Position statement

Evidence-based practice and practice-based evidence in psychology

June 2022 | Australian Psychological Society
Contributors

Division of Psychological Research, Education and Training (DPRET) initiated Expert Working Group members:

Prof Simon Crowe PhD Hon FAPS (Chair)
Dr Joanna Alexi PhD
Prof David Badcock DPhil FAPS
A/Prof Dawn Darlaston-Jones PhD FAPS
Dr Kate Derry PhD
Prof Patricia Dudgeon PhD FAPS
Dr Paul Gray DPhil
Miss Tanja Hirvonen MPych (Clin) MAPS
Dr Shraddha Kashyap PhD
Prof Kimberley Norris PhD (Clin) MAPS
Miss Belle Selkirk MPych (Clin)
Table of contents

Background to and purpose of the statement ............................................................... 4
  Historical context ........................................................................................................ 8
Defining expertise .......................................................................................................... 9
Understanding the characteristics of those receiving psychological services .......... 11
The benefits of applying evidence-based practice ...................................................... 13
  Benefits to clients ........................................................................................................ 13
  Benefits to practitioners ............................................................................................. 13
  Benefits to organisations ........................................................................................... 14
The implementation of evidence-based practice ....................................................... 15
The implementation of practice-based evidence ......................................................... 18
Implementation principles of practice-based evidence .............................................. 22
Identifying and addressing barriers to implementing PBE and EBP ....................... 23
  Barriers at the practitioner level ............................................................................... 23
  Barriers at the organisational level .......................................................................... 24
Knowledge and skill development .............................................................................. 26
Resources .................................................................................................................... 27
  Resources to support practice-based evidence ....................................................... 27
  Resources to support evidence-based practice ....................................................... 27
Glossary ....................................................................................................................... 28
References .................................................................................................................. 29
Background to and purpose of the statement

Decision-making in all areas of psychological activity should be based on the best available, most current, and most relevant psychological evidence. This determination does not occur in a vacuum however, so the evidence employed needs to be specific to the purpose intended as well as serving the interests and values of those affected by these decisions (APA, 2006; Barkham & Mellor-Clark, 2003; Dawes et al., 2005; Dudgeon et al., 2021). This determination process should also recognise that the opportunity to develop evidence is not equally distributed across society. While the existing evidence across psychology reflects the product of scientific endeavour over many generations, it also reflects social systems of power, with various groups privileged or excluded from access to key resources and institutions through which knowledge and evidence may be gathered and constructed. These elements must all be taken into account in order to ground the practice of psychology on a strong foundation of evidence.

The aim of this paper is to suggest principles to guide evidence-informed decision making for all forms of psychological work. This includes the work of clinicians, academics, educators and researchers. We address this issue from two equally valuable and worthy perspectives; evidence-based practice (EBP), which relies heavily on published work often based on the outcomes of experiments and tightly-controlled laboratory procedures and practice-based evidence (PBE), which explicitly recognises that not all important information has been published and instead looks to use information gleaned from practical procedures that produce beneficial outcomes in applied settings. Dudgeon and colleagues (2021) refer to practice-based evidence as requiring;

“…a process of systematic, continual refinement of the evidence base for a program or complex intervention through rigorous gathering and continual testing of evidence” (p. 6)

The philosophical roots of these approaches differ. EBP arose from a positivist-based philosophy of objectivism while PBE developed from a constructionist-based philosophy of science.

Psychology is a science, and all forms of acceptable practice are informed and sustained by the available research evidence. Australian registered psychological practitioners and all other Australian Psychological Society (APS) members are required to adhere to the APS Code of Ethics, which has at its foundations two principal tenets, nonmaleficence (to do no harm) and beneficence (to do good) (APS, 2007). It should, of course be recognised that the definitions of harm and good may vary across individuals and target groups, whether they be businesses or cultural groups, for example.

1 A glossary is provided on page 28.
2 The term “practitioner” is used in this document to refer to psychology-trained professionals, including for example, clinicians, academics, educators and researchers.
Psychologists thus face three ethical imperatives. First, to identify and implement the most appropriate evidence-informed psychological practice for person’s and groups as guided by current research (Blease, 2016; O’Donohue & Henderson, 1999), second, to be accountable and transparent in their psychological work (Acierno, et al., 1996; Mathews, 2016), and third, to engage in a genuine collaborative consent process (APS Code of Ethics, APS, 2007) with those for and with whom they work.

Many psychologists and psychological scientists have argued that the dominant discourse in psychology has evolved to privilege a definition of science and evidence that originally emerged from the physical sciences (i.e., empiricism), and this, at times, can devalue constructionist approaches (Darlaston-Jones, 2005, 2007; Riggs, 2004; Padgett, 2004). The most productive path forward is to consider the broad array of evidence that might arise from both traditions.

One major concern with regard to the breadth and applicability of the available evidence base comes from recognising that the published literature reflects a bias in its origin, with the vast majority of psychological research reflecting Western, educated, industrialised, rich and democratic populations (Arnett, 2008; Dudgeon et al, 2020; Howard, 2015; Moreton-Robinson & Walker, 2009; Rigney, 1999, 2001). Thus, most psychological theory, evidence, and practice guidance arises from information gathered predominately by researchers and participants from these groups. This makes it likely that the literature reflects Western cultural constructions of knowledge more than those which might arise from the majority world. Similarly, this undermines the generalisability of evidence of impact for psychological interventions regarding their use with other populations and can mean that inappropriate procedures are applied because the evidence base is not directly relevant to those other populations. It is critical that when considering the available evidence base that attention is paid to likely gaps in the evidence base and to the potential implications of those gaps. This leads naturally to a need for a broader array of evidence to be brought to bear when analysing a situation and in considering how to apply psychological practice to address a question or deliver a therapy particularly when working with populations that do not match this common bias.

This paper acknowledges the importance of an inclusive approach to the selection of evidence, one that is increasingly reflected in current practice across the globe. It recognises that knowledge can be gleaned from sources beyond the laboratory. This knowledge may include cultural traditions and beliefs in addition to community-based qualitative data. Similarly, there has been recognition from the constructionist philosophy of science that prior knowledge and expectations will significantly impact current behaviour (Cruickshank, 2012; Gergen, 1999, Newman, 2017). This is reflected in Bayesian statistical approaches which explicitly incorporate prior knowledge in the modelling of decision making. Prior knowledge comes from the individual experiences of the observer and the nature of the physical and/or social world within which they interact. These models allow for the possibility that each individual has a unique set of expectations which influence their current perspective (Breen & Darlaston-Jones, 2010; Darlaston-Jones, 2007). Recent attempts to formalise this position have been applied in many areas of psychological application (e.g., Adams, 2018; Diener et al., 2022; Gilbert et al., 2022; Kaye & Krystal, 2020; Kersten & Yuille, 2003; Pellicano & Burr, 2012), and different research methodologies are necessary and will continue to be developed to capture this complex interplay of social, cultural, economic, and political forces over time.

