in KPU discourse, knowledge transfer and translation between the two communities is to be achieved not simply through protocols, practice tools, or discrete presentations to varying audiences, but through sustained engagement processes between producers and the same intended users (Chagnon et al., 2010; Gano et al., 2006; Nutley et al., 2003). Hence a variety of strategies has been envisaged to connect the two communities in ways that integrate, rather than separate the processes of knowledge translation, transfer and utilisation. These include frequent interaction through meetings, networks and partnerships, and the use of knowledge brokers, to mediate between the two worlds, making research known, understandable and usable by those who need it (Moore et al., 2011).

With the emphasis on interaction and communication, the term knowledge exchange has entered the discourse, to denote the mutuality of the process (Graham et al., 2006). In fact, KPU literature offers a diverse range of knowledge exchange models and emphases. Some highlight broadly the quality of interaction between participants from both communities and the fit between their values and beliefs (De Goede et al., 2012; Weiss, 1979). Others, such as linkage models, concern researchers and users sharing expertise, knowledge and learning for specific purposes (Bowen and Martens, 2005). Importantly, the distinctions between models of knowledge exchange expose how the term itself is deployed in two ways. The first, more

common, endorses bi-directional communication and mutual learning, but the primary direction of travel remains linear, from the world of production to the world of use, albeit through mutual communication. The second begins to conjure a different vision, through models of co-operative knowledge production, where collaboration throughout the research process has emerged as a strategy to enhance research use (Gray and Schubert, 2012, 2013; Heinsch, 2013; Hemsley-Brown and Sharp, 2004; Lavis, 2006). The theory here is that co-producing relevant and useful knowledge, with rather than just for intended users, increases the likelihood of research use. Nutley et al.'s (2003) research-in-practice model is one exemplar. Gredig and Sommerfeld's (2008) co-operative knowledge production model is another; it refers to a deeply social process through which research, professional and other forms of knowledge are combined, through a circular process of pattern formation and recognition, in action. This produces hybridised knowledge that is neither research nor practice based, but both. It seeks to dissolve, rather than bridge, the gap between the research and practice processes and communities. Its intention is to transform the research-to-action process, from a linear continuum to an iterative circle within which knowledge production, transfer, translation, and utilisation processes become entwined.

It must be acknowledged that, as yet, there is little evidence to confirm that either vision of knowledge exchange actually achieves, rather than just claims, its desired effects. Increased and improved interaction might enhance inter-community trust and research receptivity, but it has yet to be shown that it improves demonstrable research use or impact ((Nutley et al., 2003; Moore et al. 2011) and changed individual attitudes and behaviour may or may not lead to changed organisational practice (Denis et al., 2003; Moore et al., 2011; Taylor et al., 2004).

Notwithstanding these current limitations, KPU discourse tries to engage closely with the contextual factors, in both the research and practice worlds, which facilitate or inhibit the travel of research to action. Importantly, these extend beyond the level of individuals and

interactions, to include systemic factors at the level of organisations. Discussion of the ‘two communities’ theory has already highlighted the organisational and cultural priorities that shape the academic research world and, notwithstanding some recent shifts, the disincentives these may present to active researcher engagement in knowledge transfer, translation and exchange. Broader KPU discourse has also paid attention to the pivotal role of organisations in shaping the knowledge-user world and its receptivity to research use. Organisations and the cultures they grow play a crucial role in animating or stultifying the process of connecting research to action.

Conventionally, EBP discourse has paid far less attention to the organisational context of the research-user world. However this appears to be shifting, and EBP discourse too is now pointing towards the crucial roles played by organisations not just individuals (Gray, et al., 2013a, 2013b; Gray and Schubert., 2011, 2012, 2013; Mullen et al., 2008; Plath, 2012, 2013a, 2013b; Proctor and Rosen, 2008). In turn, it is their shared focus on organisations that provides the axis around which the KPU and EBP discourses are beginning to converge. Each discourse has now generated intermediary fields of enquiry: implementation science, knowledge mobilisation and innovation, each giving prominence to organisations. Arguably, this convergence holds the potential to bring together the two communities and the four worlds so far envisaged.

CONVERGING DISCOURSES, COMMUNITIES AND WORLDS?

