

Using Grey Literature in the Human Services: Perspectives of Australian Research End Users

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Abstract

Human services workers need up-to-date, quality research to inform their work in practice, management, education, policy, and advocacy. While some research end users read peer-reviewed journal articles, many also rely on research-based grey literature in the form of print and online materials, which may not be subject to scholarly peer review. This may include commissioned research reports, conference papers, policy documents, and research summaries. The aim of this study was to understand how research end users accessed research knowledge and the benefits and challenges related to different knowledge sources, including grey literature. Semi-structured interviews were conducted with 43 research end users in child protection, disability, and aged care services. Participants indicated that they used an array of grey literature for reasons such as difficulties accessing academic journals, wanting to read more digestible research, and to source lived experience or culturally appropriate knowledge. Grey literature provides a valuable source of research knowledge, but uncertainty about its quality means research end users should be mindful of its limitations. Producers of grey literature should ensure that it distils messages for policy, practice, and the delivery of human services based on sound research.

Keywords: *Grey literature; Social work research; Research engagement; Research impact*

Introduction

Funders, providers, and users of human services expect practitioners to use research to inform their work. However, there are both conceptual and practical obstacles to accessing research knowledge—particularly that produced by academics. Conceptually, research publications may not always be oriented to policy and practitioner audiences, and it can be difficult to translate the findings and conclusions into real world situations. Practically, peer-reviewed journal articles can often only be accessed via institutional or individual journal subscriptions or via a paywall on publishers' sites, making them relatively inaccessible to staff from many nongovernment and even government agencies. This means that many “end users” of research have to source their research knowledge from other, more accessible means. One such source is “grey literature”, which comprises a range of documents that are freely available, both in print and online. For example, an Australian study identified that grey literature comprised 60% of the research material that policy workers used to inform their work (Lawrence, Thomas, Houghton, & Weldon, 2015). While not all grey literature pertains to research, much of it is research-based and in some cases, such as commissioned research reports, is a precursor to academic journal articles that have taken some years to be developed and published.

An authoritative definition of grey literature was developed at the Third International Conference on Grey Literature in Luxembourg in 1997 and subsequently expanded on:

Grey literature stands for manifold document types produced on all levels of government, academics, business and industry in print and electronic formats that are protected by intellectual property rights, of sufficient quality to be collected and preserved by libraries and institutional repositories, but not controlled by commercial publishers; i.e. where publishing is not the primary activity of the producing body. (Schopf, 2010, p. 17)

Thus, grey literature is, definitively, not that which is published by commercial academic publishing companies. Examples of research-based grey literature include commissioned research reports, theses, conference presentations and papers, program evaluations, government statistical reports, annual reports, discussion papers, working papers, briefings and guides, commentaries, and self-published books (e.g., Benzie, Premji, Hayden, & Serrett, 2006; Lawrence et al., 2015; Paez, 2017). Despite the Luxembourg definition, there remains debate over the boundaries of grey literature, and whether it encompasses blogs, social media, and online datasets. Adams et al. (2016) distinguish between three categories of grey material: grey literature (literature not controlled by commercial academic publishers), grey data (user-generated web content, such as social media), and grey information (unpublished notes, and personal communications such as emails that convey research messages). Typically, though, grey literature is publicly available (Benzies et al., 2006) through diverse channels of publication and distribution (Banks, 2006). Lawrence et al. (2015) state that:

... despite the lack of clarity around the term, grey literature still plays a useful role as a concept that draws together a range of document types and resources that are otherwise often invisible within the larger discourses of publishing, scholarly communication and the open-access movement. (pp. 230–231)

A key concern about research-based grey literature is quality: it is usually not subject to a formal peer-review process that applies with academic journals and books (Mering, 2018). Academic peer review—often when the author and reviewer are blinded to each other's identities (a double-blind review)—aims to provide credible content that meets scholarly standards and assures the level of quality a journal editorial board sets for the papers they publish (e.g., Mering, 2018, p. 238; Pappas & Williams, 2011, p. 229). Peer review provides a quality threshold for research consumers—meaning that they are potentially saved part of the effort of determining whether the material they are accessing is reputable and meets research standards appropriate for the discipline. Nonetheless, some grey literature may itself undergo rigorous review processes, such as independent examination of academic theses, or assessment of commissioned research reports by funding bodies or research advisory committees (Paez, 2017). Further, academic peer review does not always ensure quality. The quality of material accepted by journals varies widely with some journals setting relatively low bars. Errors in research may be missed in the review process, and there are many examples of subsequently discredited work being accepted for publication in peer-reviewed journals (Hopf, Krief, Mehta, & Matlin, 2019).