PBE more frequently encompasses environmental, community, social, and cultural factors that impact upon how people perceive and evaluate information (Dudgeon et al., 2021) than does EBP. This process allows for the client to be actively involved in the treatment decisions that will directly affect them (Dudgeon et al., 2021). This is now widely recommended for all research programs; for example, the NHMRC encourages the
inclusion of people with lived experience in all stages of project design and execution. PBE has been recommended for research with Aboriginal and Torres Strait Islander peoples and other minority populations who can be marginalised by the dominant psychological perspectives and practices (Dudgeon et al., 2021). In this paper we provide some specific examples of PBE based on a constructionist approach as it relates to Aboriginal and Torres Strait Islander peoples, keeping in mind that this application is an example of how this approach might be applied to a variety of marginalised and minority populations in Australia. Of particular importance here is the positionality of Indigenous Standpoint Theory (IST) and Indigenous Knowledge Systems (IKSs). Indigenous Research Methodologies (IRM)s are positioned within Indigenous standpoints and draw from IKSs (see Dudgeon et al., 2020 for an example of a rigorous research paradigm developed by, and for, Aboriginal and Torres Strait Islander peoples).

Indigenous Standpoint Theory (IST) is a discursive enquiry into knowledge construction, specifically in how Aboriginal and Torres Strait Islander peoples exercise sovereignty regarding Indigenous ways of being (ontology), knowing (epistemology), and doing (axiology) (Moreton-Robinson, 2013). IST examines the role of power in how knowledge is formed and represented, and how historically this has been used to marginalise Aboriginal and Torres Strait Islander voices (Dudgeon et al., 2020). IST values the lived experience of Aboriginal and Torres Strait Islander peoples, including the collective consciousness, knowledge systems, politics, and history of Aboriginal and Torres Strait Islander peoples in Australia (Moreton-Robinson, 2013). In doing so, IST challenges the hegemony of Western epistemology so that Indigenous Knowledge Systems (IKS) are respected, prioritised, and restored (Dudgeon et al., 2020). IKS allows Indigenous peoples to establish an Indigenous evidence hierarchy to determine what constitutes quality research, culturally relevant evidence, and effective intervention from an Indigenous standpoint (Dudgeon et al., 2021). Ideally this approach should be adopted with all cultural groups to ensure optimal practice. Ultimately, it may be the case that these same procedures may work best for many groups, but it is not safe to make that assumption without further development of the evidence base. PBE is suited to assessing the efficacy of different procedures initially as it can more readily reflect the local cultural variations in the community.

Within the context of PBE, practice is informed by shared scientific evidence and the contribution of experience and the tacit, intuitive expertise that psychology practitioners bring to the evidence base (Innes & Morrison, 2021). In some areas of psychology what constitutes the best available quality research processes and methods differs for Indigenous and non-Indigenous communities (Harfield et al., 2020) and so this issue needs to be carefully considered in any practice.

The EBP approach places emphasis on propositions that can be verified (Goldenberg, 2006). EBP provides a way of reviewing and interpreting the scientific literature, including the use of a fixed hierarchy of research methods (Hjorland, 2011) based on scientific rigour, and the likelihood of replicability and generalisation. EBP refers to the broader practice principles of integrating available research based on the evidence hierarchy with the practitioner’s expertise (American Psychological Association, 2005). EBP is distinct from the use of empirically supported treatments (ESTs) which refer only to therapies (and other areas of psychological practice) shown to be efficacious in treating specific mental health disorders (Messer, 2004). Although EBP in psychology encompasses ESTs, EBP is not the delivery of any specific treatment or strategy, but rather the implementation of an EBP process (Rubin & Bellamy, 2012; Spring & Hitchcock, 2010).

EBP may not be equally applicable for all areas of psychological practice at particular points in time due to shortcomings in the evidence base. For example, current research based on the Western industrialised focussed evidence hierarchy may not be appropriate when working with Indigenous peoples globally or with other minority groups (Dudgeon et
It is inappropriate to assume that evidence gathered with one particular group (e.g., Western undergraduate students) would apply unilaterally to populations and cultures with whom that data has not been gathered, irrespective of how methodologically rigorous the original data collection appears to have been.

A particular issue is the lack of visibility of work with groups where large-scale studies are difficult, either because the population is small or the complexity of conducting the research is more substantial than current resourcing will allow. For instance, many innovative Aboriginal and Torres Strait Islander suicide prevention initiatives do not conform to the RCT model or are excluded from systematic reviews. The “evidence ceiling” perpetuates the exclusion of evidence in certain fields of psychological practice, due to a restrictive set of desirable methods and intolerance of ideological difference (Dudgeon et al., 2021).

It is clearly desirable to use all of the available evidence pertinent to the group for which the practice is intended. The challenge for the discipline is to ensure that there are avenues for such research to be presented. The challenge for the practitioner is to ensure that their knowledge encompasses all of the relevant evidence. In order to make decisions based on the best available evidence, practitioners must be aware of the value of both the PBE and EBP approaches and the strengths and limitations of each (Breen & Darlaston-Jones, 2010).

The APS’s position on this issue is that psychology training and work in the field of psychology needs to incorporate an understanding of both EBP and PBE. This understanding is relevant to all aspects of psychological practice, including but not limited to assessment, diagnosis, intervention, treatment, research, education, training, supervision, consultation, and across all settings in which psychology is practiced. Part of ensuring that we are following ethical principles of helping and not harming involves using the appropriate methodologies for the relevant context and in upholding an inclusive definition of science.
Evidence-based practice and practice-based evidence in psychology

Historical context

The influence of positivism

In the development of the discipline of psychology, the epistemologies and methodologies of the natural sciences were adopted to position psychology as a science (Breen & Darlaston, 2010). The foundations of modern psychology are almost exclusively White, Western and middle-class, in both the practitioners and the investigated groups, and these biases influenced psychology's orientation to becoming dominated by positivism (Darlaston-Jones, 2007; Dudgeon et al., 2020; Gergen et al., 1985). This bias presents a serious limitation when practitioners need to apply psychological knowledge to the rest of the global community. Without additional work we will not know how severe that limitation is but there are clear examples which demonstrate how problematic this issue can be (see Smith, 2021).

A model linking the science and practice of psychology has been present since the 1940s culminating in the advent of the scientist-practitioner model in the United States of America (USA), initially developed to increase rigor in the training of psychologists in response to increased demand for the profession in the post-World War II period (Baker & Benjamin 2000). In Australia, the scientist–practitioner model came to influence the teaching of psychology through the principles established by the APS for the accreditation of training programs. The first national conference on professional training of psychologists held in 1977 endorsed the scientist–professional model and declared that emphasis would be placed on both practical and theoretical training in the science and profession of psychology (O’Gorman, 2001).

