Public Engagement, Knowledge Transfer and Impact Validity

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Abstract

For many academics, public engagement and knowledge transfer are no longer optional appendages to research and teaching activity. In the UK, 'giving knowledge away' has become enshrined as national research policy. However, many approaches of public engagement have traditionally adopted a 'deficit model' of public understanding. We argue that bidirectional approaches are necessary, particularly when conducting research with concerned communities. Bidirectional approaches allow for the possibility of different kinds of expertise and experience, something we discuss in relation to Collins & Evans (2002) model of public understanding of science. Our central claim is that researchers working in the field of LGBT psychology have routinely been engaged in this kind of translational work. We use historical and recent examples to illustrate the strengths and weaknesses of this approach. Bidirectional models of knowledge transfer do not resolve all of the potential problems which arise when engaging with the public. For example, it is not clear how academics should respond if the end-users do not accept the findings. However, involving concerned communities is clearly necessary, in order to achieve and maximize impact validity.

Public Engagement, Knowledge Transfer and Impact Validity

Like other contributors to this special issue, we will argue that psychologists need to understand research evaluation issues with reference to the notion of 'impact validity.' To make the case, we draw on our experiences as researchers in the field of *Lesbian, Gay, Bisexual and Transgender (LGBT) Psychology* in the United Kingdom; a field which seeks to positively impact the overlap between psychological knowledge and practice on the one hand, and the lived experience of sexual and gender minorities on the other. We begin by briefly reviewing how official definitions of research impact shape the contexts in which we work in the United Kingdom (UK). We continue by arguing that psychologists and policy makers can learn from advances in models of knowledge transfer within the sciences studies literature (Collins & Evans, 2002). By emphasizing both the *heterogeneous* nature of the public(s) wherein research may have impact, and *bidirectional* influences between researchers and their publics these models allow a way of conceptualize impact validity around LGBT Psychology both past and present. Indeed, the history of LGBT Psychology suggests that understandings of public engagement with, and through, psychological science has been more advanced in this area than its characterization as a niche, minority or applied area of psychology would warrant.

Miller's (1969) famous call to empower people by 'giving psychology away' may still appear radical in some contexts. However, in the United Kingdom, Miller's views are now enshrined as national research policy. The major funding agency for social science, the Economic and Social Research Council, requires plans for making research impactful at the grant application stage. The forthcoming Research Excellence Framework (REF), will assess not only the quality of research but also its impact, by considering academic departments' knowledge transfer activities (Corbyn, 2009). Ethical approval to conduct research involving National Health Service (NHS) patients requires a statement as to how research findings will be made available to the public – 'How will the results of research be made available to research participants and communities from which they are drawn?' (National Research Ethics Service, 2005, p. 14). Similar developments are evident elsewhere. For example, in 2007/8 the University of Melbourne in Australia launched its triple helix model, in which public engagement is the third strand of academia, equal in importance and esteem to research and teaching (MacCrae, 2010). For many academics, giving knowledge away is no

longer an optional appendage to research and teaching, and communicating to other researchers through peer reviewed journals is no longer taken to be the *sine qua non* of research activity.

Miller (1969)'s well-known paper is typical of the unidirectional approach to public engagement popular in the 1950s and 1960s. The deficit models of this period understood members of the public to be passive and naïve, and cast researchers in the role of well-informed educators. During these decades, the purpose of public engagement was typically conceived as engendering public understanding, 'explaining and effectively reinforcing the success of the sciences' (Collins & Evans, 2002, p. 139). Within such deficit models, it was inconceivable that knowledge could travel in any direction other than top down - from researchers to the public. For example, popular media applied deficit model thinking when they aimed to 'simplify' scientific information considered too complex for the general public (Wynne, 2005). The forms of knowledge transfer encouraged in the contemporary UK can similarly presume the superiority of academic knowledge. Indeed, the frequently used term 'knowledge transfer' originates in the commercialization and commodification of academic knowledge, referring to the transfer of research knowledge into 'innovative new products and services' (Department for Business, Innovation and Skills, 2009).