A commonly cited reason for accessing grey literature is the difficulty that research end users in government, nongovernment organisations, and industry have in accessing academic books and peer-reviewed journal articles due to their cost (Lawrence, 2017). Journal subscriptions and articles purchased directly from the publisher can be expensive, with individual subscriptions to social work journals costing between \$AU125–300 per volume and single articles costing around \$AU40–60. Similarly, many academic books—especially those on specialised topics and with limited print runs—can cost between \$AU100–200. As the cost of hard copy books increases, some publishers are moving more towards e-books, which may be sold as a whole or by chapter. Cost barriers are further being broken down to an extent via the open access movement, driven in part by funding bodies and governments (e.g., Australian Research Council, 2017; Research Excellence Framework, 2019) seeking to ensure that the products of their investment are publicly available. Open access is also promoted by academics (such as those who boycotted Elsevier in 2012) concerned about high costs and record profits in an era when other publishing companies have struggled to survive (Delamothe, 2012).

Gold open access means that journals allow authors (or their funding bodies or employers) to choose to pay for their article to be made freely available. In the case of open access journals, all articles are freely available, and an author fee is charged for every article published. Green open access means that a pre-publication copy can be uploaded into an institutional repository or a site such as ResearchGate. All types of open access articles are subject to the usual journal peer-review process, but if accepted, payment of open access fees makes articles accessible to non-subscribers. Some book publishers also allow pre-publication copies of chapters to be made available via green open access. However, despite more articles being made available through this means, the majority of scientific (Piwowar et al., 2018) and social work (Pendell, 2018) research articles do not appear to be available via open access. A random sample of 638 articles from the top 25 social work journals revealed that about 48% of articles were available via

some method of open access (Pendell, 2018). Detractors of the open access movement (e.g., Beale, 2013) argue that it is a leftist movement opposed to profit-making companies, such as large commercial publishers. They also claim that it has led to the proliferation of predatory journals which have no academic standing either in the form of a reputable editorial board or peer review process, and publish almost any article for a fee (Yaffe, 2019).

Grey literature itself may not always be easily available. While the internet has significantly expanded its nature, range, volume and format (Mering, 2018), different search engines often yield different sets of results. This is a concern when relying on grey literature to underpin a comprehensive analysis and development of policy and practice (Godin, Stapleton, Kirkpatrick, Hanning, & Leatherdale, 2015). A further issue is the time and effort of wading through many web pages of items of indeterminate relevance and quality (Bellefontaine & Lee, 2014; Lawrence et al., 2015). Accessing grey literature may also be hindered by hyperlinks no longer connecting to the target page ("link rot"), different citations for an updated version, or content having since been published in a more traditional academic form (Adams et al., 2016; Mering, 2018).

Despite the concerns, some features of grey literature are appealing to both researchers and research end users. Compared to research in academic journals and books, grey literature may be more likely to report negative or non-significant research findings (e.g., a finding that an intervention did not provide the intended benefit to clients) (Adams, Hitomi, & Moody, 2017). The incorporation of this type of grey literature into systematic literature reviews and meta-analyses may help avoid publication bias (Adams et al., 2017). In this way, some grey literature may assist in providing a more balanced view of the research evidence in a particular field (Benzies et al., 2006; Paez, 2017). In social work, literature reviews have included grey literature, particularly commissioned research reports, because they add detail not available in journal articles even though they may lack methodological information usually found in articles (White, Marsland, & Manthorpe, 2016). Use of grey literature in reviews of this nature helps demonstrate the comprehensive search of all relevant materials required when mapping the terrain of a literature for the first time (Clark et al., 2014). The value of grey literature is further reinforced by Cochrane, a not-for-profit organisation involving a global network of health practitioners and researchers that produces systematic reviews and synthesised evidence to inform health decision-making. According to the *Cochrane Handbook*, any bias introduced by including grey literature in systematic reviews is outweighed by the bias of not including all relevant unpublished studies (McKenzie et al., 2019).

