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A systematic review of evidence-based psychological interventions and Aboriginal and Torres Strait Islander people

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Keywords:	Aboriginal, evidence-based, Torres Strait Islander, psychotherapy, SEWB
Abstract:	<p>Objective: Limited empirical literature exists examining the application of evidenced-based psychotherapies when working with Aboriginal and Torres Strait Islander people. Further, Australian Aboriginal and Torres Strait Islander people's view of Social and Emotional Wellbeing differs to Western ideologies of mental health. In the present study, a qualitative systematic review explored evidenced-based psychological therapies with Indigenous clients. Method: A systematic review was conducted using the PRISMA framework. A total of 12 articles that met criteria for inclusion in the review were extracted through hand- and database searching. Therapies identified in the articles included Narrative Therapy (NT), Cognitive-Behaviour Therapy (CBT), Acceptance-based Therapies and Multisystemic Therapy (MST). Results: CBT was the most commonly reported therapy in the review. Three articles, rated lower in quality, also identified NT. Although limited in quantity, acceptance-based and strength-based therapies and MST were also identified as having cross-cultural applications. Conclusions: While, CBT, ACT and MST have been used when working at the cultural interface with Indigenous people, further empirical evidence with outcome data is required. Such evidence is required to assess acceptability and suitability of such psychotherapies and for clinicians to provide culturally responsive practice when working with Indigenous people.</p>

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The efficacy of evidence-based psychological interventions with Aboriginal and Torres Strait Islander people

Abstract

Objective: Limited empirical literature exists examining the efficacy of Western psychotherapies when working with Aboriginal and Torres Strait Islander people. Further, Australian Aboriginal and Torres Strait Islander people's view of Social and Emotional Wellbeing differs to Western ideologies of mental health. In the present study, a qualitative systematic review explored evidenced-based psychological therapies for Indigenous clients.

Method: A systematic review was conducted using the PRISMA framework. A total of 12 articles that met criteria for inclusion in the review were extracted through hand- and - database searching. Therapies identified in the articles included Narrative Therapy (NT), Cognitive-Behaviour Therapy (CBT), Acceptance-based Therapies and Multisystemic Therapy (MST). *Results:* CBT was the most commonly reported therapy in the review. Three articles, rated lower in quality, found NT also identified. Although limited in quantity, acceptance-based and strength-based therapies and MST were also identified as having cross-cultural applications. *Conclusions:* While, CBT, ACT and MST may be effective psychotherapies when working at the cultural interface with Indigenous people, further empirical evidence with outcome data is required. Such evidence is required to assess acceptability and suitability of Western psychotherapies and for clinicians to provide culturally responsive practice when working with Indigenous people.

Keywords: Aboriginal, evidence-based, Torres Strait Islander, psychotherapy, efficacy, SEWB.

Key points:

- 1) Indigenous SEWB differs from Western mental health conceptualisations.
- 2) A cross-cultural interface was found in CBT, ACT and MST.
- 3) Further empirical testing of psychotherapy interventions with Indigenous clients to confirm acceptability, suitability and efficacy.

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Australian Aboriginal and Torres Strait Islander experience greater risk of mental health issues such as depression, anxiety, substance use and suicide (AIHW, 2017; Thomas, Cairney, Gunthorpe, Paradies & Sayers, 2010; Vicary & Westerman, 2004; Ypinazar, Margolis, Haswell-Elkins & Tsey, 2007). Higher rates of mental illness have been associated with disadvantage through health, unemployment, poverty, isolation, trauma, discrimination and other social, historic and political determinants (Australian Bureau of Statistics, 2016; Smith, O'Grady, Cubillo & Cavanagh, 2017). Mental health conditions are twice as likely to be reported in Aboriginal and Torres Strait Islander people living in non-remote areas than in remote areas (Australian Bureau of Statistics, 2016). Further, suicide rates for Aboriginal people living in remote communities are double those of non-Indigenous Australians (Vicary & Westerman, 2004). Despite this, Indigenous mental illness is often unnoticed, undiagnosed and untreated (Ypinazar, Margolis, Haswell-Elkins & Tsey, 2007). With respect, the term 'Indigenous' refers to Australian Aboriginal and Torres Strait Islander people while acknowledging two separate cultural groups each with their own world views and cultural values and beliefs. The term 'non-Indigenous' is used to describe Australians who do not identify as an Aboriginal or Torres Strait Islander person.

Western mental health definitions, terms and concepts are not easily transferable to Indigenous cultures or languages (Kowanko, Emden, Murray & De Crespigny, 2005; Garvey, 2008). While Western conceptualisations of mental health is largely framed in relation to an individual's mental state, mental health for Aboriginal and Torres Strait Islander people is seen as a holistic conceptualisation of broader social and emotional well-being (SEWB) for individuals and community (Gee, Dudgeon, Schultz, Hart & Kelly, 2014). Six domains shape Aboriginal and Torres Strait Islander holistic conceptualisations of SEWB, including connection to the body, mind and emotions, family and kinship, community, culture and land and spirituality. Poor SEWB is likely to be experienced when people or communities experience disruptions to connectedness across these domains from factors such as historical and current governing policies associated with colonisation or discrimination (Thomas et al., 2010; Vicary & Westerman, 2004).

Expressions of poor SEWB and psychological distress differ between Indigenous and non-Indigenous people (Thomas et al., 2010; Vicary & Westerman, 2004). Indigenous people

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also express psychological distress in ways not recognised in DSM-IV diagnostic criteria (Thomas et al., 2010; Vicary & Westerman, 2004). For example, for some Indigenous people, psychological distress is more likely to be expressed through somatic symptoms such as dizziness, indigestion and breathing difficulties, whereas anxiety may manifest as low mood or sadness and depression may be expressed as anger (Thomas et al., 2010; Vicary & Westerman, 2004). Due to differences in expression, psychological distress may not be identified by non-Indigenous practitioners and thus affect access to treatment.

Aboriginal and Torres Strait Islander people have expressed fear of approaching Western mental health services (Ypinazar, Margolis, Haswell-Elkins & Tsey, 2007). Reported difficulties contributing to fear include stigma, shame, previous negative experiences, misunderstanding of treatment and diagnoses, fear of being away from country during hospitalisation, medication side effects, impact on community and culturally inappropriate treatment methodologies (Ypinazar, Margolis, Haswell-Elkins & Tsey, 2007). Further, Indigenous people often wait until crisis occurs before engaging in services and often reported seeking Western modes of treatment for psychological distress only when traditional methods had been explored (Vicary & Bishop, 2005). This delay in service engagement may be due to the disconnection between Western and Indigenous conceptualisations of health and wellbeing and a lack of evidence for Western treatment frameworks (Dingwall & Cairney, 2010; Vicary & Westerman, 2004).

Despite recognised differences in the conceptualisation and expression of mental health and SEWB for non-Indigenous and Indigenous Australians, little research has examined the efficacy of Western psychological interventions with Aboriginal and Torres Strait Islanders (Bacon, 2017, Vicary & Westerman, 2004; Ypinazar, Margolis, Haswell-Elkins & Tsey, 2007). Rather, psychological interventions have focused on developing cultural competent clinicians and services (Australian Government, 2017). Guidelines recommended that clinicians enhance their awareness, knowledge and understanding of Indigenous culture, history, SEWB conceptualisation and expression of mental illness (Australian Government, 2017). As most psychologist in Australia are non-Indigenous clinicians (AHPRA, 2019), it is crucial to build cultural competence in clinicians. However, it is not clearly

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understood whether Western treatment frameworks provide culturally appropriate interfaces when working with Indigenous clients.

Aim of the current study

A qualitative systematic review was conducted of literature exploring the efficacy of evidence-based psychological interventions for Aboriginal and Torres Strait Islander people. The aim of the current review was to identify Western evidenced-based psychological therapies used in a cross-cultural context.

Method

Search strategy

The search of multiple databases was conducted in March 2018 using the PRISMA framework (Liberati et al., 2009). Databases included PsychINFO (ProQuest), Medline (Ovid), Informit, SCOPUS, CINAHL and Emcare (Ovid). Articles published in evidence based, medical, psychological and Indigenous specific scientific journals were identified within searches to ensure maximum retrieval of qualitative and quantitative studies. A total of 103 articles were extracted with search terms, including the population (e.g. Australian Aboriginal or Torres Strait Islander or Indigenous), diagnostic categories (e.g. mental health or social and emotional well-being), and treatment approaches (e.g. psychotherapy or narrative therapy).

Eligibility criteria

Articles were required to include Australian Aboriginal and/or Torres Strait Islander people and Western evidence-based psychological interventions within the study methodology. No limitations were placed on population factors such as age, sex and location, or on the percentage of participants who identified as an Indigenous person. Quantitative and qualitative literature was included in the review. Scoping reviews or responses to commentaries were excluded. To maintain quality, case studies which lacked empirical evidence (e.g. participant demographic information, outcome measures, statistical power) were excluded.

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Data extraction

An End-note library was used to manage data collection including authors, year, title, Journal/secondary title, volume, number, pages and the name of the database articles. Duplicates were removed. Of the remaining articles, titles and abstracts were examined and screened for eligibility criteria. Articles that did not meet criteria were removed. Full-text articles that met inclusion criteria were retrieved for evaluation. Data extraction was cross-checked during four stages of the review, including the database search, removal of duplicates, removal of articles not meeting criteria and assessment of full-text articles.