Because deficit models are premised on the special expertise of researchers, they sometimes place limits on the degree to which the public *ought* to understand science. For example, differential psychologists defend validation methods which involved keeping 'the items, the scoring keys, the research, and the statistical norms' largely secret from the public (Buchanan, 2002, p. 298). Despite Miller's (1969) call to give psychology away, these limitations show that some secrets of the trade are 'far too important to popularize and "give away"' (Buchanan, 2002, p. 284). Miller's (1969) call has often been repeated (e.g., McFall, 2002). Today, researchers may not adopt the deficit model explicitly, but contemporary approaches to public engagement work suggest that this mode of thinking is still popular. The British Psychological Society's Royal Charter (BPS, 2008) includes the objective of 'advancement and diffusion of the knowledge of psychology' (p. 31), with particular reference to 'public understanding of psychology – addressed by regular media activity and outreach events' (p. 31). These kinds of activities imply a unidirectional approach to

knowledge transfer. Opinions about public engagement work in the Society's journal *The Psychologist* have focused almost exclusively on the role of psychologists giving knowledge to the public, except perhaps a comment that 'the public is becoming increasingly interested, and in some cases concerned, about scientific issues' and '[t]axpayers' money funds a substantial proportion of the research activity in the UK' (Webb & Poliakoff, 2008). "Giving psychology away," whether by diffusion or other means, has an implicit view of the public as lacking expertise, or at least the *right kind* of expertise.

From the perspective of LGBT psychology, deficit models are highly problematic. The 1950s and 1960s were a period in which the knowledge that psychologists might give away included the idea that homosexuality was a mental illness (see, for example, Bayer, 1981; Morin, 1997). Gay men, lesbians, bisexual and transgender people were all members of the public who were considered to suffer from inherent deficits that made their views particularly unlikely to subvert, or even inform, erroneous clinical psychology that was too often 'given away' to harmful effect. Both research on LGBT individuals and subcultures in this period, and research conducted by psychologists who were LGBT themselves, largely obscured the contributions of sub-cultural expertise to the research (see, for example, Hegarty, 2003; Minton, 2001). Indeed, some of the tests that psychologists were using, such as the MMPI, were developed in part as tools for the diagnosis of homosexuality (Constantinople, 1973). However, in the mid 1960s Franklin Kameny (1965) – a gay astronomer who was fired from his government job because of his sexuality – articulated a critique of the power of psychological experts to define questions about the normality of homosexuality (Marcus, 1992). Activists such as Kameny successfully protested the meetings of the American Psychiatric Association leading to a repeal of the diagnosis of homosexuality in 1973 (Greenberg, 1998). Ironically, Gergen's (1973) classic call for more democratic forms of psychological science published that year made no reference to these important events.

The deficit model quickly attracted prominent critics (Jasanoff, 2000; Wynne, 1991, 2001), drawing on work conducted in the 1960s-1970s which considered science as a social activity. The construction of 'the public' as lacking scientific literacy, or as 'epistemically vacuous' (Wynne, 1998), ignored the fact that public attitudes to science were often determined by social and political contexts (Sturgis & Allum, 2004). Furthermore, such views ignored the

growing disillusionment with science, which also explains why members of the public might have sometimes been reluctant to engage with researchers.

Social constructionist models presume that science (including social science) is a social activity embedded in culture (see also Gergen, 2009), and focused attention on the social processes by which knowledge is accepted as valid or invalid in such contexts as courts of law and schools, and in policy processes such as public inquiries (Collins & Evans, 2002). In contrast to deficit models, social constructionist models presume that 'the public' or 'the voluntary sector' possess particular forms of expertise that contribute to the processes by which knowledge moves through society. For example, the public can hold technical, methodological, institutional and cultural knowledge (Kerr, Cunningham-Burley, & Amos, 1998). Some constructionist models further proscribe that 'there should be opportunities for this [public expertise] to be expressed' (Levitt, Weiner, & Goodacre, 2005, p.69). Although constructionist models have their limitations (Nanda, 2003), our central claim in this paper is that LGBT psychology has long encouraged the expression of different kinds of expertise.

While LGBT psychology in the United Kingdom has been an important component of the social constructionist movement in psychology (Kitzinger & Coyle, 2000), the shortcomings of social constructionism as a tool of political engagement have also been frequently noted by LGBT psychologists (see, for example, Hagger-Johnson, McManus, Hutchison, & Barker, 2006; Hegarty, 2007). Of course, as members of stigmatized minorities whose ways of life are often the targets of prejudicial ideologies, members of sexual and gender minorities have a lot to fear from models that grant authority to define reality in relation to popular consensus.