Practice-based evidence development

While EBP has dominated the development of the discipline both internationally and in Australia, PBE also has a long history. Research based on PBE is linked to the largely unacknowledged history of health research with Indigenous peoples, including the impacts of colonisation (Dudgeon et al., 2010; Henry et al., 2004). However, the history of PBE predates colonisation and even positivism (Martin, 2012) and traditional knowledge has been used to seed the evidence base for EBP (Martin, 2012), as would be hoped if the discipline is to draw on all available sources of relevant evidence.

In the field of psychology, Indigenous psychology has emerged internationally to challenge colonial discourses that disregard Indigenous knowledge systems and disproportionately focus upon individual psychopathology (Cullen et al., 2020; Dudgeon et al., 2020). These approaches assert that the structural factors that impact on an individual's health need to be adequately considered when deciding how best to collect evidence and when choosing appropriate methods for implementing change. If structural factors are not actively considered, pre-existing power structures will persist, preventing substantive and sustainable change and entrenching inequities that contribute to the experiences of mental health or ill-health, not only for Aboriginal and Torres Strait Islander communities but also for the many cultural groups represented within Australia (Cullen et al., 2020).
Defining expertise

Consistent with the APS Code of Ethics (APS, 2007) as well as with the requirements for registration and accreditation (AHPRA, PsyBA), practitioners are required to practice within the boundaries of their professional competence and also have an obligation to assess the effectiveness and efficacy of their work. It is the responsibility of the practitioner to ensure that they engage in reading, training, and other forms of continuing professional development to maintain and improve their practice skills and competence.

In researching and critiquing the research evidence and forming a judgment regarding best practice, the psychology practitioner must also reflect on their own areas of competence in applying the chosen intervention, and to determine whether further education, training or supervision might be necessary to develop those skills, or whether onward referral to a more appropriate practitioner might be warranted. This includes the application of assessment tools, treatment approaches, or the supervision and assessment of psychology students (for example, Honours or Postgraduate research projects). Psychologists must reflect upon their competence and expertise in all of these processes, and seek further advice, supervision, and/or expertise where necessary.

One particularly important area of professional competence concerns a practitioner’s knowledge and application of cultural safety. A practitioner needs to be able to provide services within an appropriately safe cultural frame of reference. For example, this is important when working with Aboriginal and Torres Strait Islander individuals, families, and communities and in other unique populations, where the effectiveness of any intervention is influenced by how culturally responsive a clinician might be and how culturally safe the service environment is. The Psychology Board of Australia (2019) mandates that psychology registrars demonstrate understanding of how to work with clients from cultural backgrounds different from their own. In addition, supervisors approved by the Psychology Board of Australia are required to be culturally responsive in supervision (Psychology Board of Australia, 2018). These considerations also apply to anyone conducting research with Aboriginal and Torres Strait Islander individuals and communities. In Australia, cultural safety in professional practice has been defined by Aboriginal and Torres Strait Islander health national peak organisations (the National Health Leadership Forum) and the Australian Health Practitioner Regulation Agency (AHPRA), in consultation with the Australian Medical Council and the Medical Board of Australia as follows:

“Cultural safety is determined by Aboriginal and Torres Strait Islander individuals, families and communities. Culturally safe practise is the ongoing critical reflection of health practitioner knowledge, skills, attitudes, practising behaviours and power differentials in delivering safe, accessible and responsive healthcare free of racism”

AHPRA, 2021, Cultural Safety Definition section

Thus, it is essential for psychologists and psychological scientists to employ critical self-reflexivity not just in their practice but also in relation to the knowledge base of the discipline, and the methods employed to generate that evidence to determine the appropriateness (or otherwise) of that evidence. Cultural responsiveness therefore becomes the central point on the journey toward culturally safe practice whereby members of the
dominant group become aware of their own cultural identity and positionality in relation to the persons, groups, and communities with whom they are working.

An aim of this paper is to help practitioners find appropriate ways of working with the diverse range of clients of psychology services that they may encounter within their psychological work. Often practitioners, in a multi-cultural society like Australia, will work with people who live across two cultures, one at work and another at home. For example, for Aboriginal and Torres Strait Islander peoples, who often live in two very different cultural worlds, the profession of psychology needs to be able to understand mental health and wellbeing from more than one perspective to develop effective and efficacious interventions for all consumers. The Canadian Two-Eyed Seeing framework is an example of this dual-perspective approach (Martin, 2012; Wright et al., 2019). This approach represents one perspective; it is important to be aware that there are multiple perspectives and approaches across First Nations communities in Canada. The aim of this approach is to find the best of both worlds and to allow them both to sit together, where practitioners have the awareness that an intervention which was found to be effective or efficacious in one cultural context may not be so for another cultural context. This also requires an openness to understanding, adapting, and altering practice to fit the needs of the client, to be more effective with them, and to empower practitioners to deliver efficacious interventions. This may involve further education addressing which approaches and methodologies might be suitable for working with specific clients: education that may need to include the historical, social, and political contexts. The NHMRC (2018) guidelines encourage Australian psychologists to reflect on core values aligned with broadening one's perspective.
Understanding the characteristics of those receiving psychological services

When deciding on a course of action in psychological practice, extrapolating outcomes of research requires a judgment as to its applicability to the unique characteristics and circumstances of the individual client, group, or organisation receiving the practitioner’s service (Spring & Hitchcock, 2010). Characteristics of the client/group/organisation therefore are an important set of contextualising factors that need to be carefully considered (McPherson et al., 2020). For example, in clinical/therapeutic contexts relevant client attributes include individual variations in the presenting issue, needs, history of treatment response, motivation for change, values, culture, language proficiency, and personal preferences (Bernal et al., 2009; Krebs, 2018; McPherson et al., 2020; Norcross & Wampold, 2011; Sanetti et al., 2016; Steglitz, 2015; Swift, 2018; Windle et al., 2020). In implementing an intervention, some tailoring to the client’s characteristics (e.g., literacy level of materials) can often be implemented to enhance treatment applicability and acceptability, without undermining the fidelity of the core treatment elements that make a treatment effective (Sanetti et al., 2016; Spring & Hitchcock, 2010). Research has highlighted the importance of shared decision-making in the health care delivery process and the value of client input in selecting a preferred treatment approach. Engaging clients in decision-making increases equity within the client-practitioner relationship and is supported by research evidence, as including client preference is associated with improved outcomes and with decreased risk of dropout (Swift, 2018; Windle et al., 2020). In all research, education, and policy contexts the historical, political, economic, social, and cultural determinants of health come into play, since they often place limits on the range of intervention options which may be considered.