Quality assessment

The Crowe Critical Appraisal Tool (CCAT) was used to evaluate the quality of the reviewed literature (Crowe, Sheppard & Campbell, 2012). The CCAT is used to rate each article reflecting the quality of an article's preliminaries, introduction, design, sampling, data collection, ethical matters, results and discussion (Conchra, 2015). A total score was calculated across each domain. Quality ratings were scored on a scale between 0 = lowest score reflecting poor quality, and 5 = highest score reflecting high quality (Conchra, 2015). CCATs scores were completed and cross-checked (see Table 2 for CCAT scores).

Results and discussion

A total of 103 articles were extracted through database searching and nine articles via hand searching. 14 duplicates were removed. The title and abstracts of a further 69 articles did not meet criteria and were removed after screening. 29 full-text articles were reviewed. An additional 17 articles were excluded as research design or psychotherapy criteria were not met. A total of 12 studies met inclusion criteria for qualitative systematic review (see Figure 1). Of the identified articles, only two articles implemented psychological interventions (MST and e-psychotherapy based on ACT) with Indigenous people and reported outcome data. The other articles included reviews, therapeutic adaptations and recommendations for clinicians, theoretical implications for using therapies, and suggested potential application.

[INSERT FIGURE 1 HERE]

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Figure 1: PRISMA flowchart indicating identification, screening, eligibility and included articles.

All 12 articles meeting criteria were conducted in Australia. Five studies defined participants as “Indigenous” (Australian Aboriginal and Torres Strait Islander people) and 7 defined participants as “Australian Aboriginal”. Five articles included male and female participants, 1 article included only males and 6 articles did not record gender of participants. Two articles reported on Australian families. Four articles did not record participant demographic data. Ten articles included adult participants. Two articles included urban Indigenous participants, 2 articles included participants living remote or very remote, 1 article included incarcerated participants. Seven articles did not specifically report participant location. Three studies included Australian Aboriginal and/or Indigenous participants as part of a broader sample. In these studies, Aboriginal and/or Indigenous participants were 3.1%, 11% or 23.3% of the sample.

Study designs included qualitative analysis ($n = 3$), quantitative research ($n = 2$), case studies ($n = 2$), RCT ($n = 1$), systematic review ($n = 1$), Participatory Action Research (PAR) ($n = 1$), pilot RCT ($n = 1$) and a literature review ($n = 1$). Cognitive Behaviour Therapy (CBT) was the most commonly used therapeutic approach. It was delivered in various modalities including face-to-face with high- and low-intensity ($n = 1$), self-administered by trained counsellors ($n = 1$), within a manualised program designed from CBT principles ($n = 1$) and through internet-delivery ($n = 1$). Three articles examined Narrative Therapy in case studies ($n = 2$) and an examination of published literature ($n = 1$). Additional psychological interventions included Multisystemic Therapy (MST) ($n = 1$) and a psychotherapy app designed from acceptance-based therapies including Acceptance and Commitment Therapy (ACT) ($n = 1$). Three articles did not administer CBT however analysed findings from qualitative interviews ($n = 1$) and a systematic review ($n = 1$) in the context of CBT, and strength- and values-based approaches (such as positive psychology and ACT) ($n = 1$). The quality of each article ranged from CCAT ratings from 40-83%. The average CCAT rating per article was 60%. Table 1 provides a summary of articles meeting inclusion criteria.

[INSERT TABLE 1 HERE]

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Table one

Summary of studies meeting inclusion criteria

Cognitive Behavioural Therapy

Six articles were identified that examined the utility of CBT when working with Aboriginal and Torres Strait Islander people (Barrett et al., 2015; Bennett-Levy et al., 2014, Bennett-Levy et al., 2015; Davies, 2011; Kilcullen, Swinbourne & Cadet-James, 2016; Titov et al., 2017). One study explored urban Aboriginal and Torres Strait Islander peoples' understanding of mental health and fit with a cognitive-behavioural framework (Kilcullen, Swinbourne & Cadet-James, 2016). 19 people aged between 22 and 56 (female $n = 14$), living in Townsville, Queensland were asked open-ended questions within semi-structured interviews and focus groups about mental health and cultural identity. Approximately 20 hours of recorded data was gathered over approximately 60 hours of interviews or focus groups. Findings indicated that four themes emerged: coping strategies, knowledge, social support and connectedness (Kilcullen, Swinbourne & Cadet-James, 2016).

Coping skills included behavioural, emotional and cognitive skills to enhance well-being, such as self-talk, making positive choices based on past decisions, keeping busy, meditation, empathising and forgiving others, and upholding values such as honesty, acceptance and courage. Participants reported the impact and importance of knowledge of mental and physical health as a protective factor for good mental health (Kilcullen, Swinbourne & Cadet-James, 2016). This included knowledge of diet and exercise and of mental health services. Participants identified the importance of social support to well-being, including personal resources such as education, income, help-seeking behaviours and engaging in the wider community. Lastly, the theme of connectedness was found to be central to influencing all aspects of mental health for the Indigenous people in this study (Kilcullen, Swinbourne & Cadet-James, 2016). The model of Indigenous mental health developed in this study fit well with the SEWB model and within a cognitive-behavioural framework. Authors concluded that increasing SEWB from a cognitive-behavioural framework could enhance coping skills in cognitive, emotional and behavioural domains while increasing social support, knowledge and skills in daily living (Kilcullen, Swinbourne & Cadet-James, 2016). Therefore, using a CBT framework within the SEWB model has the

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potential to form a culturally appropriate and effective psychotherapy for urban Indigenous Australians.

The second study explored Aboriginal counsellors' perspectives for the suitability and effectiveness of CBT as a treatment method for Australian's living in Aboriginal communities (Bennett-Levy, et al., 2014). A Participatory Action Research (PAR) design was implemented over a 12-month period. Community involvement was encouraged in every stage of the project. The study provided ten days of in-depth formal CBT training to five university-educated Aboriginal counsellors. Additionally, a follow up 5-day training course was provided, 3 months post formal training, with an added 1-day workshop, 4-month post training.

Results of the PAR study indicated that CBT was endorsed by all counsellors as a useful psychotherapy for working with Indigenous client as it produced positive impacts on both client and counsellor's wellbeing (Bennett-Levy et al., 2014). Counsellors identified qualities of CBT which were effective when treating psychological distress in Aboriginal clients. These qualities included CBT's adaptability, structure, focus on the present, and the time-limited nature of the therapy. Clients also reported that they would often share techniques with their family or communities who had not attended the sessions (Bennett-Levy et al., 2014). Counsellors identified that the empowering, skill-building and agentic nature of CBT was highly consistent with the aspirations of Aboriginal people. No client outcome data was obtained (Bennett-Levy, et al., 2014).

Bennett-Levy and colleagues (2014) recommended three adaptations to CBT interventions for Aboriginal Australians. Firstly, low-intensity CBT was endorsed by counsellors, such as irregular visits to remote communities or flexible appointment times with options for walk-ins and cancellations. It was recommended that these interventions were delivered in informal spaces (e.g. outdoors, walking, sharing tea) or remotely (e.g. by phone, internet or mobile apps). Secondly, it was suggested that the structure of CBT is emphasised when working with Aboriginal clients. Counsellors reported that clients would often focus on past events, however keeping the sessions solution- and present- focused helped clients to elicit stronger perceived outcomes. Aboriginal counsellors valued self-practicing CBT as a stress reduction tool to and protection from burnout. Authors

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acknowledged that the modifications and adaptations of delivering CBT were not uniquely relevant to Indigenous people (Bennett-Levy et al., 2014). Bennett-Levy and colleagues (2014) also noted that it was likely the results were influenced by confirmatory bias as authors of the project were also participants who invested time and energy into training and therefore desired to validate the therapy (Bennett-Levy et al., 2014). While no outcome measures were administered to clients, these positive findings show promise for a cross-cultural fit.

The third study conducted a secondary analysis from the study outlined above (Bennett-Levy et al., 2014), where 10 days of CBT specific CBT training was provided to five Australian Aboriginal counsellors (Bennett-Levy et al., 2015). This article reported counsellor's perceptions on the effectiveness of self-practiced CBT. Authors conducted an analysis of conversational data recorded from discussions occurring in two reflective group meetings at 3- and 5-months post CBT training. Although the previous study (Bennett-Levy et al., 2014) did not specifically advocate for counsellors to self-practice CBT, all counsellors reported a positive effect upon their practice of self-practice and self-reflection during and after the study. No standardised method for self-reflection was used and limited information was provided regarding data methodologies. Counsellors delivered CBT to clients and suggested that CBT was a culturally appropriate, effective psychotherapy for Indigenous clients (Bennett-Levy et al., 2015).

CBT was also demonstrated to be useful in both personal and professional contexts (Bennett-Levy et al., 2015). Within a professional context, counsellors reported an increase in confidence of skills and practice in delivering CBT. Counsellors perceived CBT to prevent burnout by increasing their resilience and skills to manage personal stress. Counsellors reported that due to living in a rural location, they frequently connected with clients on a personal level, outside of the therapeutic space. Overall, authors concluded that CBT was perceived as an effective psychotherapy for Aboriginal clients and counsellors. As in the previous study, no outcome measures were reported (Bennett-Levy et al., 2015).

The fourth study analysed website traffic data to determine patterns of use by 458, 921 Australian's visiting the MindSpot Clinic website (Titov et al., 2017). The MindSpot Clinic was a component of the Australian Government e-Mental Health Strategy and provided

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Australian adults with online mental health services addressing anxiety and depression (Titov et al., 2017). MindSpot provided brief online assessments, referrals to local services and therapist-guided Internet-delivered CBT (iCBT). MindSpot courses consisted of four to six CBT modules consisting of PowerPoint presentations over an eight-week duration. The aim of the program was to target symptoms of depression and anxiety, obsessive compulsive disorder (OCD) and post-traumatic stress disorder (PTSD).