In sum, while deficit models of public engagement tend to assume rigid distinctions between expert scientists and a naive public, social constructionist models provide little basis for assessing how to weigh the contrary opinions of a 'myriad [of] potential contributors' (Collins & Evans, 2002, p. 249). Clear cases in which the public are wrong while academic experts are right – such as the case of the hypothesis that the MMR vaccine is a cause of autism in children (Collins & Evans, 2002), or lay reports of cancer clusters that do not match the epidemiological evidence (Levy, Weinstein, Kidney, Scheld, & Guarnaccia, 2008) -

suggest that academic research is not as epistemologically void, nor reality as amenable to social construction by the will of a majority of the public, as some social constructionist models suggest. Of course, widespread prejudicial beliefs that LGBT psychology research informs; the notions that LGBT parents cannot raise well-adjusted children (Patterson, 2006); that bisexuality is only a phase (Diamond, 2008), that hate crimes are legitimate (Franklin, 2004), or that transgender people do not deserve civil rights (Tee & Hegarty, 2006) are further cautions against models of cultural relativism that reify the common sense of 'the public' as fact.

Finally, there is evidence that technical knowledge is often privileged by the public (Kerr, Cunningham-Burley, & Tutton, 2007). Such evidence further problematizes the idea that popular consensus is necessarily in favour of greater public involvement in the determination of scientific and technological change, as social constructionist models tend to presume. Indeed, to the extent that social constructionist models presume the power to 'give precedence' to lay people, they may, ironically, operate a form of 'epistemic charity' (Nanda, 2003) that is no less patronizing (potentially) than Miller's (1969) original idea of 'giving psychology away'. Finally, when constructionist models adopt a relativist philosophy that proscribes that all perspectives on knowledge are equally valid, they can lead to 'paralysis' (Collins & Evans, 2002) that stifles the possibility of research impact (Lynch & Cole, 2005).

Because of these frustrations with both deficit models and social constructionism, Collins and Evans (2002) called for a third line of research on 'studies of experience and expertise' (SEE). While the deficit model assumed a clear dividing line between experts and the public, the constructionist model tended to collapse the distinction altogether. The solution offered by SEE is to distinguish different kinds of expertise such as *interactive expertise* (i.e., the capacity to 'absorb the expertise' of different actors); c*ontributory expertise* (i.e., substantive, professional expertise about the issue gained by 'those who actually do it' (Collins & Evans, 2002, p. 244), and *referred expertise* (that is, 'expertise applied from one field to another'). Of course, this list of expertises is not exhaustive. Other models of expertise acknowledge *experiential expertise* (Bal, Bijker, & Hendriks, 2004), which comes from the experience of a having a minority condition or a minority identity. This latter kind of expertise is particularly relevant when conducting research with LGBT people.

The SEE model provides a more useful framework by which to evaluate public engagement around LGBT psychology that does or does not possess impact validity. For example, the secrecy surrounding psychometric testing might be evaluated in terms of the extent to which such secrecy supports contributory expertise at the expense of the impact of referred expertise on testing practice (see also APA, 1999). Indeed, many of the most impactful forms of research around LGBT issues have involved the heterogeneous distribution of expertise such as the early politics of HIV/AIDS (Epstein, 1996), shifts in the management of sex reassignment (Barrett, 2007) and, of course, the depathologization of homosexuality itself (Bayer, 1981).

The SEE model also suggests that impact validity might depend on the work of 'translators' (Collins & Evans, 2002, p. 258) or 'knowledge brokers…whose job is to facilitate the transfer of research and other evidence' (Ward, House, & Hamer, 2009b), such as the bidirectional transfer of skills between academic institutions and voluntary and community organizations (Jorgensen, 2002). As we argue below, LGBT psychologists have routinely been engaged in this kind of translational work. Such translation means more than simply 'giving psychology away.' LGBT people who are not psychologists also contribute to the development of psychology's knowledge base, by utilizing that knowledge in different contexts, and by the informing researchers about the compatibility of their goals with the norms and values of the user group (Huberman, 1994; Ward, House, & Hamer, 2009a, 2009b). Although harmonious fit with users' values is not always achieved (M. Barker, Hagger-Johnson, Hegarty, Hutchison, & Riggs, 2007), such involvement is likely to maximize potential impact, in part because it creates interaction, dialogue, and linkage (Ward et al., 2009b). As a result, understandings of research quality that fail to grasp the importance of this kind of translation work are likely to be weighted against LGBT psychology.