Practitioners must decide on whether an intervention is effective. There are many factors for practitioners to consider when making this determination. If the aim of any action is to improve the wellbeing of an individual/family/workplace/community, then the effectiveness of any form of psychological practice, is determined as perceived by the individuals receiving that intervention. For instance, if the concept of mental health differs among groups of people being provided with the same intervention, then measuring effectiveness (and efficacy) for all groups in the same way may not yield accurate information for all groups. For example, using a Western definition of mental health and research methodology to determine the effectiveness of a psychological intervention for Aboriginal and Torres Strait Islander peoples, might not tell us if the intervention is effective or efficacious, as Aboriginal and Torres Strait Islander peoples do not consider mental health as a concept that is separate or separable from the physical health of a person and the total wellbeing of their community. This holistic concept of health is described as social and emotional wellbeing (SEWB). To know whether an intervention is effective and has efficacy for Aboriginal and Torres Strait Islander peoples, we need to measure SEWB and any improvement or deterioration in SEWB following an intervention. To measure the effectiveness and efficacy of an intervention aimed at improving the SEWB for Aboriginal and Torres Strait Islander peoples for example, culturally appropriate methodologies and measures are imperative. It should also be noted that SEWB, can be beneficial and applicable to other groups beyond Aboriginal and Torres Strait Islander peoples. Issues of collective influence including the social determinants of health such as poverty, exclusion, underemployment, and lack of access to resources each impact the wellbeing of individuals, families, and communities regardless of ethnicity. Psychological scientists should consider the beneficial outcomes.
that can be achieved by utilising Indigenous knowledges and their applicability to other cultural groups.

Up to this point in time, there is a lack of adequate evidence demonstrating that empirically derived Western models of practice are effective and efficacious with Aboriginal and Torres Strait Islander peoples (see Ponturo & Kilcullen, 2021), as is the case with many other groups within the community (Adams & Miller, 2021). Further, some research has indicated that Western therapeutic approaches, such as the application of CBT, are less effective and can indeed be detrimental for Aboriginal and Torres Strait Islander peoples if not appropriately adapted (see Dudgeon & Kelly, 2014). A practice approach that prioritises evidence without considering these issues entrenches, rather than alleviates, inequality and injustice, and must be avoided.
The benefits of applying evidence-based practice

Benefits to clients

EBP benefits clients in several ways. Firstly, as EBP focuses on selecting the intervention with the greatest efficacy based on the best available evidence, it increases the chances of the client receiving thoroughly tested and validated interventions (Cook et al., 2017). Secondly, knowledge of the breadth of the evidence base provides a sound basis for informed decision-making (Blease et al., 2016, 2018; Drisko, 2021), and limits the possibility of exposure to untested, ineffective or potentially harmful approaches (Dodier, 2019; Fasce & Adrián-Ventura 2020; Lilienfeld, 2007, 2014), maximising the chances of achieving a beneficial outcome. EBP supports a collaborative consent process between the practitioner and the client/group. If engaging with a practitioner who is familiar with the evidence base for the issue in question and who is open to sharing that knowledge in the spirit of collaborative decision-making, the client/group is likely to be best informed as to the options available, the relative evidence in support of or in contravention of any intervention or approach (including those potentially put forward by the client), and is consequently better able to make an informed decision about engaging in the chosen approach (Blease et al., 2016; Cook et al, 2017). Practitioners have a responsibility to communicate transparently with clients about their knowledge of the evidence base and their options regarding treatments and interventions (APS, 2007; Cook, et al, 2017). As EBP takes into consideration as much as possible the specific qualities, characteristics, values, and preferences of the client, the client’s collaborative engagement with the intervention is more likely and the chance of dropout reduced (Windle et al., 2020).

Benefits to practitioners

Practitioners have a duty to be accountable and transparent (Mathews, 2016) and to acquire and apply accurate knowledge in their practice (Blease et al., 2016; Lilienfeld et al., 2014). Practitioners can commonly rely on intuition and clinical judgment to guide their decision-making (Gaudiano et al., 2011; Harvey et al., 2021, Shimokawa et al., 2010) and while these can be effectively integrated with an empirical approach (Wittman et al., 2012) particularly in generating and testing hypotheses (Salkovskis, 2002), they are not enough in and of themselves as they are prone to psychologist’s cognitive biases (Lilienfeld et al., 2013), such as the overestimation of benefits and client gains (see Gaudiano, 2011, Stewart et al., 2018, Shimokawa et al., 2010). Conversely, formalised decision-making processes that rely upon statistical evidence and base rates have been shown to overwhelmingly outperform clinical decision making alone (Dawes et al., 1989; Bowes et al., 2020).

Training in EBP enhances practitioner knowledge, skills, attitudes and clinical acumen, enhancing decision-making and critical appraisal skill and especially so when self-reflective practice is incorporated (Cook, 2017; Baker-Ericzén et al., 2015; Beidas & Kendall, 2010; Thomas et al., 2011). Training in EBP approaches ensures a breadth and depth of knowledge that increases understanding of contemporary practices, increasing the client’s choice of intervention and effectiveness in practice. Ongoing Continuing Professional Development (CPD) thus facilitates client change and positive outcomes (Cook, 2017; Monteiro et al., 2018, 2020).
For researchers, the use of EBP helps determine efficacy using a combination of statistical and research design tools and the ability to generalise and thereby develop more universal understanding (Alharahsheh & Pius, 2020; Diener et al., 2022). However, in all circumstances, EBP that is formulated using experimental methods are only applicable to those on whom the practice was developed and “normed”, and do not apply universally.

**Benefits to organisations**

Organisations may also benefit from applying EBP across all organisational levels, from evidence-based selection and recruitment, to supporting staff in their implementation of evidence-based practices in their day-to-day work (Briner 1998; Rousseau & Gunia, 2016). For example, using evidence-based selection techniques which use tests of specific aptitude or structured interviews relevant to the role, have demonstrated greater effectiveness than the use of unstructured interviews or intuition in predicting job performance (Highhouse, 2008). Organisations that implement EBP, such as in selection or safety training procedures, achieve outcomes that are superior to those observed before the implementation, or in comparison to organisations that conduct business as usual (Rynes & Bartunek; 2017), assuming those processes were not already optimal. Implementing EBP may also prove cost effective for organisations (Feliu-Soler et al., 2018; Sheidow et al., 2012), support accountability (Wandersman et al., 2016), and improve staff retention (Aarons et al. 2009a).

Supporting staff in utilising EBP enables practitioners and organisations to keep up to date with the accumulating evidence and abreast of shifting paradigms within psychological practice, leading to an expectation that continued refinement may be expected and allowing them to implement changes which keep them competitive (Rousseau, 2006). Finally, research suggests that with adequate support and resourcing to staff, introducing EBP can have a positive impact on staff psychological wellbeing by increasing their sense of personal mastery and efficacy (Kim et al., 2018) and maintaining work performance for those whose work is at risk of deteriorating (Briner, 1998).
The implementation of evidence-based practice

Finding the best evidence for a given context involves a 5-step process (Rubin & Bellamy, 2012; Spring & Hitchcock, 2010):

1. Defining the question (in conjunction with the target individual/group/organisation).
2. Conducting a thorough search of the literature and other sources of pertinent information, including literature specific to the individual, group or organisation's social and cultural orientation.
3. Critically appraising the quality of the literature, relevant gaps in the evidence base, and evidence arising from other sources including PBE.
4. Selecting an intervention, taking into consideration one's own expertise and competence at administering the practice, and the individual characteristics of the client, group, population or organisation receiving the service.
5. Evaluating outcomes following the practice and monitoring progress, adjusting approaches as indicated by the evaluation outcomes – ensuring that the broadest range of definitions of efficacy are applied. Ensuring outcomes are meaningful from the perspectives of the individual/group/organisation.