Titov and colleagues (2017) collected MindSpot Clinic data from two data points between January 2013 and June 2015. Data was firstly collected by Australian users who publicly accessed the internet website. A second set of data was obtained by patients who registered to receive services provided by mental health professionals delivering online CBT. Patients were administered a range of psychometric testing, including the 9-Item Patient Health Questionnaire (PHQ-9), Generalised Anxiety Disorder 7-Item Scale (GAD-7), Yale-Brown Obsessive Compulsive Scale- Self Report (YBOCS-SR), Post-Traumatic Stress Disorder Checklist- Civilian Version (PCL-C) and the Kessler-10 Item Scale (K10) (Titov et al., 2017). 6,149 patients completed assessment and enrolled in a MindSpot treatment course. 72% were female with a mean age of 36.4 years (Titov et al., 2017). 3.1% of the sample identified as an Aboriginal or Torres Strait Islander person, approximating the percentage of Australian Indigenous population (Titov et al., 2017). Results indicated that MindSpot enhanced access to mental health services, knowledge and provided effected online treatment. CBT was also effective in improving health outcomes ($p = 0.001$), decreasing psychological distress ($p = 0.001$), decreasing symptoms of OCD ($p = <0.001$) and decreasing symptoms of PTSD ($p = <0.001$) (Titov et al., 2017). A significant reduction in symptoms was reported at 3-month post-treatment follow up ($ps = <0.001$) (Titov et al., 2017). No specific analysis of outcome data was recorded for Aboriginal and Torres Strait Islander people.

In the fifth study, a Seeking Safety program, was delivered to male Australian prisoners aged between 22-65 years (Barrett et al., 2015). Seeking Safety is a manualised treatment program with a present-focused treatment of substance use disorder (SUD) and post-traumatic stress disorder (PTSD) designed from CBT. The program has been endorsed as an effective evidence-based treatment by the International Society for Traumatic Stress Studies (ISTSS) (Barrett et al., 2015). Of the 30 participants, 15 were provided with the

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Seeking Safety program and 15 were placed in a treatment-as-usual (TAU) control group. The sample included 23.3% Indigenous Australians. This percentage was representative of the population of incarcerated males in NSW (Barrett et al., 2015). The program provided psycho-education and coping skills to reduce trauma and substance-related problems. A total of 25 treatment topics addressed a core theme of safety via cognitive, behavioural, interpersonal and case management domains. Topics were delivered by counsellors in a flexible sequence, delivered to individuals or groups, to males and females, to outpatients or inpatients and for any types of trauma and substance use.

The study used eight modules from Seeking Safety and were delivered weekly by a clinical psychologist in eight 90-minute sessions (Barrett et al., 2015). All participants were eligible to participate in the TAU control group for substance use and PTSD. The TAU control group contained the model of care provided in accordance to NSW standard practice in prisons. Just over half of the participants of Seeking Safety participated in treatment for substance use at baseline ($n = 53.3\%$), 20 percent were accessing mental health treatment (compared to $n = 13.3\%$ of TAU group) and equal proportions of both groups were prescribed antidepressant medication ($n = 46.7\%$) (Barrett et al., 2015). Participants undertook a clinical interview and diagnostic assessment including items from the 2009 NSW Inmate Health Survey, the World Mental Health Composite International Diagnostic Interview version 3.0 (WMH-CIDI 3.0), Drug-Taking Confidence Questionnaire (DTCQ-8), Composite Diagnostic Interview version 2.1 (CIDI 2.1), Clinical Administered PTSD Scale (CAPS) and the Posttraumatic Cognitions Inventory (PTCI) (Barrett et al., 2015). Assessments were abbreviated and administered at eight-week and six-months.

Due to a limited sample size, statistical analyses of outcome data were restricted, and significance levels and effect sizes were not obtained (Barrett et al., 2015). Given this limitation, no strong conclusions could be made regarding treatment outcomes. However, based on standard deviation scores, authors suggested that compared to the TAU group, symptom severity related to PTSD was reduced in individuals who undertook the Seeking Safety program and participants reported increased confidence in their ability to resist the urge to use substances (Barrett et al., 2015). Results from face-to-face interactions between clinical psychologist and clients indicated a high level of treatment satisfaction from

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participants undertaking Seeking Safety (Barrett et al., 2015). It was not clear if an effective reduction of SUD symptomology or posttraumatic cognitions occurred. Furthermore, although Indigenous Australians comprised 23.3% of the sample, no Indigenous specific outcome data was recorded.

In the final study, authors conducted a systematic review of 20 journal articles to explore the feasibility of a structured CBT based program, Cool Kids (Davies, 2011). The study addressed acute and chronic anxiety among Aboriginal children living in remote areas. While the efficacy of an appropriately adapted Cool Kids for Indigenous children was not examined, the study explored the unique cultural factors effecting mental health including learned helplessness from colonisation, and expressions of mental health symptomology such as anxiety producing symptoms of dizziness (Davies, 2011). The author noted that flexible narrative approaches, such as the inclusion of yarning circles, were advantageous when delivering the program for Indigenous clients living remotely (Davies, 2011). Additionally, Davies (2011) noted that community engagement was essential for treatment and program success. It should be noted that the author did not state how many articles were included in the review that were children specific or provided CBT interventions for Indigenous people.

Common elements of effective CBT

In summary, six articles were identified examining the utility of CBT when working with Aboriginal and Torres Strait Islander people (Barrett et al., 2015; Bennett-Levy et al., 2015, Bennett-Levy et al., 2014; Davies, 2011; Kilcullen, Swinbourne & Cadet-James, 2016; Titov et al., 2017). Although differences in population, study aims, and quality were evident across articles, all six articles concluded that CBT has potential to be effective when working with Indigenous Australians. Three common themes of potentially effective theoretical components of CBT, including knowledge and confidence, to enhance SEWB were identified in five of the six articles (Barrett et al., 2015, Bennett-Levy et al., 2014, Bennett-Levy et al., 2015, Kilcullen, Swinbourne & Cadet-James, 2016, Titov et al., 2017). These themes were 1) knowledge, 2) confidence, and 3) perceived client satisfaction (see Figure 2).

[INSERT FIGURE 2 HERE]

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Figure 2: A model of effective elements of CBT for enhancing SEWB.

Knowledge was identified within two articles as a benefit of CBT for Indigenous people. Kilcullen, Swinbourne and Cadet-James (2016) stated that Indigenous people living in urban areas identified that obtaining knowledge regarding mental health facilitators and concepts would likely increase SEWB. Further, when CBT was delivered through an electronic medium, Titov et al., (2017) found that participants reported an increase of knowledge for accessible mental health services. While psychoeducation was not specifically identified among articles, CBT characteristically includes psychoeducation and therefore likely provided within therapy.

The theme of confidence was reported within two studies for both clinicians and clients (Barrett et al., 2015; Bennett-Levy et al., 2015). In one study, the Australian Aboriginal counsellor's delivering CBT reported an increase in confidence in their ability to successfully deliver CBT to Aboriginal clients. For clients, male prisoners undertaking a manualised program based on CBT demonstrated an increased confidence in their ability to resist the urge to use substances (Barrett et al., 2015). Therefore, using a CBT approach provided practitioners and clients with an increased confidence across domains.

Two articles reported participants to rate CBT with high levels of treatment satisfaction (Barrett et al., 2015; Bennet-Levey et al., 2014). While Barrett and colleagues (2014) noted client satisfaction with a CBT approach, an extension of this study identified that Australian Aboriginal people living remotely reported to respond well to the adaptability, structure, present focus and time-limited nature of CBT programs (Bennett-Levey, et al., 2015). Not only does CBT display evidence of cross-cultural commonalities with SEWB, Indigenous clients reported satisfaction when engaged in the therapy.

Narrative Therapy

Three articles reflected upon the practice of Narrative Therapy (NT) for Indigenous people. Within an Indigenous context, NT has been referred to as the process of storytelling. This approach aims to separate a person from their distress with the focus of enhancing one's skills, competencies and abilities that align with an individual's values and beliefs (Smith, O'Grady, Cubillo & Cavanagh, 2017). One article examined adaptations made to a

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manualised parent-child narrative therapy program, Let's Start (Stock, Mares & Robinson, 2012). This program aimed to improve Aboriginal parents' educational, social and emotional outcomes as well as their four-to seven-year- old children's outcomes. The Let's Start program is a 10-week multi-therapeutic group program implemented in Darwin and within remote Aboriginal communities in the Northern Territory (Stock, Mares & Robinson, 2012). The program provided therapeutic intervention to parents and children and drew on developmental theory, attachment theory, group therapy, CBT and NT (Stock, Mares & Robinson, 2012). Stock and colleagues (2012) stated that as efficacy for this approach was reported in previous literature, the current study used narrative and group drawing interventions to increase cultural appropriate practice for Aboriginal families.

The study implemented culturally appropriate adaptations such as incorporating extended family and wider systems into the intervention (Stock, Mares & Robinson, 2012). This extension of therapy into the broader context draw upon narrative, expressive and reflective approaches such as sharing stories through drawing. Ten families and 3 group leaders living in remote community in the Northern Territory participated in the program. Sessions were conducted in public open spaces, such as under trees or on the veranda of a house. Parent/family sessions were delivered in a group setting and primarily included participants sharing narratives via drawings that related to their and their children's relationship or daily life experiences. From the sharing of narratives, group participants and leaders collectively offered suggestions for improving the situation. Additionally, a parent-child interactive group was provided in which parents or caregivers and two to three group leaders attended sessions with games or drawing encouraging story sharing. Although no outcomes measures were reported, the authors suggested that the use of stories decreased symptomology of problem behaviours in parents and children.