In particular, researchers that make their membership of the minority communities and 'experiential expertise' explicit are vulnerable to having the validity of their endeavours undermined (c.f., Barker, 2006). Criticisms of such research as lacking 'objectivity' are sometimes based on the conflation of contributory expertise with expertise more generally, such that experiential expertise is glossed as special interest or 'bias.' Complicating matters further, claims to experiential expertise can be competing. Consider the case of a social constructionist paper in the *British Journal of Social Psychology* which argued that gay men

have unsafe sex because of a deep rooted conflation of anal sex with death in gay culture (Crossley, 2004). When critiqued by LGB researchers as misinformed, particularly in relation to the successes of HIV prevention efforts that have been led by gay and bisexual men (Barker et al., 2007), the author of the original article replied that her critics, as insiders, were a 'clique [in a] rather too comfortable, grouping' and therefore less 'attuned' to her research subjects (Crossley, 2007, p. 694).

In order to converse meaningfully with each other and with users, social scientists need to do more than apply traditional psychological science, or to joust with each over the rhetoric of experiential expertise; they must also communicate outside of the academic context where their own expertise is dominant (Collins & Evans, 2002). Strengthening objectivity requires not just 'giving psychology away' but also the recognition that psychologists require input from non-psychologist stakeholders – input that is rarely contained within their own discipline's reservoir of knowledge and wisdom. A recent conceptual framework for understanding knowledge transfer in health services research describes some of the contexts where such communication might occur (Ward et al., 2009a). Relevant to the current special issue, Ward et al.'s (2009a) model explicitly differentiates the goals of knowledge production (in our case, in psychology) and the goal of changing practice (or, in other cases, bringing about social/political change). As such it provides a useful way to consider how to maximize impact validity; 'the extent to which research has the potential to play an effective role in some form of social and political change' (Barreras & Massey, 2010, p. tbc). The model has five components; the problem, the knowledge, the context, the intervention and utilization (Figure 1). Importantly, this model emphasizes bidirectional communication between all contexts.

INSERT FIGURE 1 ABOUT HERE

The model

While this model is recent and innovative, we argue that research practitioners in LGBT psychology have been practicing bidirectional forms of public engagement of this form for some time. We briefly consider the five component of this model, with particular reference to LGBT psychology.

1. The central <u>problem</u> for LGBT psychology is the lack of investment in mechanisms for translation between LGBT researchers, non-academic organizations and the public. This arose because state-sponsored research on sexuality and gender has often been inhibited for political reasons, and popular psychology has attempted to fill the gap (Ericksen, 1999). The support structures necessary in order for LGBT psychology to flourish (training, career pathways, funding and suitable publication outlets) have not been available historically (Kitzinger & Coyle, 2000).

2. The <u>knowledge</u> or evidence base may be difficult for users to interpret. Psychological research is typically written for peer reviewed journals, which may not be accessible to a lay LGBT audience (Hagger-Johnson et al., 2006) and which are scripted to obscure the kinds of collaborative relationships that might engender impact validity (see Walsh-Bowers, 1992). As a result LGBT researchers must wrestle with a dilemma between presenting research that they feel accurately captures phenomena of interest, and those that will be likely to create impact within psychology (see Kitzinger, 1997, for a discussion).

3. There are several <u>barriers and supports</u> which affect the transfer of knowledge in LGBT psychology. First, the history of pathologizing homosexuality, and the ongoing pathologization of trans identity can affect perceptions of psychologists' values and goals among LGBT people (Darren Langdridge, 2007a). Second, interested potential research users, such as LGBT individuals and organizations, may find the research difficult to locate and difficult to understand (Hagger-Johnson et al., 2006). Third, psychology departments may reduce the flow of expertise into this area by implicitly or explicitly discouraging students from joining the field. For example, LGBT groups are misrepresented in psychology textbooks (Barker, 2007) and postgraduate students who pursue research in this area are warned that they are committing career suicide (Biaggio, Orchard, Larson, Petrino, & Mihara, 2003; Kitzinger & Coyle, 2000). Fourth, with the exception of research linked explicitly to health outcomes such as HIV prevention, LGBT psychology research attracts

relatively little funding (Rivers, 2008).   Against these ongoing problems, supportive
mechanisms have been created, such as the development of special interest groups such as the
BPS Psychology of Sexualities Section (formerly the Lesbian & Gay Psychology Section).