Implementation science and knowledge mobilisation

Conventional EBP has been troubled by limited evidence of uptake arising from the methodological rigour of research alone (Oh, 1997). EBP research has also cast doubt on the effectiveness of linear and technical strategies of knowledge transfer. Some studies have highlighted mediating factors at the levels of individual skills and experience (McFarlane et

al., 2001) and interactions and communication (Innvaer et al., 2002). These studies and others, however, have also exposed organisational facilitators and barriers to research utilisation within the user community, including time, workload, training, resources, and the affordance of autonomy to make changes to practice (Holzer et al., 2007; Innvaer et al., 2002).

As a result, EBP has increasingly engaged in the emerging field of implementation science. This retains the distinction between knowledge generation and use (Johansson, 2010; Manuel et al., 2009; Mullen et al., 2008; Proctor et al., 2009) and remains predicated on the assumption that expert research evidence is moved to, not co-created with, practice. Thus, for example, the Cochrane Collaboration Consumer Network has been established to include research users on a sustained basis in the production and dissemination of systematic reviews of research evidence intended to inform practice; but these reviews still adhere to Cochrane, not user-designated, evidence hierarchies (Cochrane, 2014). Nonetheless, implementation science embraces more fully than conventional EBP the complexity of the research-to-action process, and the mediating relationships and time involved. So, for example, Morago (2010) examines how leaders or champions of research within practice organisations might become highly influential mediators; Speller et al. (2007) advocate for knowledge brokers, on the grounds that effective research utilisation ‘requires the cultivation of new professional roles and the development of collaborative mechanisms working across research policy–practice boundaries’ (pp. 258–259). As Grimshaw et al. (2004) put it, ‘the implementation of most clinical guidelines requires changing the system and, hence, organizational as well as individual change’ (p. 591). This, in turn, takes time; it involves working with complexity, multiple contextual layers and power politics (Ferlie et al., in Greenhalgh et al., 2004).

These observations from the field of implementation science emerging from within EBP discourse are all but identical with observations from the emerging field of knowledge mobilisation, whose roots are in KPU discourse but increasingly reach into implementation

science. Knowledge mobilisation takes a holistic approach to harnessing the benefits of research for organisational change. So as Brown (2012) notes, its focus includes attending to ‘the social nature and processes of research utilisation, and the motivations of social actors to engage in such activity – where adoption is seen as resulting from a “fruitful relationship”’ (p. 460). But enhancing this, knowledge mobilisation also includes creating an organisational culture receptive to, and actively supportive and encouraging of, research utilisation (Gray and Schubert, 2012; Moore et al., 2011).

The coming together of EBP and KPU discourses adds to terminological confusion and proliferation, with further designations, such as knowledge management entering the mix (Cooper and Levin, 2010). Nonetheless, the convergence is very welcome. Beyond this point in discussion, it becomes more fruitful to follow EBP and KPU discourses together, not separately. By way of caveat, we must note that their shared focus to date is on organisations that shape the culture, priorities and practices of the knowledge user, rather than the knowledge provider community.

Pivotal role of organisations in research utilisation

Across both discourses, many studies now mention the importance of a ‘culture of expectation’ within the practice community that values and drives research use (Gray et al., 2012, 2013a, 2013b; Hemsley-Brown and Sharp, 2004; Plath, 2012, 2013a, 2013b). As Cooper and Levin (2010) note: ‘Organisational and systemic approaches are needed across institutions, especially in terms of increasing collaboration and networks among relevant parties’ (p. 356).

Organisational barriers to research use repeatedly identified in the literatures include lack of staff time, organisational support, access to research findings, supervision, and funding to translate research into practice guidelines (Bellamy et al., 2006; Gray and Schubert, 2012, 2013; LaMendola et al., 2009; Mullen et al., 2008; Murphy and Macdonald, 2004; Straussner

et al., 2006). In one of the first empirical studies to address organisational impact and research utilisation in health, Belkhdja et al. (2007) found in Canada that some of the most important determinants of research use were formal linkages between researchers and practice organisations, along with the size and sector of the organisation itself. Training for practitioners to access and appraise research evidence, for example, was more supported in hospitals than government departments and regional authorities. They argued that organisational context was vital to understanding what makes research utilisation and impact happen.