The second article examining Narrative Therapy provided a case study to demonstrate support for the cultural appropriateness of an Australian mental health and wellbeing initiative, KidsMatter (Smith, O'Grady, Cubillo & Cavanagh, 2017). The case study described the inter-cultural participatory process of developing of resources such as videos, animations and written resources in the KidsMatter Aboriginal Children's SEWB project. KidMatter was designed to enhance the SEWB of children within Aboriginal primary school

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and early childhood education and care services. This program was based on participatory action, NT and reflective practice (Stock, Mares & Robinson, 2012). However, the specific influence of NT within resources was not identified. The efficacy of resources was reflected upon by participants including cultural consultants, Indigenous psychologists, non-Indigenous psychologists, KidsMatter staff, early childhood educators, a policy officer, child and family worker and counsellor (Stock, Mares & Robinson, 2012). While the efficacy of NT's influence to KindMatter resources was not specifically reported, the authors concluded that the principles of participatory action, narrative therapy and critically reflective practice could guide culturally appropriate interventions to support positive SEWB outcomes for Indigenous children (Stock, Mares & Robinson, 2012).

A literature review examined the effectiveness of an NT approach with Indigenous people misusing substances (Bacon, 2007). Qualitative articles written by practitioners were identified which described the use of NT in their practice. The study reviewed articles which included children, young women with eating problems, young women who had experienced sexual abuse and people experiencing substance misuse (Bacon, 2007). The review reported minimal demographic information (e.g. population size, mean age/gender). Substance misuse programs, such as Alcohol Anonymous, and interventions conducted by social workers were included in the review. Programs incorporated 'Learning Circles' to link connections between therapeutic efficacy of sharing one's personal narrative and healing. While outcome measures were not obtained, successful outcomes were reported based upon client feedback in sessions, the present-problems clients discussed in session appeared resolved, and symptoms reduced. While the quality of reviewed literature was low, Bacon (2007) stated it was likely that NT had treatment efficacy for Indigenous people with substance misuse.

Overall efficacy of Narrative Therapy

While all three articles supported the efficacy of NT for Indigenous clients (Bacon, 2007; Smith, O'Grady, Cubilo & Cavanagh, 2017; Stock, Mares & Robinson, 2012), these articles demonstrated the lowest quality rating of literature. All three studies were based on n=1 studies and did not provide outcome data. The only outcome data in the reviewed articles was from a secondary study. These outcomes indicated that an NT based program

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significantly increased parental confidence, assertiveness and forged stronger parent-child relationships for Indigenous parents and children (Stock, Mares & Robinson, 2012).

Although three studies suggested NT has potential treatment efficacy for Indigenous clients, further empirical research is required.

Acceptance-based and strength-based therapies

Two articles suggested that Acceptance-based therapies, mainly Acceptance Commitment Therapy (ACT) and mindfulness-based interventions, have potential efficacy when working with Indigenous people. Strength-based psychological approaches, such as positive psychology and ACT, describe mental health not only as the absence of illness or disorders, but also one's ability to develop and maintain mental health. One study explored urban Aboriginal and Torres Strait Islanders' perceptions of well-being and fit to strength-based frameworks (Kilcullen, Swinbourne & Cadet-James, 2017). 19 participants (female $n = 14$) aged between 22 and 56 were asked open-ended semi-structured questions in focus groups and individual interviews. Respondents reported values aligning with ACT approaches, such as valuing acceptance and mindfulness to increase mental well-being (Kilcullen, Swinbourne & Cadet-James, 2017). Thematic analysis identified seven strength-based attributes and values, included acceptance, respect, forgiveness and integrity, honesty, courage, empathy, mindfulness and spirituality (Kilcullen, Swinbourne & Cadet-James, 2017). From these findings, it was suggested that current strength- and values-based psychological approaches such as ACT, may provide meaningful contributions to understanding cross-cultural conceptualisations of mental health (Kilcullen, Swinbourne & Cadet-James, 2017). While the authors suggested that it was likely Indigenous conceptualisations of mental health align with ACT frameworks and may be an effective psychotherapy for urban Indigenous Australians, empirical application of this framework is required.

The second study administered a psychological e-therapy via an app, iBobbly (Tighe et al., 2017). The customised app was created by authors, community members and with the Black Dog Institute to target suicide prevention in Aboriginal Indigenous youth. The iBobby app was created based on acceptance-based therapies including ACT and included three modules (Tighe et al., 2017). Module 1 provided education to identify thoughts,

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feelings and behaviours and to learn distancing techniques. Module 2 educated participants to regulate emotions with mindfulness and acceptance techniques. This module also encouraged social self-soothing activities such as calling a friend or storytelling to support good mental health. In module 3, participants identified values and set small achievable goals in an action plan based upon the identified personal values. Participants included 61 Indigenous Australians aged between 18-35 years who lived in remote and very remote Kimberly region of northern Western Australia. Participants were randomised to either an intervention group or waitlist (6-week) control group (Tighe et al., 2017). Both groups received a 6-week e-intervention and were also administered face-to-face measures pre- and-post intervention that assessed suicidal ideation (Depression Symptom Inventory-Suicidality Subscale [DSI-SS]), depression (Patient Health Questionnaire-9 [PHQ-9]), psychological distress (Kessler-10 [K10]) and impulsivity (The Barratt Impulsivity Scale [BIS-II]) (Tighe et al., 2017).

The iBobbly study electronically delivered an Acceptance-based therapy (Tighe et al., 2017). Participants reported a significant reduction in depression ($p = .01$) and psychological distress ($p = .02$). However, a significant reduction in suicide ideation or impulsivity was not reported. The authors noted that the non-significant findings were likely attributed to flaws in methodological design, such as small sample size of people experiencing suicidal ideation, and the assessment measure targeting temperament rather than impulsivity (Tighe et al., 2017).

Overall efficacy of acceptance and strengths-based therapies

Aboriginal and Torres Strait Islander's conceptualisation of mental health have demonstrated theoretical alignment with the principles and values of acceptance and strength-based therapies (Kilcullen, Swinbourne & Cadet-James, 2017) and reduction in depression and psychological distress using this framework (Tighe et al., 2017). However require further empirical research is required to support these findings.

Multisystemic Therapy

Multisystemic Therapy (MST) was assessed by one article eligible for review. MST uses a social ecological understanding of behaviour, particularly emphasising the

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development of behaviour in complex interactions between individuals and the system in which they belong (Porter & Nuntavisit, 2016). MST interventions aim to reduce antisocial behaviour in youth by using empirically validated treatments, including CBT, parental skills training and structural family therapy (Porter & Nuntavisit, 2016). MST is high in intensity, with in-home therapy sessions delivered three times a week for 4-6 months and clinical phone support 24 hours per day, 7 days per week (Porter & Nuntavisit, 2016). MST was delivered to 330 Australian families engaged with Specialist Child and Adolescent Mental Health Services (CAMHS), of whom 11% identified as Australian Aboriginal people. Average age of youths was 13.6 years and majority were male ($n = 71\%$). Families completed various assessment measures including the Child Behaviour Checklist (CBCL), Parenting Styles and Dimensions Questionnaire (PSDQ) and the Depression, Anxiety and Stress Scale-21 (DASS-21) (Porter & Nuntavisit, 2016).

Using an MST approach, significant improvements across all measures were evident at pre-and post-intervention, and at 6- and 12-month follow-ups (Porter & Nuntavisit, 2016). A significant reduction in total behavioural problems was reported by youth, including internalising and externalising behaviour. Changes in parenting styles were reported, including an increase in authoritative parenting ($p = .001$), and a decrease in both authoritarian ($p = .001$) and permissive ($p = .001$) styles. Decreases in parent's depression, anxiety and stress ($p = .001$) were also reported over a 12-month period post-intervention. While 11% of the participants identified as Aboriginal and/or Torres Strait Islander, no Indigenous specific outcome data was obtained. It is therefore unclear whether Indigenous participants demonstrated improvements similarly to the non-Indigenous families. Additionally, participant demographic data was not obtained, and it is uncertain if Indigenous participants lived in urban or remote areas. From this study, MST appears to demonstrate potential efficacy when working with effective Indigenous families, however, further research, particularly with urban and remote Indigenous families is required.

Limitations

Despite a comprehensive search strategy, limited literature met criteria. Of the included studies, several provided intervention data while other provided theoretical support for culturally appropriate use of Western therapeutic intervention. Further, of the

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studies with broader samples of non-Indigenous and Indigenous people, specific data for Indigenous participants was not reported. Compounding this difficulty, articles that met criteria for the review included various populations, study aims, quality and data analyses. Further, results specific to Indigenous participants in these studies were not reported. Due to the range scope of data, comparing articles to find commonalities was challenging. Additionally, minimal empirical data was obtained for Indigenous children or for Indigenous people living in urban areas.

Many evidence-based psychotherapies commonly used in Western practice were not reported for working with Indigenous people. For example, no studies were found that used therapies such as Interpersonal Therapy (IPT), Dialectical Behaviour Therapy (DBT), Psychoanalysis, Psychodynamic Therapy and Schema Therapy. Given this gap in knowledge, it is unclear whether these approaches are appropriate when working with Indigenous Australians. While research were not identified, it may be that these approaches have already been deemed unsuitable in the cross-cultural context.