4.   The <u>intervention</u> proposed by a research project clearly depends on the type of
research that has been conducted. Descriptive and exploratory research often concludes
simply that 'something should be done' while more prescriptive studies suggest that 'this
[specifically] should be done' and propose specific changes to policy and practice
(Rychetnik, Hawe, Waters, Barratt, & Frommer, 2004). Much psychology and social science
is of the first sort, because it can take time to produce research that offers clear guidance on
what practices should change. However, there are notable exceptions. For example,
researchers could identify members of the bisexual community who can call for the inclusion
of 'bisexual' as a category on questions of sexual identity in all relevant research projects
(rather than the dichotomous heterosexual/homosexual still used by many psychologists;
Barker, 2007). Again, bidirectionality is key to impact here (Ward, House, & Hamer, 2009a,
2009b).

5.   The <u>utilization</u> of research is, perhaps all too often, envisaged as the end-point for
research – the moment where impact validity should materialize. However, few studies
produce results which can be used without modification by their users, meaning that further
dialogue is likely to be both necessary and productive. Research can be cyclical, permitting
'reinvention' and the re-visiting of different stages of the research process (Ward et al.,
2009a). Very little is known about the extent to which LGBT communities and voluntary and
community sector groups use and apply research, or how LGBT researchers envisage their
research being used.   After research findings are disseminated, researchers lose control over
how their research findings will be used in practice. Involving users from the start of a project
is one strategy for researchers to use to reduce the gap between their aims for their research
and its actual effects (Involve, 2009).

To unpack our argument that LGBT psychologists have long been engaged in translational
knowledge transfer, we next present four case histories that fit Ward et al.'s (2009) model.
The first is historical and was a defining moment for LGBT psychology.

Case Study 1: Evelyn Hooker and the Rorschach Test

Evelyn Hooker's (1957, 1958) conducted research on the limitations of the Rorschach test as a means of detecting a signature 'homosexual personality'. Hooker's *problem* was the widespread belief that a distinct pathological 'homosexual personality' – characterized by effeminacy, anal interests and aloofness – could be detected by responses to personality tests; principally the Rorschach test. The problem was created by the use of the Rorschach and other tests to detect heterosexual men who might 'malinger' as homosexual and so avoid active service during World War I (see Berube, 1990), uses of Rorschach tests to detect both gay men and lesbians in American prisons (see, for example, Freedman, 1998; Hegarty, 2003)), and the resulting *Diagnostic and Statistical Manual* informed by military protocols, codified homosexuality as a mental illness (see Grob, 1991). Several studies prior to Hooker's had posited that distinct responses to the Rorschach inkblots revealed homosexuality (see principally Wheeler, 1949).

Hooker (1957, 1958) drew on supportive contexts in 'mainstream' academia. These included NIMH funding, her status as a member of the faculty at the University of California Los Angeles, and her friendship with Rorschach expert Bruno Klopfer. However, Hooker *simultaneously* drew on support from gay organizations. Specifically, she capitalized on the interests of new organizations, such as the Mattachine Society, to improve public perceptions of homosexuality through participation in research (D'Emilio, 1983; Meeker, 2001). The knowledge that Hooker produced was circulated in both mainstream contexts through peer-reviewed publication (e.g. Hooker, 1957), and to the community she addressed through publication in the homophile publication *The Mattachine Review* (Anonymous, 1957). Here, the trenchant problem of simultaneously writing for a methodologically sceptical audience of psychologists, *and* a more general public was evident. Hooker's Rorschach work was widely cited in the later *intervention* to remove homosexuality from the DSM. However, Hooker later reflected that she also underestimated the degree to which radical protest would be necessary to bring about the depathologizing of homosexuality (Harrison & Schmiechen, 1992). Nevertheless the originality of her approach and conclusions, and the resulting enduring impact, can be traced to a willingness to look to allow psychological science to be

informed by the 'experiential authority' garnered through friendships with gay men and lesbians, and familiarity with gay/lesbian cultures.