The academic standing and merit of grey literature as a source of research knowledge appears to be increasing. Gelfand and Lin (2013) argue that grey literature is becoming more evidence-based and more rigorously monitored, with its own taxonomies, and is being collected more systematically. For example, opengrey.eu facilitates searches of around 700,000 grey literature documents produced in Europe (Paez, 2017). GreyNet (greynet.org) acts both as a repository for grey literature and to promote dialogue, research, and awareness about grey literature via a journal, conferences, and other web-based resources (Pappas & Williams, 2011). In Australia,

the national research quality assessment exercise (Excellence in Research for Australia) accepts full refereed conference papers as research outputs, while research reports commissioned by external organisations (e.g., funding bodies) can be submitted individually or collectively (via a portfolio) as non-traditional research outputs. These are accompanied by a research statement that demonstrates how the research output classifies as research and verifies its significance and quality.

For professionals, there are other features of grey literature that make it attractive. As noted, an Australian study of 1,012 government and nongovernment workers reported that, on average, grey literature made up 60% of source material accessed for their work. For about a quarter of respondents it comprised 80% (Lawrence et al., 2015). These research end users valued grey literature because it is timely (i.e., available sooner than published research), offers a broad picture of what is available, provides a unique source of information on some topics, and differs from that found in academic journals (Lawrence et al., 2015, p. 236). In a related survey of 144 producers of grey literature, almost all reported that they do it to provide an evidence base and inform policy and practice, with 80% indicating a desire to translate knowledge for public use and increase public access to research (Lawrence et al., 2015, p. 237).

The readily accessible nature of grey literature compared to peer reviewed journal articles means it has become an important component of the research base needed to inform the human services, as well as public policy (Lawrence et al., 2015, p. 229). However, little is known about why research end users access this literature and what they see as its benefits and limitations. This study examined how research knowledge is accessed and used in human services organisations. The findings are drawn from an Australian Research Council Discovery project about the production, use, and impact of social work research (Tilbury, Hughes, Bigby, Fisher, & Vogel, 2017). The project has involved industry stakeholders as research participants, as well as convened a series of industry–academic forums in Queensland, New South Wales and Victoria and presented workshops and seminars at professional conferences. In the present paper, we pose the questions: how do social work research end users access research knowledge and what do they perceive to be the benefits and challenges related to different sources of knowledge, including grey literature?

Method

The study was a qualitative investigation of the perspectives of research end users in the human services sector. A research end user was defined as someone external to academia who may use, or benefit from, the outcomes of research (Hessles, Wardenaar, Boon, & Ploeg, 2014). Accordingly, participants were practitioners, policy makers in government and nongovernment settings, managers of human services organisations, and research coordinators who facilitate access to research knowledge and enable the transfer of this knowledge into practice, organisational, and policy settings. Participants were also located in peak bodies, which are organisations or associations that represent a group of member organisations within a particular industry or sector. The sample was purposive and drawn from three fields of human

services practice: child protection; ageing and aged care; and disability. These fields were selected because they are typical of the Australian human services sector: social workers and other qualified human services workers are important professional groups in these fields, but they are multi-disciplinary; comprised of a diverse qualified and non-qualified workforce; and services are delivered by a mix of government, nongovernment, and for-profit providers. Based on our knowledge of the fields and through internet searches, a contact list from government and nongovernment agencies was compiled. We aimed for a sample of people in strategic roles with some responsibility for ensuring their agency was research-informed. Invitations to participate were published in industry e-newsletters. Additionally, snowball sampling whereby an interviewee recommended another potential participant, expanded the sample.

Semi-structured interviews were conducted to explore participants' perspectives on their research knowledge and its impact in their field, how they access and use research in their work, and how they engage with researchers, including those based in universities. Research knowledge was defined as knowledge generated through a systematic process aiming to produce new findings; it is planned, based on original concepts, does not have preconceived outcomes, and leads to results that are transferable or replicable (Department of Education, 2020). The focus of this paper is on how research end users accessed different sources of research knowledge, including grey literature, and their perceptions of the benefits and challenges of accessing research knowledge in these ways. The interviews were conducted in person or via the telephone and the average duration was 40 minutes. The interview schedule was broad enough to generate detailed qualitative data while also ensuring some standardisation of questioning across all participants. Interviews were conducted by Author 2 and a Senior Research Associate.