Clinical implications and conclusion

Western evidenced-based therapies such as CBT, NT, ACT and MST, were identified in this review as having potential for working at the cultural interface with Aboriginal and Torres Strait Islander people. However, few intervention studies with outcome data were identified. Several of the studies identified common cross-cultural elements for therapies and provided theoretical support for delivery with Indigenous clients. Further, studies identified a cross-cultural understanding of health and wellbeing, where many common values, conceptualisations or beliefs of improving SEWB, fit into Western psychological interventions. Particularly, a model of effective elements of CBT for enhancing SEWB was created to highlight three common themes of knowledge, confidence and perceived client satisfaction within this approach. Findings demonstrate that psychological interventions such as CBT, ACT and MST may have the potential to enhance SEWB. However, these elements require empirical support via further intervention studies. In doing so, Indigenous clients and communities need to be consulted to gain appropriate cultural adaptations and acceptability of such research. The current review further highlights the paucity of empirical evidence for the use of Western mainstream psychotherapies, such as IPT, DBT,

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Psychoanalysis, Psychodynamic Therapy and Schema Therapy when working with Indigenous people, however also provides a foundation to inform future research regarding implement culturally appropriate psychotherapy for Indigenous clients. Such a foundation provides practitioners with a culturally responsive approach to delivering Western psychological therapies to enhance the social and emotional wellbeing of Aboriginal and Torres Strait Islander people.

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References

- Australian Government. (2017). *National Strategic Framework for Aboriginal and Torres Strait Islander People's Mental Health and Social and Emotional Wellbeing 2017-2023*. Retrieved from https://pmc.gov.au/sites/default/files/publications/mhsewb-framework_0.pdf
- Australian Health Practitioner Regulation Agency (AHPRA). (2019). *2017/2018 Annual report*. AHPRA: Canberra.
- Australian Institute of Mental Health and Welfare (AIHW). 2017a *Mental Health Services in Australia. Summary*. Retrieved from: <https://www.aihw.gov.au/reports/mental-health-services/mental-health-services-in-australia/report-contents/summary>
- Australian Bureau of Statistics. (2016). *4714.0 National Aboriginal and Torres Strait Islander Social Survey, 2014-15: Aboriginal and Torres Strait Islander people with a mental health condition*. Retrieved from [http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4714.0~2014-15~Feature%20Article~Aboriginal%20and%20Torres%20Strait%20Islander%20people%20with%20a%20mental%20health%20condition%20\(Feature%20Article\)~10](http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4714.0~2014-15~Feature%20Article~Aboriginal%20and%20Torres%20Strait%20Islander%20people%20with%20a%20mental%20health%20condition%20(Feature%20Article)~10)
- Bacon, V. (2007). What potential might Narrative Therapy have to assist Indigenous Australians reduce substance misuse? *Australian Aboriginal Studies*, 2007(1), 71-82. Retrieved from <https://search.informit-com-au.elibrary.jcu.edu.au/documentSummary;dn=715952694372581;res=IELIND>
- Barrett, E. L., Indig, D., Sunjic, S., Sannibale, C., Sindicich, N., Rosenfeld, J., ... Mills, K. (2015). Treating comorbid substance use and traumatic stress among male prisoners: A pilot study of the acceptability, feasibility, and preliminary efficacy of Seeking Safety. *International Journal of Forensic Mental Health*, 14(1), 45-55. doi: 10.1080/14999013.2015.1014527
- Bennett-Levy, J., Wilson, S., Nelson, J., Rotuman, D., Ryan, K., Budden, W., . . . Beale, D. (2015). Spontaneous self-practice of Cognitive Behavioural Therapy (CBT) by Aboriginal Counsellors during and following CBT training: A retrospective analysis of

The efficacy of evidence-based psychological interventions with Aboriginal and Torres Strait Islander people

facilitating conditions and impacts. *Australian Psychologist*, 50(5), 329-334. doi: 10.1111/ap.12154

Bennett-Levy, J., Wilson, S., Nelson, J., Stirling, J., Ryan, K., Rotumah, D., . . . Beale, D. (2014). Can CBT be effective for Aboriginal Australians? Perspectives of Aboriginal practitioners trained in CBT. *Australian Psychologist*, 49(1), 1-7. doi: 10.1111/ap.12025

Conchra: Research & Technology. (2015). *Crowe Critical Appraisal Tool (v1.4)*. Retrieved by <https://conchra.com.au/2015/12/08/crowe-critical-appraisal-tool-v1-4/>

Crowe, M., Sheppard, L., & Campbell, A. (2012). Reliability analysis for a proposed critical appraisal tool demonstrated value for diverse research designs. *Journal of Clinical Epidemiology*, 65(4), 375–383. doi: 0.1016/j.jclinepi.2011.08.006

Davies, M. (2011). Anxiety in children: Remote area sensitivities and considered changes in structuring a Cool Kids approach. *Australasian Psychiatry*, 19(1), 23-25. doi: 10.3109/10398562.2011.5830

Dingwall, K. M., & Cairney, S. (2010). Psychological and cognitive assessment of Indigenous Australians. *Australian and New Zealand Journal of Psychiatry*, 44(1), 20-30. doi: 10.3109/00048670903393670

Garvey D. (2008). *A review of the social and emotional wellbeing of Indigenous Australian peoples*. Retrieved from http://www.healthinfonet.ecu.edu.au/sewb_review.

Gee, G., Dudgeon, P., Schultz, C., Hart, A., & Kelly, K. (2014). Aboriginal and Torres Strait Islander Social and Emotion Wellbeing. In Dudgeon, P., Milroy, H., & Walker, R. Editor (Ed.), *Working together: Aboriginal and Torres Strait Islander mental health and wellbeing principles and practice* (2nd ed.). Canberra: Department of the Prime Minister and Cabinet

Kilcullen, M., Swinbourne, A., & Cadet-James, Y. (2016). Aboriginal and Torres Strait Islander health and well-being: Implications for a Cognitive Behavioural Therapy framework. *Australian Psychologist*, 51(6), 453-462. doi:10.1111/ap.12159

The efficacy of evidence-based psychological interventions with Aboriginal and Torres Strait Islander people

Kilcullen, M., Swinbourne, A., & Cadet-James, Y. (2017). Aboriginal and Torres Strait Islander health and well-being: Social emotional wellbeing and strengths-based psychology. *Clinical Psychologist*, 22(1), 16-26. doi: 10.1111/cp.12112

Kowanko, I., Emden, C., Murray, H., & De Crespigny, C. (2005). Better medication management for Indigenous Australians: Findings from the field. *Australian Journal of Primary Health*, 11(1), 80-90. doi: 10.1071/PY05011

Liberati, A., Altman, D. G., Tezloff, J., Mulrow, C., Gotzsche, P. C., Ioannidis, J. P. A., ... Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate healthcare interventions: Explanation and elaboration. *BMJ*, 339(2009), b2700-b2700. doi: 10.1136/bmj.b2700

Porter, M., & Nuntavisit, L. (2016). An evaluation of Multisystemic Therapy with Australian families. *Australian and New Zealand Journal of Family Therapy*, 37(4), 443-462. doi: 10.1002/anzf.1182

Robinson, G., Zubrik, S., Silburn, S., Daprano, A., Tyler, W., McGuinness, K., Jones, Y ... Stock, C. (2009). *Let's Start: Exploring together an early intervention program for Northern Territory children and families. Final evaluation report*. School for Social and Policy Research, Institute of Advanced Studies, Charles Darwin University: Darwin.

Smith, S., O'Grady, L., Cubillo, C., & Cavanagh, S. (2017). Using culturally appropriate approaches to the development of KidsMatter resources to support the Social and Emotional Wellbeing of Aboriginal Children: Intercultural participatory processes. *Australian Psychologist*, 52(4), 299-305. doi: 10.1111/ap.122284

Stock, C., Mares, S., & Robinson, G. (2012). Telling and re-telling stories: The use of narrative and drawing in a group intervention with parents and children in a remote Aboriginal community. *Australian and New Zealand Journal of Family Therapy*, 33(2), 157-170. doi: 10.1017/aft.2012.17

Thomas, A., Cairney, S., Gunthorpe, W., Paradies, Y., & Sayers, S. (2010). Strong souls: development and validation of a culturally appropriate tool for assessment of social

The efficacy of evidence-based psychological interventions with Aboriginal and Torres Strait Islander people

and emotional well-being in Indigenous youth. *Australian and New Zealand Journal of Psychiatry*, 44(1), 40-48. doi:10.3109/00048670903393589

Tighe, J., Shand, F., Ridani, R., Mackinnon, A., De La Mata, N., & Christensen, H. (2017).