Case Study 2: Building partnership with the voluntary and community sector

Three public engagement events were organized by the BPS Psychology of Sexualities section. Reviews of the first two events have been previously described elsewhere (Hagger-Johnson et al., 2006; Shepperd & Hegarty, 2004). Evaluations from the first two events were used to identify ways to improve the process of organizing and delivering the third event, a one-day conference titled 'Building Partnership with the Voluntary Sector' held in Edinburgh in 2005. The events were otherwise supported by funding from a health promotion initiative called Healthy Gay Scotland and the BPS Publications & Communications Board and the Public Engagement with Psychology Group (PEPG), a funding initiative organized by aim of 'taking psychology to society.' While this phrase tacitly assumes that knowledge transfer is a one-way process, the Building Partnership event was purposively designed as bidirectional. We wanted to develop and strengthen partnerships between producers and users of LGBT psychology. The central problem facing delegates was the lack of partnership work between LGBT psychology and the VCS organisations in the UK, and the relevant knowledge was the work being produced in UK LGBT psychology at this time (Clarke & Peel, 2007; Coyle & Kitzinger, 2002). Users reported that they had found LGBT psychology inaccessible and/or difficult to understand at previous events (Hagger-Johnson et al., 2006). However, as participants from VCS organisations were increasingly required to justify their work with an evidence base, non-engagement with academics was not a viable option. Two interventions followed; the dissemination of the 'Getting it Right' research guidelines for LGBT research (Kandirikirira, 2005) and an LGB research database, both aimed at link the producers and users of research in Scotland.

Example 3: Bisexual communities and psychology research

Our third example is the ongoing engagement between bisexual communities and academic research in the UK which began in 2003. It became clear that the UK bisexual community would benefit from systematic applied research given that several reports had found bisexual

people to be at greater risk of mental health problems than their heterosexual, lesbian or gay counterparts (King & McKeown, 2003). It was also clear that both applied and academic psychology would benefit from a more thorough understanding of bisexual identity and experience, given that this was largely invisible within mainstream psychological research and teaching (Barker, 2010). Such an exploration had broader implications for psychological understandings of sexuality since these mostly rested on a dichotomous view of sexual identity, which asserts that people are either homosexual or heterosexual (Barker & Langdridge, 2008). Bringing these bidirectional needs together, the invisibility of bisexuality in academic and popular understandings has been strongly linked to the levels of distress in this group (Jorm, Korten, Rodgers, Jacomb, & Christensen, 2002). Following from such observations, a small group of academics, led by two psychologists, started a group called 'BiUK' (www.biuk.org). The group's work included setting up an e-mail discussion group for bi research, bringing together academics with shared research interests and producing a series of research studies. Crucially, the work was designed to engaged directly with the bi community by conducting research at formal UK events (such as the annual BiCon and BiFest) including large surveys and a number of qualitative studies, as well as examining bi activist literature (Bowes-Catton, 2007). Research was disseminated in a number of publications, particularly targeted at the international *Journal of Bisexuality* (e.g. Barker, Bowes-Catton, Iantaffi, Cassidy, & Brewer, 2008). In order to be considered bidirectional, it was considered imperative that such research was also fed back to bi community members at their events as well as through the regular newsletter 'Bi Community News' and on bi websites and blogs. The project led to the inclusion of a page about bisexuality on the Stonewall website (which previously had not included any such information). The members of the group also drew on the research in developing training and policy for those working therapeutically with bi people (Shaw et al., 2009). Finally, the work of the group will culminate, in 2010, with the second BiReCon conference: an international event linked to the annual community BiCon event.

Example 4: Transgender sexualities research

Our fourth example is a piece of *participatory research* designed specifically to resolve some of the problems within much transgender (hereafter, trans) research (Hines, 2010). The research focused on trans peoples' experiences of their sexuality. Previous research had

tended to adopt a deficit approach, conducting research 'on' rather than 'with' trans people (Antoszewski, 2007). Both the quantitative and qualitative methods adopted had tended to assume certain understandings of trans and sexuality (for example, surgical outcomes studies such as (Smith, Van Goozen, Kuiper, & Cohen-Kettenis, 2005).