The interviews were audio recorded and subsequently transcribed. The qualitative data were initially analysed by within-field coding to develop tentative categories. This identified a range of perspectives of engagement with research. Areas of conceptual agreement and disagreement were identified and classified in relation to participant type and field of practice. A constant comparative method was employed to refine emerging categories, determine their boundaries and refine themes and relationships between them (Charmaz, 2006). Ethics approval was granted by Griffith University and interviews were conducted between late 2017 and early 2019.

Findings

Types of research literature accessed

Journal articles. Research end users who participated in this study identified that they used multiple sources of knowledge to inform their practice, management, advocacy, or policy work. Accessing peer-reviewed journal articles was a priority for many participants. This was reported as easiest for those connected to universities through adjunct appointments or in their roles as field educators. Those in large organisations with libraries (e.g., government departments) reported that librarians sometimes conducted database searches on their behalf. Others indicated that they read the journals they could access via their professional

associations' websites, such as *Australian Social Work*, which is accessible to members of the Australian Association of Social Workers.

I peruse the *Australian Social Work* journal. It has improved a lot but is still dominated by academics. It would be good to have more academic/practitioner partnerships in research and publishing. (Manager, Government)

Grey literature. The vast majority of participants also reported relying heavily on grey literature for their research knowledge. Conference papers and presentations at seminars, workshops, symposia, forums, and webinars were commonly reported, as were guest presentations at staff meetings or training days. This included events focused on sharing research findings:

Research in the Round and sector discussions about research are helpful in sharing information. For example, [Name of Organisation] research dissemination forums. (Manager, Nongovernment Organisation)

Research reports, briefs, and newsletter items were widely drawn upon, often from peak body websites.

We are a member of [Name of Peak Body]. [It] is helping to translate research into practice. There are lots of small services in aged care. ... On a day to day basis, funding is stretched, so individual staff would not access research to inform their practice, but as an organisation we seek out research and information from our networks and bodies such as [Name of Peak Body]. (Manager, Nongovernment Organisation)

This kind of material is also made available by research centres including, but not limited to, those based in universities. For one research end user, Rapid Research Reviews produced by a peak body and guides for practitioners and service users were considered especially useful because:

Consumers can use these guides as a prop for conversations with service providers so that they are better informed. (Manager, Nongovernment Organisation)

Similarly, some participants reported accessing research and discussion papers, as well as the final reports, produced by government inquiries and Royal Commissions:

The biggest impact lately is the Royal Commission [into Institutional Responses to Child Sexual Abuse] in identifying what the root causes of institutionalised abuse are. This has led to movement in government and people taking notice. Why? The evidence is based on real stories. (Manager, Nongovernment Organisation)

Participants also referred to using personal relationships and communications to acquire research knowledge:

Our team members each track different fields—connections to uni researchers, invites to events, opportunistic things like conference attendances, and academics like [Name] act as a critical friend. (Research role, Nongovernment Organisation)

Accessing research, we draw on our networks and relationships with experts. They point us to papers or approaches. (Manager, Nongovernment Organisation)

Research end users employed by peak bodies played a significant role in promoting and disseminating research, in synthesising research into readable, accessible bulletins for their members, and in setting up research networks and events.

Our key purpose is to connect researchers to members for policy and practice ... [Name of Organisation] has links with 17 collaborative research centres with various unis ... Two main ways we use research are: one, a dissemination role where we inform people about webinars, annual conferences, special interest groups, newsletters, Facebook expert forums; and two, we influence policy and practice development, advocacy. We use research by being involved in inquiries, submissions, position papers. We run workshops to start conversations. (Research Role, Nongovernment Organisation)

Reasons for accessing grey literature

Lack of access to journals. Research end user participants reported diverse reasons for accessing grey literature. For many it was driven by an inability to access journals—either because it was too expensive to subscribe to a journal as an individual or to purchase a single article, or because they did not belong to a library that subscribed to relevant journals. As one commented, “the best research is behind a paywall” (Manager, Government). An inability to access online academic databases, such as Proquest, used to search for and link to articles was also cited as a factor in needing to draw on grey literature. Again, this was due to not being a member of a library that enabled free database access. Participants reported that lack of time and skills in searching for and making sense of the research in journal articles was a reason for turning to grey literature.