In an important related development, Greenhalgh et al. (2003, 2004) leading the field of innovation scholarship, have proposed a holistic approach that speaks to complexity and process, to understand how research or evidence-based innovations can bring about not just altered practices but sustained systemic change. They distinguish between diffusion as ‘passive spread’, dissemination as active, planned efforts to persuade target groups to adopt an innovation, implementation as active and planned efforts to mainstream innovation within an organisation, and sustainability as making the innovation routine until it becomes obsolete. Most important, they advocate for a whole-system approach of assimilation by the organisation, to make complex, research-informed change happen systemically. Greenhalgh and colleagues combine backgrounds in evidence-based health and knowledge management; their shared work is perhaps the most striking example yet of the melding of EBP and KPU discourses, animated through a common focus on the pivotal role of organisations in bringing together the two communities and connecting research to action.

CONCLUSION: IMPLICATIONS FOR SOCIAL WORK

What then are the implications for research utilisation in social work? First, we suggest, social work needs to widen its gaze. By and large, when it comes to connecting research to action, EBP discourse has been dominant (albeit contested) in social work. Our examination of the

distinctions and the emerging complementarities between EBP and wider research utilisation discourses highlights the complexities involved, suggesting ways forward. The ‘two communities’ theory (Caplan, 1979; Wiggins, 1990), which draws attention to researchers’ and practitioners’ differing priorities in knowledge production and utilisation, provides a helpful, if imperfect framework for understanding what separates these communities and what might draw them together.

Secondly, despite the emergence of some models that integrate both researcher and user communities in iterative processes of knowledge co-production and utilisation (Gredig and Sommerfeld, 2008; Nutley et al., 2003), our analysis highlights that most approaches still denote a linear movement of research to practice, albeit one entailing communicative or iterative processes. These approaches to research utilisation have yet to be tested for their effectiveness in connecting research and action. In social work, as elsewhere, we need to find out not just what knowledge producers or users say makes a difference, but what actually makes a difference to achieving sustained, research-informed change in practice.

Thirdly, notwithstanding the dearth of good effectiveness studies, there is sufficient evidence to be confident that organisational cultures matter. All stages of the connecting-research-to-action process require more than steps or tasks to be accomplished by researchers and practitioners alone (Gabbay et al., 2003; Greenhalgh et al., 2003, 2004); they require ‘an organisational perspective beyond the individual researcher or end user’ (Sin, 2008, p. 95). Management policies and decisions are critical in shaping practitioners’ expectations of, and readiness for, research utilisation and practice change. For genuine and sustained change to occur, an organisational culture that values and resources the production, transfer, translation, and use of research in practice is crucial (Gray et al., 2012, 2013a, 2013b; Cooper and Levin, 2010; Gabbay et al., 2003; Greenhalgh et al., 2003, 2004; Plath, 2012, 2013a, 2013b).

Two further implications suggest themselves as starting points for further discussion. First, whether focusing on changing individual practice, or organisational systems and cultures, or both, we must be mindful of the policy contexts that may continue to support restrictive and proceduralised practices, and political contexts where some research findings and implications are more welcome than others. Here we might turn for inspiration to Ferguson's (2013) arguments for 'critical best practice', which highlights the scope for practitioners, managers and the profession to resist the constraints of managerialism and political expediency (Carey, 2009; Lawler, 2013). Secondly, and relatedly, Greenhalgh and Wieringa (2011) have encouraged us to move beyond the conventional discourses of both EBP and KPU, and to draw instead on constructs from philosophy, sociology and organisation science to understand how knowledge is 'created', 'constructed', 'embodied', 'performed', and 'collectively negotiated'. This approach may allow us to understand 'the link between knowledge and practice in more creative and critical ways', along with 'the complex links between power and knowledge' that operate at individual, organisational, policy, and political levels (p. 501).

Of course these challenges are not distinct to social work. But in a culture that continues to favour procedure and protocol over critical debate, to make individuals rather than institutions responsible for research utilisation, and commonly to find itself beset by, rather than embracing, change, we have some distance to travel.

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