The process is cyclical, moving back and forth between these steps.

**Step 1. Constructing a search question**

The first step in this process is to develop a well-defined question to be answered by the research base (Norcross et al., 2008). To do so, one suggestion is to consider framing the question using the PICO method based around the following elements:

- **P  Patient:** population, or problem: how would I describe a group similar to my client?
- **I  Intervention:** which main intervention, prognostic factor or exposure am I considering?
- **C  Comparison:** what is the main alternative to compare with the intervention?
- **O  Outcome:** what can I hope to accomplish, measure, improve, or affect?

The PICO method is primarily a tool for collecting evidence from published quantitative research on the efficacy of therapies, but may be less well suited to other questions, such as aetiology, diagnosis and prognosis (Huang et al., 2006) or to contexts other than the clinical therapeutic domain.

To search for *qualitative studies* which may be more appropriate for answering questions around the real-life experiences, opinions, and processes of study participants, an extension of the PICO method yields more appropriate search results. Dubbed PICOS, the search strategy also includes the study type (S), increasing the chances of retrieving qualitative studies in the results (Methley et al., 2014).
Another method for searching qualitative literature dubbed “SPIDER” (Cooke et al., 2012), has been developed to reflect the elements characteristic of qualitative studies, yielding greater specificity of search results for qualitative studies:

- **S** Sample: qualitative research uses smaller samples, as findings are not intended to be generalised to the general population.
- **PI** Phenomenon of Interest: how and why certain experiences, behaviours and decisions occur (in contrast to the effectiveness of intervention).
- **D** Design: the theoretical framework and corresponding method, which influence the robustness of the analysis and findings.
- **E** Evaluation: may include more subjective outcomes (views, attitudes, perspectives, experiences, etc.).
- **R** Research type: qualitative, quantitative or mixed-methods.

Although these are tools to help formulate a search question, even informal, unstructured searches can yield comparable search results, and may be easier and more efficient for practitioners to use (Hoogendam et al., 2012). The challenge is to recognise gaps in the evidence base that may be critical to the question of interest. A thorough search will show what literature exists but as noted above, sometimes additional steps may be needed to access relevant knowledge. This may require discussion with experienced colleagues or members of target groups, if no pertinent work has been published.

### Step 2. Conducting the search

The second step of the EBP decision-making process is conducting a thorough evidence search (Yates, 2013). After formulating a search question, practitioners can refer to textbooks, articles from database searches, practice guidelines, and systematic reviews. Databases such as the Cochrane Database of Systematic Reviews can be a useful source of large-scale reviews. Books such as the APS “Evidence-based psychological interventions in the treatment of mental disorders: A literature review”, 4th edition (APS, 2018), which synthesises the current literature on a range of mental health disorders, would also be useful. The input from PBE approaches makes clear that it is desirable to expand this search to include consultation with target communities so that historic and structural factors that are pertinent to those groups can be incorporated or noted as missing.

### Step 3. Critically appraising the research literature

The third step of the decision-making process is critically appraising the research studies and other literature discovered in the search, against the levels of evidence hierarchy (Yates, 2013). Being familiar with research design, methodological flaws in research, the comparability of the samples employed in the study and the client group with whom the approach will be applied (including broader structural factors and context) and statistical methods will help in critically evaluating the strength of the studies and therefore their conclusions and translatability (Norcross et al., 2008). Familiarity with the differences between various research designs and the inferences which can be drawn is also useful (Bloom et al., 2006).

### Step 4. Choosing an intervention

The next step is choosing the most appropriate intervention, based on the evidence regarding efficacy and on knowledge around the specific characteristics and circumstances of the client, and the expertise of the psychologist. This is done collaboratively with the client, considering their values, preferences and presenting needs (Gray et al., 2012; Sackett et al., 2000).
Step 5. Monitoring progress and outcomes

Once an approach has been identified, agreed to and applied, monitoring takes place, which evaluates the outcome of the intervention against the goals of the intervention. Outcomes which suggest modification is warranted are attended to, and the cycle repeats (Yates, 2013).
The implementation of practice-based evidence

From a constructionist perspective, the role of language and narrative, how people make sense of their experiences, and the complex interactions which derive from their experience, are all central to understanding the person, family, and community. The inclusion of this broader range of evidence is desirable in all contexts, including when devising an EBP procedure. This section discusses Indigenous Standpoint Theory (IST) and Indigenous Knowledge Systems (IKSs), and how these are central to understanding the experiences of Aboriginal and Torres Strait Islander peoples within broader ecological factors (i.e., historical, political, social, and cultural determinants of health). Both IST and constructionist approaches emphasise the importance of reflexive practice and a relational process that is cyclical in nature. The following example is presented to illustrate this complex, cyclical, and reflexive method of enquiry and knowledge gathering.

Consider the following case study:

Aaron is an Aboriginal man, who lives with his wife and children in an urban Australian city. He has several siblings who also have children. He is considered another father and caregiver to his brothers’ children, who also call him Dad. Sadly, one of his nephews, who he called son, died suddenly. Aaron grieves deeply for his nephew. So do his brother and sister-in-law and their children, as well as grandparents, other aunts/uncles, and sister-cousins and brother-cousins. The family made the decision to take their loved one’s body to a specific area on Country 30 kilometres outside the urban centre, where extended family members in their kinship system would join them to participate in mourning/ceremony/sorry time. This is very important for Aaron and his family. Culturally, Aaron has specific roles he is required to complete as part of ceremony. Unfortunately, because of a COVID-19 community outbreak, restrictions were put in place preventing people from travelling freely between and throughout the area and the state. This means that Aaron and his immediate family cannot travel to the area on Country as planned, even though some extended family members are able to do so. Aaron and his family are understandably conflicted and heartbroken. Some Elders expressed concerns about the wellbeing of their loved one’s spirit if cultural protocols cannot be performed in the right way. Some Elders recalled other upsetting times in their life when they were prevented from being on Country. Some family members expressed worries about Elders and physically vulnerable family members being put at risk of contracting the virus if they travelled or attended gatherings. Some family members expressed sadness and anger that they could not attend the ceremony. Some family members felt numb and disconnected. Aaron described feeling depressed and tired, as well as having difficulty getting out of bed and going to work. He also reports hearing his nephew’s voice in the evenings and has vivid images of him in his dreams. Aaron reaches out to the local community mental health clinic for support.