It’s hard for practitioners to access research—they lack time and access to databases. ... Workers in ageing are under resourced. There is little help to digest information. It is hard to read scholarly articles. There is more research out there than people are aware of. (Manager, Nongovernment Organisation)

A senior government participant reported that policy staff often used google searches rather than accessing databases, which they lacked the necessary research expertise to navigate.

Convenience. On the flip side, convenience and ease of access were cited as major reasons for accessing research reported in grey literature, such as reports from peak bodies and research centres:

This provides easy access to research. Unless research is on the website [of peak bodies] we don't get it. (Manager, Nongovernment Organisation)

Research centres and sites make research accessible, for example [Name of Research Centre]. We use this research to inform practice. ... [Name of Research Centre] research is current and readable. ... [It] is not too theoretical—the research is practical and accessible. (Research Role, Nongovernment Organisation)

A research manager in a nongovernment organisation explained that grey literature was presented in more suitable formats than academic publications:

Research needs to be packaged in a way that busy people can access. Packaged in a consumable way. Researchers need to design research with that end point in mind; to think about dissemination from the start. (Research Role, Nongovernment Organisation)

Peak body research end users described their role summarising and disseminating research briefs to their members, and directing them to relevant Australian and international research websites or organisations. A nongovernment manager said that in her organisation, in the absence of specialist research staff, senior practitioners were responsible for translating research in a way that staff could understand and apply.

Access to a different type of knowledge. There was a sense from many participants that grey literature provided a different perspective and, in some cases, access to a different type of knowledge than that found in traditional academic sources. For example, research reports produced internally could provide direct insight into an agency's operations and professional practices:

[Name of Organisation] conducts short research projects. The level of rigour is less than uni research, but we use online member surveys frequently to capture members' views ... There are different ways of knowing: research and practice knowledge are two ways. We don't generally have enough evidence of: Does social work "work"? Complementary sources of knowledge need to be valued equally—valued internally at management level and broadly within the sector. Many people are doers, not researchers. It's hard to bridge the two worlds. (Manager, Nongovernment Organisation)

Some participants reported that grey literature could produce more timely knowledge given the lengthy delays sometimes found with academic publishing.

Access to lived experience knowledge. Grey literature was also perceived as valuable when it incorporated the lived experience perspective of service users. Reports produced by research centres incorporating lived experience were noted especially.

In the disability space, people are doing inclusive research design; they are having impact. ... [Names of Research Centres] are involving people with lived experience. ... In ageing we need to push boundaries and ask: “How do we involve older people in design to have a voice?” (Policy and Programs, Nongovernment Organisation)

For one participant this was because “the knowledge base that’s most effective in advocacy is the lived experience of members” (Policy and Programs, Nongovernment Organisation). A government participant concurred, saying “Granular understanding of client groups is important” (Manager, Government).

Access to culturally appropriate knowledge. Along a similar vein, others were drawn to grey literature because some of this material is seen as more culturally appropriate than that published in commercial academic sources. Aboriginal and Torres Strait Islander research end users affirmed the value of practice wisdom and experience, as well as the significance of Aboriginal ways of knowing that may be reported in grey literature.

We saw what community-controlled research was around. We need to own and control our research. There is room for more research relevant to our field and our organisations. ... Practice can be dismissed if we do not have more research. Our ways of knowing, being, and doing need to be valued more, and backed by relevant research. (Policy and Programs, Nongovernment Organisation)

For some, this literature on culturally relevant research was essential because the non-Indigenous models in the academic literature were not necessarily transferable into Aboriginal and Torres Strait Islander contexts:

People’s experience of research has not been positive and that leads to apathy or reluctance if government has not taken any notice of it. Also when they get positive results for a program with another population so they want to apply it to us, for example [Name of Program] treatment in foster care. So what if it works in [Name of Non-Indigenous Organisation]? These things override common sense or advice from our community about what will work. [Name of Program] has numbers that make it look good to government, so they want to fund it even if we know it won’t work. (Manager, Nongovernment Organisation)

Valuing and improving grey literature

Some participants indicated that grey literature played a crucial role in facilitating access to research in a way that did not happen with traditional academic sources. For others it complemented and extended research reported in peer-reviewed journals, providing a broader

knowledge base. One participant's experiences in a regional area demonstrated the initiative and determined efforts that some made to access research. This practitioner set up professional networks to focus on research with special needs groups. She accessed professional journals through peak bodies and was routinely scanning for research reports. She commented:

Research gives me the confidence. It's what I base my practice on. I'm always looking for new research. I want to be up to date. Headlines will come out about a new breakthrough on dementia and immediately I will try and follow it up. (Policy and Programs, Nongovernment Organisation)

For some participants, grey literature was perceived to be more aligned with practice concerns than traditional academic literature. However, as a number of participants pointed out, it was peer-reviewed journal articles and associated metrics (e.g., citation counts) that were valued in academia.