Ibobbly mobile health intervention for suicide prevention in Australian Indigenous youth: A pilot randomised controlled trial. *BMK Open*, 7(1), e013518. doi: 10.1136/bmjopen-2016-013518

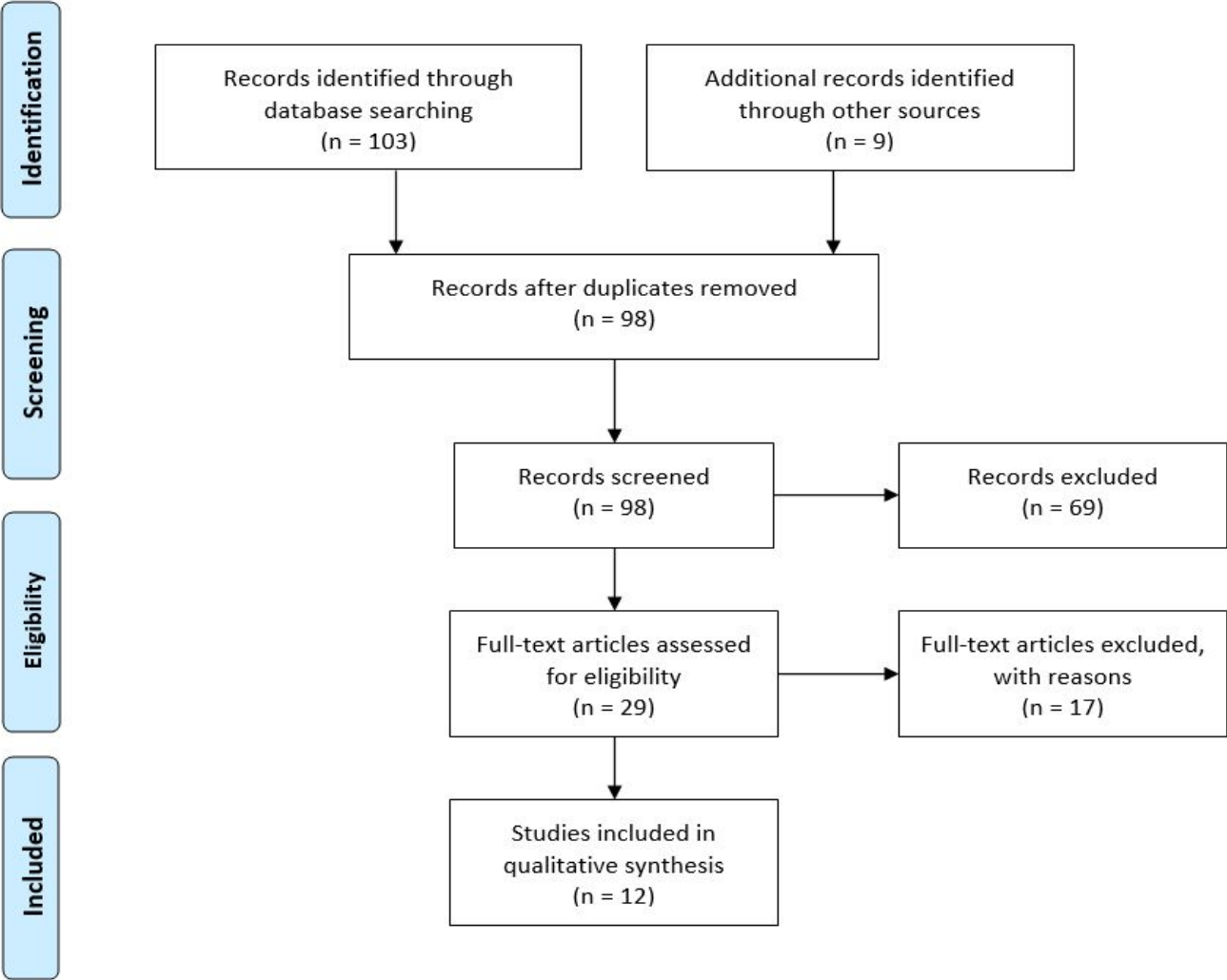
Titov, N., Dear, B. F., Staples, L. G., Bennett-Levy, J., Klein, B., Rapee, R. M., ... Nielssen, O.

(2017). The first 30 months of the Mindspot clinic: Evaluation of a national e-mental health service against project objectives. *The Australian and New Zealand Journal of Psychiatry*, 51(12), 1227-1329. doi: 10.1177/0004867416671598

Vicary, D., & Bishop, B. J. (2005). Western psychotherapeutic practice: Engaging aboriginal people in culturally appropriate and respectful ways. *Australian Psychologist*, 40(1), 8-19. doi:10.1080/00050060512331317210

Vicary, D., & Westerman, T. (2004). That's just the way he is: Some implications of Aboriginal mental health beliefs. *Australian e-Journal of the Advancement of Mental Health*, 3(3), 10. Retrieved from <https://search.informit-com-au.elibrary.jcu.edu.au/documentSummary;dn=708706043419657;res=IELHEA>

Ypinazar., V. A., Margolis, S. A., Haswell-Elkins, M., & Tsey, K. (2007). Indigenous Australian's understandings regarding mental health and disorders. *Australian and New Zealand Journal of Psychiatry*, 41(6), 467-478. doi: 10.1080/00048670701332953

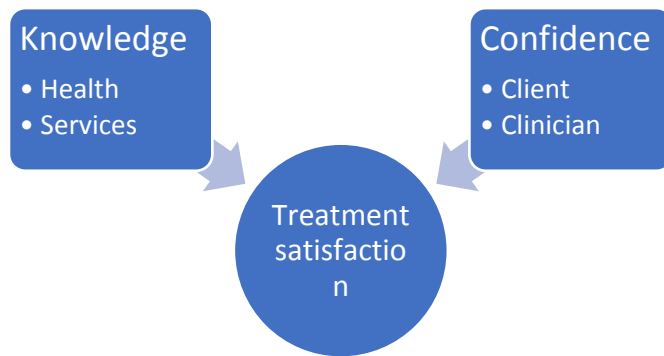


Author	Year	Title	Participants	Design	Psychological Intervention	Treatment outcomes	CCAT Quality rating
Bacon	2007	What potential might Narrative Therapy have to assist Indigenous Australians reduce substance misuse?	Published literature	Literature review	Evaluation of published literature examining NT.	NT demonstrated treatment efficacy for substance misuse for Indigenous people. Noted that no empirical-based evaluations were found within the literature.	25%
Barrett et al.	2015	Treating comorbid substance use and traumatic stress among male prisoners: A pilot study of the acceptability, feasibility, and preliminary efficacy of Seeking Safety	30 male Australian prisoners. 23.3% Indigenous representative of prison sample.	Pilot RCT. 15 participants Seeking Safety, 15 treatment as usual. Outcome data measured at 8 weeks post-treatment and 6 months post-baseline.	Seeking Safety manualised program designed from CBT. Endorced as evidence-based treatment for traumatic stress.	No valid outcome data due to limited sample size. Author's suggested (based on "eye-balling" SDs) that reduction in PTSD symptomology and an increase in confidence to resist urge of using substances in future. No Indigenous specific outcome data recorded.	60%
Bennet-Levy et al.	2014	Can CBT be effective for Aboriginal Australians? Perspectives of Aboriginal practitioners trained in CBT	5 Australian Aboriginal counsellors	Participation action research (PAR)	High and low-intensity CBT	No outcome data on efficacy of treatment on clients. Counsellor's perceived CBT to be effective for clients and self-practice. Counsellor's reported CBT to enhance client and personal well-being, confidence and may reduce risk of professional burnout.	43%

Bennet-Levy et al.	2015	Spontaneous self-practice of Cognitive Behavioural Therapy by Aboriginal counsellors during and following CBT training: A retrospective analysis of facilitating conditions and impact	5 Australian Aboriginal counsellors	Quantitative design (self-reflections) “retrospective analysis”	Self-practiced CBT by counsellors	No outcome measures - data collected from informal reflective groups. Increase counsellors resilience and skills to manage with stress. May prevent burnout. Counsellors felt safe and contained in their work with clients.	40%
Davies	2011	Anxiety in children: Remote area sensitivities and considered changes in structuring a Cool Kids approach	20 journal articles	Systematic review	No psychological intervention delivered as systematic review was conducted.	Concluded that CBT structured programs, such as Cool Kids, is likely to be effective for Aboriginal children (no outcome data examined).	60%
Kilcullen, Swinbourne, & Cadet-James	2016	Aboriginal and Torres Strait Islander health and well-being: Implications for a Cognitive Behavioural Therapy framework	19 A&TSI people (14 F, 5M: age: 22-56)	Qualitative interviews	No psychological intervention delivered in study.	Theoretical support for fit between urban Indigenous people’s conceptualisation of being mentally healthy and CBT. No outcome data recorded.	83%
Kilcullen, Swinbourne & Cadet-James	2017	Aboriginal and Torres Strait Islander health and wellbeing: Social emotional wellbeing and strengths-based psychology	19 A&TSI people (14 F, 5M: age: 22-56)	Qualitative interviews	No psychological intervention delivered in study.	Theoretical support for fit between urban Indigenous people’s conceptualisation of being mentally healthy and ACT and strength-based approaches. No outcome data.	83%

Porter & Nuntavisit	2016	An evaluation of Multisystemic Therapy with Australian families	330 families (11% Australian Aboriginal)	Quantitative research- one way repeated measure ANOVA	Multisystemic Therapy (MST)	No Australian Aboriginal specific outcome data. Reduction in total behavioural problems ($p = .001$). Parenting styles adjusted with an increase in authoritative parenting ($p = .001$) and parental depression, anxiety and stress reduced ($p = .001$).	45%
Smith, O'Grady, Cubillo & Cavanagh	2017	Using culturally appropriate approaches to the development of KidsMatter resources to support the Social and Emotional Wellbeing of Aboriginal Children: Intercultural participatory processes.	N/A	Case study	KidsMatter program designed on participation action, Narrative Therapy and reflective practice.	No outcome data for efficacy of Narrative Therapy. Authors concluded that principles of Narrative Therapy are appropriate to guide culturally appropriate SEWB outcomes.	75%
Stock, Mares & Robinson	2012	Telling and Re-telling Stories: The Use of Narrative and Drawing in a Group Intervention with Parents and Children in a Remote Aboriginal Community	10 Aboriginal families living in remote communities in Northern Territory	Case study	Let's start program with adaptations from NT approach.	No outcome measure. Authors proposed NT interventions effective based on personal reflections. Cited previous literature stating Let's start (based on developmental theory, attachment theory, NT and CBT).	45%
Tighe et al.	2017	Ibobbly mobile health intervention for suicide prevention in Australian Indigenous youth: a pilot randomised controlled trial	61 Indigenous Australians (age 18-35) living remote or very remote Northern WA	RCT with post-test and 6 week follow-up data	Electronic psychotherapy (app) based on acceptance-based therapies including ACT	Significant reduction from pre-to-post intervention scores were found in depression ($p = 0.01$) and psychological distress ($p = 0.02$). No significant changes in suicide ideation or impulsivity. No significant differences were found	75%