Sarah is a registered psychologist and is employed in the community mental health clinic. She has European ancestry. She has been practicing for 5 years and has received limited cultural awareness and cultural safety education during her university training. She presents Aaron’s referral in clinical peer supervision for discussion and feedback regarding ways to engage with Aaron that are culturally appropriate. The team’s clinical supervisor suggests an internal referral to the team’s psychiatrist for diagnostic clarification and treatment recommendations as an important first step. Another psychologist recommends connecting with the local Aboriginal Community Controlled Health Service to see if they offer any grief
services or resources. Sarah has already sought guidance from the academic literature on culturally responsive grief responses but is challenged as most of this is qualitative research and her training has emphasised that only quantitative experimental research is legitimate evidence.

**Practice-based evidence implementation approach informed by IST and IKS:**

The IKS approach places the cultural context of the person/group at the centre of considerations. In this context, it means positioning the beliefs, values, and knowledge systems of Aboriginal and Torres Strait Islander peoples at the forefront. In recent years, peak bodies such as the APS, the Australian Psychology Accreditation Council (APAC), AHPRA, and the PsyBA have made formal commitments to embed cultural safety in the discipline and practice of psychology when working with Aboriginal and Torres Strait Islander peoples. These policy changes challenge the one-size-fits-all approach and promote organisations, new graduates, and existing professionals in the discipline of psychology to think more critically and reflexively about ways of working with Aboriginal and Torres Strait Islander peoples. This may include organisations and individual practitioners engaging in cultural safety training, developing long standing relationships with Aboriginal and Torres Strait Islander governed organisations (e.g., Aboriginal Community Controlled Health Services), and critically examining the cultural safety of the organisational policies and processes that may discriminate, prejudice, or mislabel Aboriginal and Torres Strait Islander peoples.

In addition to Sarah's own self-reflexive process on how to ensure cultural safety for Aaron and his family, the organisation in which she works should provide support and opportunities for meaningful partnerships with the Aboriginal and Torres Strait Islander community, specifically engaging with and learning from Elders, Traditional Healers, and cultural advisors. In parallel with this, individuals and organisations should draw on the wealth of written works from Aboriginal and Torres Strait Islander leaders, researchers, and scholars. Both oral and written IKSs have value and provide important insights into effective ways of working with Aboriginal and Torres Strait Islander peoples, that Western empirical evidence may lack.

In adopting an IKS approach, Sarah recognises the centrality of relationships and the importance of allowing time to build a safe connection with Aaron and his family. Listening deeply and allowing for silence is important for Aboriginal and Torres Strait Islander peoples. Sarah would shift her communication style by slowing down in the amount and frequency of assessment questions asked and allow Aaron's personal narrative as well as his family's collective narrative to unfold. Yarning is a culturally validated methodology and narrative discourse for Aboriginal and Torres Strait Islander peoples. For example, the IKS approach would ask “What has been happening in your community?”, rather than “What are your problems?”. Organisational systems might recognise the importance of time for Aaron and his family by allowing for flexible assessment processes and flexibility in the scheduling of appointments, for example.

The IKS approach honours Aboriginal and Torres Strait Islander beliefs and values by considering the interconnectedness between person, family, community, and culture. It is important to look at the broader ecological and historical context for Aboriginal and Torres Strait Islander people’s wellbeing. Sarah should consider what other losses or trauma are being experienced and compounded for Aaron, his family, and his community, and how the current government regulations are impacting on the grief process, family functioning, and in the ability to engage in necessary cultural protocols. Particular attention should be paid to the lived experiences of so called “Aboriginal protection policies” and other historical and contemporary forms of government control imposed since the colonisation of Australia, including the widespread dispossession of land and spread of disease, massacres, cultural genocide, forced child removals and lack of truth telling, resulting in transgenerational
experiences of trauma, loss and powerlessness among Aboriginal and Torres Strait Islander families and communities (Milroy et al., 2014).

The IKS approach values cultural explanations of grief and loss, which is critical in Sarah’s understanding of Aaron’s personal experience. There are different presentations of hearing and seeing associated with grief in Aboriginal and Torres Strait Islander cultures. Aaron’s experience of hearing his nephew’s voice may be a cultural phenomenon and consultation with an Elder, Traditional Healer or cultural advisor prior to any Western psychological or psychiatric intervention is appropriate. Without considering the cultural context and connecting with community, the conceptualisation and intervention would be quite different and potentially harmful. Seeking cultural supervision will help Sarah to develop culturally-informed and trauma-informed conceptualisations. A collaborative assessment (rather than one done in isolation) with Aaron, his family, community member, and/or Elders will help to minimise Sarah’s cultural biases and constructively work towards developing a culturally responsive safety care plan. Sarah should observe and respect cultural protocols regarding ways of talking about the deceased person, using their name, or other norms as identified by an Elder, Traditional Healer or cultural advisor. She should seek clarification about what is and what is not appropriate and to seek permission about whether it is okay or not okay to talk about certain issues.

The IKS approach prioritises Aboriginal and Torres Strait Islander holistic beliefs of health and wellbeing. This may require Sarah to be open and accepting in exploring topics that may not at first glance seem directly related to the referral reason of grief and loss or may involve others in the family. For instance, showing interest in the family functioning and how the children in the family are being supported at school. For many Aboriginal and Torres Strait Islander peoples, recovery is likely to take the form of healing in the community, rather than interventions in the treatment room. Healing for Aboriginal and Torres Strait Islander peoples includes participating in ceremony, spending time with Elders or Traditional Healers, taking traditional medicines, participating in yarning circles, engaging in art, song, dance, and storytelling, being on Country and caring for Country, and engaging in programs aimed at boosting empowerment and self-determination. The IKS approach encourages cultural continuity and self-determination, such as the collaborative decision making between Aaron, his family, Elders, and the Traditional Healer regarding what healing practices need to be undertaken, including what ceremony or cultural protocols are possible given the circumstances, so that the grief process can be performed in a culturally appropriate way.

Such an approach, situated within IKS and IST is PBE which contrasts with the dominant perspective of EBP. PBE here is local, community-led, and does not have to be generalisable to other settings. Rather there might be some commonalities which can transfer to other settings, but this is not a requirement. What works for the person/group at a local specific level is right for that person/group at that location.

Culturally safe care also needs to be reflected in the organisational policies of Sarah’s workplace. A policy stipulating EBP which fails to acknowledge and systematically excludes consideration of cultural diversity and culturally centred care is likely to be harmful to Aaron and his family. Sarah’s colleague suggested reaching out to the local Aboriginal Community Controlled Health Organisation which demonstrates that flexible and culturally safe approaches are encouraged. Organisational culture is also relevant in relation to Aaron’s employer. Employing a IKS approach, Sarah would ask Aaron if his workplace has provision for cultural leave and would suggest steps for him to find and apply for such leave.