I'm a practitioner and academic, a pracademic. There is not enough value placed on a publishing record in grey literature. ... I work with people who want to change systems ... I like research that is applied in practice readily. (Policy and Programs, Nongovernment Organisation)

While valuing the contribution of grey literature, many participants also identified ways it could be improved. Notwithstanding perceptions that grey literature was more practice focused than other literature, a key concern was improving its quality so that practitioners could easily translate the findings and conclusions into their work.

Translation, translation, translation. There needs to be more effort by researchers into translation of research findings into practice. Staff in NGOs don't have time to seek out research. Organisations like [Name] play a role in dissemination and translation of research—there needs to be more of this with researchers and organisations working in partnership. (Research Role, Nongovernment Organisation)

It was claimed that, while many researchers had a strong value base and a commitment to improving policy and service delivery, many research reports were dense and relatively inaccessible. One research end user stated:

To distil key things takes a great deal of work ... that's a pity ... there's rigour ... but they need a good editor. Organisations need more people to translate research into action. (Policy and Programs, Nongovernment Organisation)

Research end users were also interested to ensure that service users and carers accessed and contributed actively to research reported on in grey literature. Similarly, some stressed the need for service users to access more research literature so that they could make more informed decisions about their needs and care.

Broadly, participants agreed that more investment was needed in research and its translation into diverse and accessible formats to assist research end users access and use this knowledge in their work. They stressed the need for more intermediary initiatives, such as clearinghouses that synthesised and disseminated research evidence, to be established to increase the production of high-quality, accessible, research-based grey literature.

The real point of difference in Australian versus international research [in the disability sector] is the knowledge vocalisation. In Australia we lack the infrastructure to mobilise the best available research to research end users. Other sectors such as housing, health, children's services have research centres of national significance, for example, [Name of Research Centre]. SCIE in the UK is a good model ...We lack funded research bodies to bridge the gap between research and practice. (Manager, Nongovernment Organisation)

One participant's comments captured the overarching concern of many: "it is difficult to know what research is available and how we can access it" (Manager, Nongovernment Organisation).

Discussion

Research end user participants in our study reported that they valued grey literature and drew on it in their work for diverse reasons. For some, it was more accessible than peer-reviewed journal articles, and for others it provided access to a different type of knowledge than is found in peer-reviewed papers. This included grey literature generated internally within an organisation (e.g., a report on an internal evaluation project) and which would be directly aligned with the needs of staff in that agency. There was a sense from some participants that grey literature was more likely than academic peer-reviewed journals to contain knowledge of service users' lived experience or more culturally appropriate knowledge. This was particularly the case when the literature was generated by an Aboriginal and Torres Strait Islander community-controlled organisation and where compliance with appropriate community protocols had been demonstrated.

This last point is important in the context of the ongoing impact of colonisation in contemporary Australia (Green & Bennett, 2018) and the need to value Aboriginal and Torres Strait Islander people's ways of knowing and researching (Laycock, 2011). Broadly, it is recognised that a substantial amount of Aboriginal and Torres Strait Islander research is published in grey literature (McCalman et al., 2014). According to Bat and Shore (2013), grey literature can provide access to knowledge that exists outside of, or is routinely negated by, colonial knowledge-making practices. Their study, which involved a review of grey literature on remote Aboriginal teacher education, brought to the fore Aboriginal perspectives that were missing or misunderstood from the academic and policy literature on the topic. Similarly, a review of Aboriginal youth development programs in Central Australia identified key elements of successful programs from a body of grey literature given the lack of formally published material (Lopes, Flouris, & Lindeman, 2013).