			(Kimberly region)				with SI between initial therapy and waitlist control group.
Titov et al.	2017	The first 30 months of the MindSpot Clinic: Evaluation of a national e-mental health service against project objectives	6 149 online Australians (3.1% Indigenous)	Quantitative analysis of website traffic data	Electronic psychotherapy. Therapist-guided internet-delivered CBT	No Indigenous specific data. Overall sample reduction in psychological distress (p= 0.001), OCD symptomology (p= <0.001), PTSD symptomology (p= <0.001) with an increase in health outcomes (p= 0.001).	70%



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Table 1. Summary of studies meeting inclusion criteria

Author	Year	Title	Participants	Design	Psychological Intervention	Findings	CCAT Quality rating
<i>Cognitive Behaviour Therapy (CBT)</i>							
Barrett et al.	2015	Treating comorbid substance use and traumatic stress among male prisoners: A pilot study of the acceptability, feasibility, and preliminary efficacy of Seeking Safety	30 male Australian prisoners. 23.3% Indigenous representative of prison sample.	Pilot RCT. 15 participants Seeking Safety, 15 treatment as usual. Outcome data measured at 8 weeks post-treatment and 6 months post-baseline.	Seeking Safety manualised program designed from CBT. Endorced as evidence-based teatment for traumatic stress.	No valid outcome data due to limited sample size. Author’s suggested (based on “eye-balling” SDs) that reduction in PTSD symptomology and an increase in confidence to resist urge of using substances in future. No Indigenous specific outcome data recorded.	60%
Bennet-Levy et al.	2014	Can CBT be effective for Aboriginal Australians? Perspectives of Aboriginal practitioners trained in CBT	5 Austrailian Aboriginal counsellors	Paricipation action research (PAR)	High and low-intensity CBT	No outcome data on efficacy of treatment on clients. Counsellor’s percieved CBT to be effective for clients and self-practice. Counsellor’s reported CBT to enhace client and personal well-being, confidence and may reduce risk of professional burnout.	43%

Bennet-Levy et al.	2015	Spontaneous self-practice of Cognitive Behavioural Therapy by Aboriginal counsellors during and following CBT training: A retrospective analysis of facilitating conditions and impact	5 Australian Aboriginal counsellors	Qualitative design (self-reflections) "retrospective analysis"	Self-practiced CBT by counsellors	No outcome measures - data collected from informal reflective groups. Increase counsellors resilience and skills to manage with stress. May prevent burnout. Counsellors felt safe and contained in their work with clients.	40%
Davies	2011	Anxiety in children: Remote area sensitivities and considered changes in structuring a Cool Kids approach	20 journal articles	Systematic review	Cool Kids program, CBT	Concluded that CBT structured programs, such as Cool Kids, is likely to be effective for Aboriginal children (no outcome data examined).	60%
Kilcullen, Swinbourne, & Cadet-James	2016	Aboriginal and Torres Strait Islander health and well-being: Implications for a Cognitive Behavioural Therapy framework	19 Aboriginal and Torres Strait Islander people (14 F, 5M: age: 22-56)	Qualitative interviews	CBT	Theoretical support for fit between urban Indigenous people's conceptualisation of being mentally healthy and CBT. No outcome data recorded.	83%
Titov et al.	2017	The first 30 months of the MindSpot Clinic: Evaluation of a national e-mental health service against project objectives	6 149 online Australians (3.1% Indigenous)	Quantitative analysis of website traffic data	Electronic psychotherapy. Therapist-guided internet-delivered CBT	No Indigenous specific data. Overall sample reduction in psychological distress ($p=0.001$), OCD symptomology ($p<0.001$), PTSD symptomology ($p<0.001$) with an increase in health outcomes ($p=0.001$).	70%
<i>Narrative Therapy (NT)</i>							

Bacon	2007	What potential might Narrative Therapy have to assist Indigenous Australians reduce substance misuse?	Published literature	Literature review	Evaluation of published literature examining NT.	NT demonstrated treatment efficacy for substance misuse for Indigenous people. Noted that no empirical-based evaluations were found within the literature.	25%
Smith, O’Grady, Cubillo & Cavanagh	2017	Using culturally appropriate approaches to the development of KidsMatter resources to support the Social and Emotional Wellbeing of Aboriginal Children: Intercultural participatory processes.	N/A	Case study	KidsMatter program designed on participation action, NT and reflective practice.	No outcome data for efficacy of Narrative Therapy. Authors concluded that principles of Narrative Therapy are appropriate to guide culutrally appropriate SEWB outcomes.	75%
Stock, Mares & Robinson	2012	Telling and Re-telling Stories: The Use of Narrative and Drawing in a Group Intervention with Parents and Children in a Remote Aboriginal Community	10 Aboriginal families living in remote communties in Northern Terrirory invited (6 families in final study)	Case study	Let’s start program with adaptations from NT appraoach.	No outcome measure. Authors proposed NT interventions effective based on personal reflections. Cited previous literature stating Let’s start (based on developmental theory, attachment theory, NT and CBT).	45%

Acceptance Commitment Therapy (ACT)

Kilcullen, Swinbourne & Cadet-James	2017	Aboriginal and Torres Strait Islander health and wellbeing: Social emotional wellbeing and strengths-based psychology	19 Aboriginal and Torres Strait Islander people (14 F, 5M: age: 22-56)	Qualitative interviews	ACT.	Theoretical support for fit between urban Indigenous people's conceptualisation of being mentally healthy and ACT and strength-based approaches. No outcome data.	83%
Tighe et al.	2017	Ibobbly mobile health intervention for suicide prevention in Australian Indigenous youth: a pilot randomised controlled trial	61 Indigenous Australians (age 18-35) living remote or very remote Northern WA (Kimberly region)	RCT with post-test and 6 week follow-up data	Electronic psychotherapy (app) based on acceptance-based therapies including ACT	Significant reduction from pre-to-post intervention scores were found in depression ($p = 0.01$) and psychological distress ($p = 0.02$). No significant changes in suicide ideation or impulsivity. No significant differences were found with SI between initial therapy and waitlist control group.	75%
<i>Multisystemic Therapy (MST)</i>							
Porter & Nuntavisit	2016	An evaluation of Multisystemic Therapy with Australian families	330 families (11% Australian Aboriginal)	Quantitative research- one way repeated measure ANOVA	Multisystemic Therapy (MST)	No Australian Aboriginal specific outcome data. Reduction in total behavioural problems ($p = .001$). Parenting styles adjusted with an increase in authoritative parenting ($p = .001$) and parental depression, anxiety and stress reduced ($p = .001$).	45%

Abstract

Objective: Limited empirical literature exists examining the application of evidenced-based psychotherapies when working with Aboriginal and Torres Strait Islander people. Australian Aboriginal and Torres Strait Islander people's view of Social and Emotional Wellbeing differs to Western ideologies of mental health. In the present study, a qualitative systematic review explored evidenced-based psychological therapies with Indigenous clients. *Method:* A systematic review was conducted using the PRISMA framework. A total of 12 articles that met criteria for inclusion in the review were extracted through hand- and database searching. Therapies identified in the articles included Narrative Therapy (NT), Cognitive-Behaviour Therapy (CBT), Acceptance-based Therapies and Multisystemic Therapy (MST). *Results:* CBT was the most reported therapy in the review. Three articles, however rated lower in quality, also identified NT. Although limited in quantity, acceptance-based and strength-based therapies and MST were also identified as having cross-cultural applications. *Conclusions:* While, CBT, ACT and MST have been used when working at the cultural interface with Indigenous peoples, further empirical evidence with outcome data is required. Such evidence is required to assess acceptability and suitability of such psychotherapies and for clinicians to provide culturally responsive practice when working with Indigenous people.

Keywords: Aboriginal, evidence-based, Torres Strait Islander, psychotherapy, efficacy, SEWB.

Key points:

- 1) Indigenous SEWB differs from Western mental health conceptualisations.
- 2) A cross-cultural interface was found in CBT, ACT, NT and MST.
- 3) Further empirical testing of psychotherapy interventions is required with Indigenous clients to confirm cultural acceptability, suitability and efficacy.

Evidence-based psychological interventions and Aboriginal and Torres Strait Islander people

Australian Aboriginal and Torres Strait Islander peoples experience greater risk of mental health issues such as depression, anxiety, substance use and suicide (Australian Institute of Health and Welfare, 2017; Thomas, Cairney, Gunthorpe, Paradies, & Sayers, 2010; Vicary & Westerman, 2004; Ypinazar, Margolis, Haswell-Elkins, & Tsey, 2007). Higher rates of mental illness have been associated with disadvantage through health, unemployment, poverty, isolation, trauma, discrimination and other social, historic and political determinants (Australian Bureau of Statistics, 2016; Smith, O'Grady, Cubillo, & Cavanagh, 2017). Mental health conditions are twice as likely to be reported by Aboriginal and Torres Strait Islander people living in non-remote areas than in remote areas (Australian Bureau of Statistics, 2016). Further, suicide rates for Aboriginal people living in remote communities are double those of non-Indigenous Australians (Vicary & Westerman, 2004). Despite this, Indigenous mental illness is often unnoticed, undiagnosed and untreated (Ypinazar et al., 2007). With respect, the term 'Indigenous' refers to Australian Aboriginal and Torres Strait Islander people while acknowledging two separate cultural groups, each with their own world views and cultural values and beliefs. The term 'non-Indigenous' is used to describe Australians who do not identify as an Aboriginal or Torres Strait Islander person.