Similarly, she would enquire about the supports available for the children from their schools. A Western view would see the schools offering counselling support for the children from a school psychologist, chaplain or counsellor. However, this often ignores the specific cultural needs of Aboriginal and Torres Strait Islander peoples. Consequently, schools should seek to build relationships with the local community and Elders so that appropriate protocols can
be built into their policies and practices to establish cultural safety. This would also include the school sharing information with Aaron about his nieces and nephews and providing a family-based support framework.

This narrative raises the issue of power differentials in therapeutic, employment, and educational settings. The pervasive dominance of Western norms and practices effectively silences other experiences and ways of knowing, resulting in a form of professional arrogance that assumes that one’s knowledge system is superior to all other forms of knowing. Further, this professional arrogance can deter people from seeking and accessing health and mental health services in the future. Self-reflexive practice is important but applying reflexivity to one’s disciplinary knowledge systems is equally critical.

Sarah would also seek information from the academic literature but would also be cognisant of the fact that many academic journals use criteria that have led to it being difficult to publish IKS research. Therefore, she would need to examine the grey literature that is more likely to report diverse approaches. She would also seek cultural mentorship and advice from community, Aboriginal peers, colleagues, and communities.
Implementation principles of practice-based evidence

Below is a summary of the principles with respect to how to optimally implement PBE approaches with Aboriginal and Torres Strait Islander peoples and other underserviced populations.

1. Understand that PBE is local, community-led, and does not have to be generalisable to other settings. Recognise the diversity of Aboriginal and Torres Strait Islander lived experiences and knowledges and the epistemological equivalence these knowledges hold.

2. Take time to explore the cultural context of the person/group, ensuring, for example, that Aboriginal and Torres Strait Islander beliefs, values, knowledge systems, practices, and communication styles and the regional variations in those factors are prioritised and appropriately incorporated.

3. Develop reciprocal relationships with Aboriginal and Torres Strait Islander community groups, including Aboriginal Community Controlled Health Organisations, Elders, cultural advisors, and Traditional Healers.

4. Review both the academic and the grey literature and community reports that are specifically led by people from the cultural group, for exemplars of best-informed practice. Carefully review publications to determine if they have been led by Aboriginal and Torres Strait Islander peoples, for example.

5. Engage in self-reflexive practice in cultural safety and review cultural safety at organisational levels. This includes addressing power differentials that marginalise Aboriginal and Torres Strait Islander peoples and voices.
Identifying and addressing barriers to implementing PBE and EBP

There are a number of barriers at the individual practitioner level and the organisational level that prevent EBP and PBE being optimally applied (Bowes et al, 2020). A better understanding of these barriers can provide practitioners with the best opportunity to maintain integrity with whichever approach they are applying, and to ensure the best outcomes for those they work with.

Barriers at the practitioner level

A significant barrier to implementation for many psychology practitioners is a lack of training and skills in the constructionist- and subjectivist-based methodologies. Addressing this barrier requires further demonstration of the efficacy of such methods and in establishing when they are best used and may require advocating for broadening accreditation standards, as well as targeted recruitment of academics with competence in both approaches, collaboration between disciplines, mentoring, workshops and use of appropriate textbooks (Breen & Darlaston-Jones, 2010).

A strong knowledge base increases the capital on which to draw when making decisions and is the best predictor of accurate and complex decision-making, and resilience to bias (Monteiro et al., 2018).

The application of any practice requires training in and experience with it (Nelson & Steele, 2007) and attitudinal shifts which can occur across the career (Hamill & Wiener, 2018).

Specifically, barriers at the practice level include:

- Lack of time and resources to learn/engage in a range of methods of enquiry.
- Lack of knowledge and skills in implementing EBP and PBE, including critical reflection of the evidence hierarchy and the importance of context and how to evaluate the efficacy of treatments (Whiston & Coker, 2000; Pagoto et al., 2007).
- Valuing common therapeutic factors over interventions based on prior evidence of efficacy for particular presentations (Chambless, 2002).
- Failure to consider intuition based on relevant experience in tandem with evidence-based decision making (Gaudiano et al., 2011).
- Failure to carefully analyse whether the research evidence, however, acquired, is pertinent to the target group. Over-reliance on sourcing information from empirical literature and limited awareness of culturally appropriate resources, for instance the grey literature and PBE exemplars, for example, from Aboriginal and Torres Strait Islander community groups, Elders, Traditional Healers, and cultural advisors.
- Awareness that the research context can inappropriately favour certain treatment modalities over others (Castelnuovo, 2010; Hagemoser, 2009; Shean, 2014).
- An unnecessarily narrow view of the types of evidence that may be useful.
- Limited exposure to culturally responsive practices.
- Limited critical self-reflexivity.
These barriers can be addressed by providing continuing education opportunities, evaluation of efficacy where needed and advocacy to encourage the following strategies, attitudes, and practices among practitioners. Strategies beneficial for all practitioners include:

- Being an active and wide consumer of scientific research literature and be alert to implicit biases.
- Being familiar with research terminology and the strengths of different research designs.
- Being active in monitoring practice outcomes and determining whether the chosen interventions are having the desired results or whether a different course of action is warranted.
- Engaging in supervision and continuing professional development.
- Engaging in critical thinking and reflexive practice to ensure quality decision making.
- Emphasising the importance of therapeutic relationships and recognising different standpoints and positionalities.

### Barriers at the organisational level

At the organisational level, barriers include the time constraints experienced by busy practitioners, difficulty accessing high quality training or literature (Rousseau & Gunia, 2016, Plath, 2013), organisational culture and attitudes towards EBP and PBE (Aarons, 2006; Aarons & Sawitzky, 2006). These factors can all contribute to a drift from psychological work based on evidence and an erosion in the quality of psychological care provided.

### Lack of time and resources

Practitioners often lack ready access to resources, such as library facilities, online databases, contemporary textbooks, and manuals, as well as access to training and supervision (Gray et al., 2012). When they do have access to such resources, they can be faced with an overwhelming amount of research literature, taxing the decision-making process and making judgments about which intervention to use, difficult (Yates, 2013).

Indeed, some disadvantages of a rigorous decision-making process include the time and commitment required of already time-poor practitioners (Plath, 2013; Rousseau & Gunia, 2016).

Organisations also face demands including costs and other resources required to provide training and supervision to staff to improve and maintain their skills (Gray et al., 2012; Yates, 2013).

The barriers are best approached by collaborative efforts to address the available evidence. These may be continuing education sessions, peer groups that distribute the reading or consultation efforts and, ideally, allocated time to allow for ensuring the currency of knowledge. The solutions will necessarily vary from workplace to workplace, but best practice can only arise from a comprehensive knowledge base and so this barrier needs to be addressed.