In order to ensure that the research was maximally bidirectional, the research began by involving trans community groups in order to ensure that the central 'problem' was identified by the end users. Clearly any research and theory in this area needs to be particularly sensitive to concerned communities, given the continued pathologisation and marginalisation of trans within society and high levels of transphobia and resultant violence (Lombardi, Wilchins, Priesing, & Malouf, 2001). Once the nature of the problem had been agreed, the design and methodology were chosen on the basis of minimising the potential to impose extant theory on the data. This was achieved by developing phenomenological methodologies and employing researcher reflexivity throughout (Langdridge, 2007b) as well as ensuring researcher familiarity with all relevant literature and media rather than just academic or medical materials on this topic (e.g. current media discourse and autobiographical accounts on trans). Methods were used which were already familiar to the participant community (online questionnaires and the use of personal blogs, (Whittle, 1996). During analysis as much attention was paid to diversity as to consistency within the data. The analyses were all checked back with the participants themselves to make sure that they were an accurate reflection of their reported experiences (and revised if not). In addition to academic publications (currently in preparation) on the basis of this research, it has been fed back to the relevant community groups and used as the basis of guidance on clinical practice (Richards, Barker, Langdridge & Lenihan, in preparation). The methodologies employed have been fed back to psychologists and other academics working with community groups in similar ways (M. Barker et al., 2008; Bowes-Catton, 2007). Due to the methodology employed, the material resulting from this study revealed genuinely new information about the diversity of ways in which trans people experience their sexuality over time, particularly in relation to embodied experience and ways in which conventional sexual scripts are resisted or embraced. The implications of this have been fed back to both specific gender identity clinics and therapists working with trans clients, and will be presented to the World Professional Association of Transgender Health in 2011.

In summary, whereas psychological research had traditionally adopted a pathologizing stance toward bisexuality, trans, homosexuality, the recent history of LGBT psychology shows that public engagement, knowledge transfer and alternatives and can help maximize impact validity.

Discussion

Public engagement is an important part of the knowledge transfer process, and can help maximize impact validity. The Ward el al. (2009) model of knowledge transfer provides a useful framework for understanding how the producers and users of social research might work together. LGBT psychology has long adopted this kind of approach, although not consistently. For example, issues of compatibility also arose when the BPS Lesbian & Gay Psychology Section ran its public engagement events. Quite rightly, VCS groups questioned why bisexuality and transgender were excluded from the Section name (Hagger-Johnson et al., 2006). And others questioned the othering of LGBTQ identities through the exclusion of heterosexuality as an object of study (Richards, et al. 2008). The Section was renamed as the Psychology of Sexualities section, for these reasons and to ensure inclusiveness. A change of name is a relatively minor policy change, but an important example of why it is important to consider the values of the intended end users of research. Had LGBT psychology continued to call itself 'lesbian and gay', it would have seemed out of touch and exclusionary to many concerned communities.

Bidirectional models of knowledge transfer do not resolve all of the potential problems which arise when engaging with the public(s). Except perhaps where 'knowledge brokers' exist, to translate the research findings into an accessible language, users may not have the necessary expertise to evaluate the credibility of the research findings themselves. For this and other reasons, several commentators have encouraged academics to write two versions of their results – once for peer review, and once for a lay audience. This still leaves other problems, particularly the perceived relevance of a research study to the end users. Answering research questions properly takes time and may involve several pilot studies. Pilot or exploratory work may have no benefit to the end users, nor to the research participants. Participants may

assume that their participation is going to have immediate benefit to their community – often there is none, at least not immediately. Another limitation to public engagement is that not all end users believe that they should base their decisions on research evidence. Instead, users can select the research findings which they find useful (Hagger-Johnson et al., 2006), and downplay findings which they find objectionable for a variety of reasons.

The history of psychology contains several examples of knowledge transfer activities. Generally, academic psychologists have tended not to engage with the public, however, the popular psychology movement was arguably an early and successful attempt at public engagement. Beginning with the publication of Smiles' (1859, cited in Ludy, 2009) book 'Self Help' and continuing after the First World War, this movement was British psychology's 'public counterpart', since there was very little public engagement work undertaken by professional psychologists at the time (Ludy, 2009). Indeed, tension existed between the British Psychological Society (BPS), who commissioned a report into 'these clubs' in the 1950s, and popular psychology (Ludy, 2009). The popular psychology movement has remained largely separate from academic/professional psychology and has made academics uneasy, perhaps reflecting unease about the nature of expertise.