Research presented in grey literature is not necessarily of lower quality or less rigorous than commercially published academic material, but caution should be exercised if relying it as a source of knowledge. Much of it is not subject to independent review or examination prior to publication and may not have adhered to ethical research practice. The processes of data collection, analysis and ethics approval may not be reported, as they are in scholarly publications. Therefore, research end users must use their own judgement in searching for and assessing the quality and suitability of the material for their work. Skills for appraising research with respect to authority, accuracy, quality, credibility, validity, comprehensiveness, or representativeness of results may be required (Benzies et al., 2006; Mahood, Van Eerd, & Irwin, 2014; Pappas & Williams, 2011). Tools to appraise research quality may be used to good effect, including the Critical Appraisal Skills Programme (CASP) (casp-uk.net), which has produced a range of checklists for different types of research designs, including qualitative studies. Another approach is more reflexive and iterative in that the research end user continues to search for new literature alongside the interpretation and application of the literature for their work. They may do this until no new insights are generated (saturation). This is similar to the hermeneutic approach to searching and reviewing literature outlined by Boell and Cecez-Kecmanovic (2014). These different approaches to searching for, assessing and distilling the research knowledge from grey literature may support evidence-based, research-informed and critically reflective approaches to human services practice. This is vital to ensure policy and practice are guided by high-quality research, regardless of its publication platform.

As indicated by some participants in our study, not all research end users have the time or the capability to appraise the quality of research presented in grey literature and to distil its findings as relevant for their work. There seems to be scope for further refinement of the research-based grey literature so that it is even more accessible and transferable for research end users. Our participants indicated that such material needed to be readable, with the evidence weighed clearly, and implications for practice outlined well. Otherwise there is a risk of relying on research that we agree with, rather than the best evidence. The role of peak bodies in Australia was particularly noted and it was evident that they used a range of communication strategies—producing multiple forms of grey literature or grey information (Adams et al., 2016)—to convey the messages from research. In the context of the busy lives of human services practitioners and managers, it is important not to dismiss verbal communication of research via training programs, workshops, seminars, webinars and personal communication.

While participants in this study drew extensively on grey literature for their research knowledge, it was clear that they also continued to value research published in academic, peer-reviewed journals. Thus, there is an ongoing need to ensure that journal articles can be accessed by social workers in a range of organisations. One way to do this is to expand open access so that social work knowledge is freely available to all those with an internet connection. However, it is notable that there are no fully open access social work journals listed by Scimago in the top quartile (Q1) of journals ranked according to the Scimago indicator of journal prestige. And, as noted earlier, the majority of social work articles do not appear to be available via open

access (Pendell, 2018). There will continue to be a need for research knowledge to be made available in a range of formats including in grey literature.

There were some limitations to this study. While we sought to target a broad range of research end users for the sample, the study did not include service users or clients, who may be considered the ultimate research end users. A more focused study on their experience of being on the receiving end of research knowledge would be valuable. The sample included those with some knowledge about research and its usefulness for their work and thus did not capture the views of those who are less research-literate or who are antithetical to research. While we focused on three large and diverse fields of human services practice (disability, child protection and aged care) it is possible that the experiences of research end users in other fields (e.g., mental health, refugee services, housing services) may be different from those who participated in our study. Future research may examine in more depth, possibly via a case study design, how easily and effectively research end users translate findings from different types of grey literature (e.g., a research brief generated by a peak body versus a commissioned report from a research centre). Further research is also warranted on the specific value grey literature may provide of lived experience or culturally appropriate research knowledge.

Conclusion

In this study, research end users identified a range of ways in which they engage with research and access research knowledge for their work. While they continued to value commercially produced academic publications—such as peer-reviewed journal articles—they also reported drawing on research reported in grey literature. This included material such as commissioned reports, research briefs and reports on research in newsletters, particularly those produced by peak bodies and research centres. Participants also drew heavily on personal communications with researchers, as well as on training, seminars and workshops, to access research knowledge. Many relied on grey literature because they had difficulty accessing books and journal articles, while others used it because grey literature reported research that was more relevant or transferable into their work than that presented in commercial academic sources. Some research end users noted, in particular, that grey literature provides access to more lived experience and culturally appropriate research than other sources, although particularly in the former there is no empirical evidence to support this proposition. Because grey literature is a valued source of research knowledge both for human services workers and for the academic research community, it is important that research end users have the skills to assess its quality and the strength of the evidence reported.

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