### Workplace attitude and culture

Culture and climate within organisations may have a direct bearing on the adoption and adherence to evidence-based or practice-based decisions amongst staff employed within organisations (Aarons, 2006). Higher levels of organisational support for EBP have been shown to be associated with more positive staff attitudes towards the adoption of EBP, translating into actual adoption of EBP (Aarons et al., 2009b). This suggests that workplace culture is likely to be an important factor in adopting a more balanced approach to the use of EBP and PBE in forming the evidence base.
Key elements at the organisational level which help address these barriers and thus support the adoption of both EBP and PBE include:

- Having leadership that promotes the merits of both approaches.
- Building capacity to engage in practice that is informed by both strategies
- Having an effective implementation framework and the infrastructure to support and maintain a culture inclusive of both strategies (Bennett et al., 2016; Whiteside et al., 2016).

Specifically, this involves:

- Provision of strong leadership which communicates a vision across the organisation.
- Fostering a workplace culture which values, supports and embeds appropriate processes in everyday practice.
- Consideration of the use of specialist staff with expertise within the organisation as needed.
- Providing access to training and other regular professional development activities.
- Providing access to resources such as computers, databases, and other user-friendly research dissemination resources.
- Synthesising and disseminating relevant research evidence to staff.
- Addressing the time constraints experienced by staff and ensuring adequate time for critical thinking and reflexive processes.
- Providing access to supportive supervision which uses a critical reflective approach.
- Consideration of the use of “communities of practice” which bring together various engagement strategies and practitioners, to share experiences and practice knowledge (Gray et al., 2012; Novak & McIntyre, 2010; Plath, 2006; Plath, 2013).
Knowledge and skill development

Ethical practice requires an evidence base on which practice can be built. Dominant mainstream traditionalist approaches define this evidence to mean research which is conducted within a positivist orientation and utilising experimental methods. Within the training and education of psychology students, research is taught within these parameters. If alternate research approaches are included, it is usually as a subset of approaches which positions them as being less rigorous and consequently less valuable than experimentation. This is often reflected in students being mandated to employ experimental methods in Honours and postgraduate research projects.

This position statement argues that both orientations, EBP, and PBE make valuable and complementary contributions and therefore should be taught at undergraduate and postgraduate levels. APAC (2019) Standards require that research methods and statistics be taught at level 1 (Bachelor's Degree). The addition of the word “and” in the Standards recognises that research methods is not synonymous with statistical approaches and therefore requires delivery of a broad consideration of effective methods as a required element in an undergraduate program of study. These methods should include those needed for both EBP and PBE. Similar language is employed in the Standards across all levels. Recent trends indicate that these issues are changing and evolving but progress is slow and constant vigilance is required to ensure that a balanced approach survives and thrives.

Since coverage of “Methods” in the curriculum has often not been as comprehensive as this paper recommends, continuing Professional Development modules in understanding the philosophies of science and the different research approaches within these diverse frameworks are needed to achieve these learning outcomes. While educators can develop their own personal learning journeys to upskill in these areas, it would be prudent for Higher Education Providers to provide programs of professional development to assist. A series of modularised learning opportunities which build over time into a comprehensive understanding of the value and legitimacy of different methodologies would bring greater depth to the evidence base on which psychologists and psychological scientists build their practice. In addition, offering opportunities for educators and practitioners to be mentored through their journey by peers with knowledge and expertise in this space would be beneficial. Establishing a community of practice within and between educational institutions could be considered as well as bringing in experienced practitioners to provide illustrative examples of each approach (for example members of the Australian Indigenous Psychology Education Project, AIPEP, are well versed on PBE and could be asked to provide seminars and workshops to assist the learning journeys of academics, practitioners and students).
Resources

Resources to support practice-based evidence


Resources to support evidence-based practice

- [ProQuest](https://www.proquest.com) database accessible to APS members through the APS website
- [NICE guidelines](https://www.nice.org.uk/guidance)
- Cochrane Library, including the Cochrane Library of Systematic Reviews, the Cochrane Central Register of Controlled Trials (CENTRAL) and Cochrane Clinical Answers ([www.cochranelibrary.com](https://www.cochranelibrary.com))
**Glossary**

**Constructionist:** This is a philosophy of science that contends that evidence can only be interpreted subjectively within a person's social norms and context (Cruickshank, 2012; Gergen, 1999; Newman, 2017). A constructionist approach promotes the value of a wide range of research methodologies and contends that there is no one objective truth, as human phenomena are dynamic, relational, and influenced by our engagement with the social world (Breen & Darlaston-Jones, 2010).

**Cultural safety:** In Australia, cultural safety in professional practice has been defined by Aboriginal and Torres Strait Islander health national peak organisations (the National Health Leadership Forum) and the Australian Health Practitioner Regulation Agency (AHPRA), in consultation with the Australian Medical Council and the Medical Board of Australia as follows: “Cultural safety is determined by Aboriginal and Torres Strait Islander individuals, families, and communities. Culturally safe practice is the ongoing critical reflection of health practitioner knowledge, skills, attitudes, practising behaviours and power differentials in delivering safe, accessible and responsive healthcare free of racism” (AHPRA, 2021, Cultural Safety Definition section).

**Evidence-based practice** refers to the use of evidence to drive the decision on what processes to implement to solve a psychological problem. This can include the use of published literature, in addition to other sources of relevant information, collated data bases of therapeutic outcomes, relevant reports of critical context from the local community or target cultural group, and experimental outcome or implementation trial comparing different techniques. Ideally the evidence base will be broad-based and directly relevant to the context. Evidence-based practice would also advocate monitoring the outcomes of any procedure to assess efficacy (APA, 2005; 2006; Sacket et al., 2000; Straus et al., 2011).

**Indigenous Standpoint Theory (IST):** IST is a discursive inquiry into knowledge construction, specifically how Aboriginal and Torres Strait Islander peoples exercise sovereignty regarding Indigenous ways of being (ontology), knowing (epistemology), and doing (axiology) (Moreton-Robinson, 2013).

**Indigenous Knowledge Systems (IKS):** IKSs allow Indigenous peoples to establish an Indigenous evidence hierarchy to determine what constitutes quality research, culturally relevant evidence, and effective intervention from an Indigenous standpoint (Dudgeon et al., 2021).

**Practice-based evidence:** Practice-based evidence has been defined as high-quality scientific evidence that is developed, refined, and implemented first in a variety of real-world settings. (Hellerstein, 2008). Practice-based evidence considers information from a broad range of environmental, community, social, and cultural factors that impact upon how people perceive and evaluate information and has, for example, been recommended for research with Aboriginal and Torres Strait Islander peoples and other minority populations marginalised within dominant psychological perspectives and practices (Dudgeon et al., 2021).
References


Evidence-based practice and practice-based evidence in psychology


© 2022 Australian Psychological Society

30


Evidence-based practice and practice-based evidence in psychology


Evidence-based practice and practice-based evidence in psychology


© 2022 Australian Psychological Society
Evidence-based practice and practice-based evidence in psychology


© 2022 Australian Psychological Society

34
https://doi.org/10.1080/09515070.2012.655419

https://doi.org/10.1080/0312407X.2015.1059465

https://doi.org/10.1177/1609406919869695

https://doi.org/10.1177/2150137812472193