The role of expertise in knowledge transfer is perhaps least resolved. Although the SEE model proposed by Collins & Evans (2002) is useful for describing different kinds of expertise that the public may possess, it provides little practical guidance on how to approach, consult or involve the public in the research process. Neither does it question the extent to which expertise is constructed and may be dependent on the context. For example, what counts as technical may be contingent on the topic and other factors (Kerr et al., 2007). It does not offer simple advice on what to do if the views expressed by people we engaged with are, essentially, wrong. However, social scientists are increasingly required to recognize lay expertise. The shift toward greater patient and public involvement (PPI) in research (Rutter, Manley, Weaver, Crawford, & Fulop, 2004) means that potential users, and the wider public, are often involved in the research process from its outset, including assisting with the writing of grant proposals. In the UK, The trend towards involving patients in [mostly health] research has resulted in a set of useful guidelines and resources for researchers (INVOLVE, 2009). Jasanoff (2003) has argued that 'the most powerful argument for wider lay

participation in expert decision-making is not that the public possesses some mysterious reservoir of lay expertise that is equal to the knowledge of scientists' but that 'in democratic societies is that all decisions should be as far as possible public; it is the exceptions that require justification' (p. 397).

When involving LGBT communities, researchers may need to consider the right of involved persons and participants to know what the research data will be used for. LGBT people might be suspicious of psychiatric research into their mental health, given the history of work in this area. Even when participants are fully involved in the research process, little discussion has occurred in academic circles about what to do if the users do not 'like' the findings. Research often produces conclusions which users may not 'like'. This is not simply an issue about withholding the true nature of a study until the end, when participants can be 'debriefed' according to ethical guidelines. Research will on occasion produce conclusions that can stigmatize minority groups. End users and participants need to know that there is potential for stigma and misuse of the findings with users from the outset. For example, do users appreciate that higher rates of substance misuse by LGBT people could be cited as evidence for health inequalities, but also as evidence of psychopathology? When LGBT people become involved in the design of research itself, they too must accept the potential for results which stigmatize the very communities they may belong to. The nature of research is that it produces results which can be used for beneficial or objectionable purposes. Participating in research is an opportunity to help harvest its benefits, but also to share in its risks:

> 'we must resist pressures, both within and outside GLBT communities, not to ask certain questions about certain people, or not to report findings that some consider embarrassing, threatening, or dangerous to the general well-being of GLBT populations. And we must accept rational findings from carefully designed and executed studies that do not support dominant views' (Meezan & Martin, 2003, p.13)

Being explicit about the social and political change which the study seeks to support, is unlikely to provide a simple solution. We could insist that 'impact validity statements' are added to Participant Information Sheets and consent forms, but merely informing communities of our intentions is not sufficient. As the Ward et al. (2009) model implies, dialogue must occur throughout the research process, including post-dissemination.

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Figure 1

The Ward et al. model of knowledge transfer
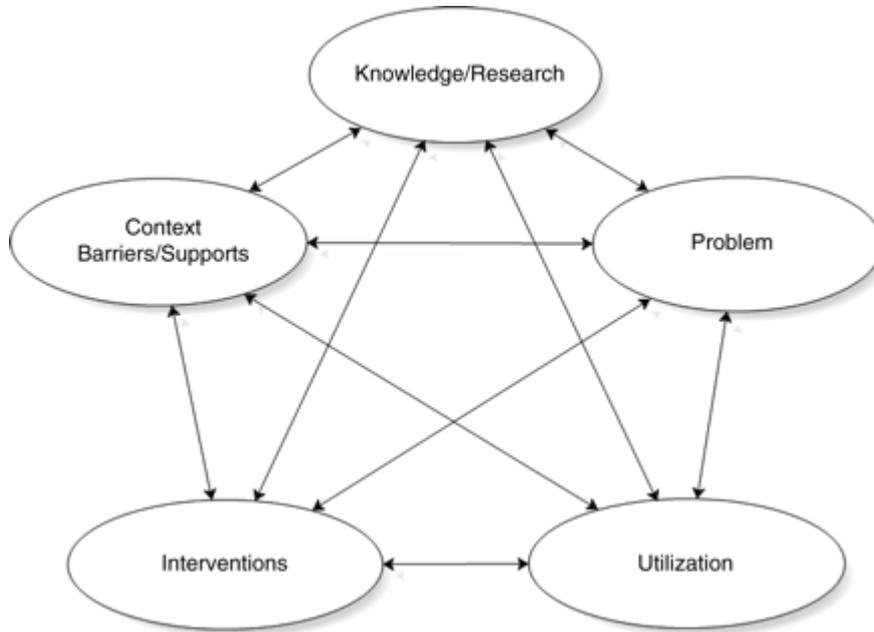
Note. Reproduced from Ward, House & Hamer (2000a), permission pending