Western mental health definitions, terms and concepts are not easily transferable to Indigenous cultures or languages (Emden, Kowanko, de Crespigny, & Murray, 2005; Garvey, 2008). While Western conceptualisations of mental health is largely framed in relation to an individual's mental state, mental health for Australian Indigenous people is seen as a holistic conceptualisation of broader social and emotional well-being (SEWB) for individuals and community (Gee, Dudgeon, Schultz, Hart, & Kelly, 2014). Six domains shape Aboriginal and Torres Strait Islander holistic conceptualisations of SEWB, including connection to the body, mind and emotions, family and kinship, community, culture and land and spirituality. Poor SEWB is likely to be experienced when people or communities experience disruptions to connectedness across these domains from factors such as historical and current governing policies associated with colonisation or discrimination (Thomas et al., 2010; Vicary & Westerman, 2004).

Expressions of poor SEWB and psychological distress differ between Australian Indigenous and non-Indigenous people (Thomas et al., 2010; Vicary & Westerman, 2004).

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Indigenous people also express psychological distress in ways not recognised in DSM-IV diagnostic criteria (Thomas et al., 2010; Vicary & Westerman, 2004). For example, for some Indigenous people, psychological distress is more likely to be expressed through somatic symptoms such as dizziness, indigestion and breathing difficulties, whereas anxiety may manifest as low mood or sadness and depression may be expressed as anger (Thomas et al., 2010; Vicary & Westerman, 2004). Due to differences in expression, psychological distress may not be identified by non-Indigenous practitioners and thus affect access to treatment.

Australian Indigenous people have expressed fear of approaching Western mental health services (Ypinazar et al., 2007). Reported difficulties contributing to fear include stigma, shame, previous negative experiences, misunderstanding of treatment and diagnoses, fear of being away from country during hospitalisation, medication side effects, impact on community and culturally inappropriate treatment methodologies (Ypinazar et al., 2007). Further, Indigenous people often wait until crisis occurs before engaging in services and often reported seeking Western modes of treatment for psychological distress only when traditional methods had been explored (Vicary & Bishop, 2005). This delay in service engagement may be due to the disconnection between Western and Indigenous conceptualisations of health and wellbeing and a lack of evidence for Western treatment frameworks (Dingwall & Cairney, 2010; Vicary & Westerman, 2004).

Despite recognised differences in the conceptualisation and expression of mental health and SEWB for non-Indigenous and Indigenous Australians, little research has examined the efficacy of evidence-based psychological interventions with Indigenous people (Bacon, 2007; Vicary & Westerman, 2004; Ypinazar et al., 2007). Rather, psychological interventions have focused on developing cultural competent clinicians and services (Commonwealth of Australia, 2017). Guidelines recommended that clinicians enhance their awareness, knowledge and understanding of Indigenous culture, history, SEWB conceptualisation and expression of mental illness (Commonwealth of Australia, 2017). As most psychologist in Australia are non-Indigenous clinicians (Australian Health Practitioner Regulation Agency (Ahpra) & National Boards, 2019), it is crucial to build cultural competence in clinicians. However, it is not clearly understood whether Western treatment frameworks provide culturally appropriate interfaces when working with Indigenous clients.

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Aim of the current study

A qualitative systematic review was conducted of literature that reported on the use of evidence-based psychological interventions with Australian Indigenous people. The aim of the current review was to identify evidenced-based psychological therapies used in a cross-cultural context. For the purposes of this review, evidence-based therapies are defined as those identified in the Australian Psychological review (Australian Psychological Society, 2018), including but not limited to Acceptance and Commitment Therapy (ACT), Cognitive Behaviour Therapy (CBT), Dialectical Behaviour Therapy (DBT), and Interpersonal Psychotherapy (IPT).

Method

Search strategy

The search of multiple databases was conducted in March 2018 using the PRISMA framework (Liberati et al., 2009). A research librarian supported the authors in the searches of the databases. Databases included PsychINFO (ProQuest), Medline (Ovid), Informit, SCOPUS, CINAHL and Emcare (Ovid). Articles published in peer-reviewed journals were identified within searches to ensure maximum retrieval of qualitative and quantitative studies.

Eligibility criteria

Articles were required to include Australian Aboriginal and/or Torres Strait Islander people and Western evidence-based psychological interventions within the study methodology. No limitations were placed on population factors such as age, sex and location, or on the percentage of participants who identified as an Indigenous person. Quantitative and qualitative literature was included in the review. Scoping reviews or responses to commentaries were excluded.

Data extraction and study selection

An Endnote library was used to manage data collection including authors, year, title, Journal/secondary title, volume, number, pages and the name of the database articles. Duplicates were removed. Of the remaining articles, titles and abstracts were examined and screened for eligibility criteria. Articles that did not meet criteria were removed. Full-text

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articles that met inclusion criteria were retrieved for evaluation. Data extraction was cross-checked during four stages of the review, including the database search, removal of duplicates, removal of articles not meeting criteria and assessment of full-text articles.

Quality assessment

The Crowe Critical Appraisal Tool (CCAT) was used to evaluate the quality of the reviewed literature (Crowe, Sheppard, & Campbell, 2012). The CCAT is used to rate each article reflecting the quality of an article's preliminaries, introduction, design, sampling, data collection, ethical matters, results and discussion. A total score was calculated across each domain. Quality ratings were scored on a scale between 0 = lowest score reflecting poor quality, and 5 = highest score reflecting high quality, and expressed as a percentage score by dividing total score by 40 (8 x max. score of 5). CCATs scores were completed and cross-checked (see Table 2 for CCAT scores).

Results and discussion

A total of 103 articles were extracted through database searching and nine articles via hand searching. After the initial review, 14 duplicates were removed. The title and abstracts of a further 69 articles did not meet criteria and were removed after screening, and the remaining 29 full-text articles were reviewed. An additional 17 articles were excluded as research design or psychotherapy criteria were not met. A total of 12 studies met inclusion criteria for review (see Figure 1). Of the identified articles, only two articles implemented psychological interventions (MST and e-psychotherapy based on ACT) with Australian Indigenous people and reported outcome data. The other articles included reviews, therapeutic adaptations and recommendations for clinicians, theoretical implications for using therapies, and suggested potential application. Given the small number of eligible studies, a qualitative synthesis of results was conducted.

[INSERT FIGURE 1 HERE]

Figure 1: PRISMA flowchart indicating identification, screening, eligibility and included articles.

Five articles included male and female participants, 1 article included only males and 6 articles did not record gender of participants. Two articles reported on Australian families.

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Four articles did not record participant demographic data. Ten articles included adult participants. Two articles included urban Indigenous participants, 2 articles included participants living remote or very remote, and 1 article included incarcerated participants. Seven articles did not specifically report participant location. Three studies included Australian Aboriginal and/or Indigenous participants as part of a broader sample. In these studies, Aboriginal and/or Indigenous participants were 3.1%, 11% or 23.3% of the sample. In order to identify the types of evidence-based psychotherapies that are delivered with Australian Indigenous people, studies were included that did not specifically reported outcomes for Indigenous people. While this is not ideal, it provides some insights in the context of so few eligible articles.

Study designs included qualitative analysis ($n = 3$), quantitative research ($n = 2$), case studies ($n = 2$), RCT ($n = 1$), systematic review ($n = 1$), Participatory Action Research (PAR) ($n = 1$), pilot RCT ($n = 1$) and a literature review ($n = 1$). Cognitive Behaviour Therapy (CBT) was the most used therapeutic approach. It was delivered in various modalities including face-to-face with high- and low-intensity ($n = 1$), self-administered by trained counsellors ($n = 1$), within a manualised program designed from CBT principles ($n = 1$) and through internet-delivery ($n = 1$). Three articles examined Narrative Therapy in case studies ($n = 2$) and an examination of published literature ($n = 1$). Additional psychological interventions included Multisystemic Therapy (MST) ($n = 1$) and a psychotherapy app designed from acceptance-based therapies including Acceptance and Commitment Therapy (ACT) ($n = 1$). Three articles did not administer CBT however analysed findings from qualitative interviews ($n = 1$) and a systematic review ($n = 1$) in the context of CBT, and strength- and values-based approaches (such as positive psychology and ACT) ($n = 1$). The quality of each article ranged from CCAT ratings from 40-83%. The average CCAT rating per article was 60%. Table 1 provides a summary of articles meeting inclusion criteria.

[INSERT TABLE 1 HERE]

Cognitive Behavioural Therapy

Kilcullen and colleagues (2016) explored urban Aboriginal and Torres Strait Islander peoples' understanding of mental health and fit with a cognitive-behavioural framework. Participants included 19 people aged between 22 and 56 (female $n = 14$), living in Townsville, Queensland, who were asked open-ended questions within semi-structured

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interviews and focus groups about mental health and cultural identity. Approximately 20 hours of recorded data was gathered over approximately 60 hours of interviews or focus groups. Findings indicated that four themes emerged: coping strategies, knowledge, social support and connectedness (Kilcullen et al., 2016).

Coping skills included behavioural, emotional and cognitive skills to enhance well-being, such as self-talk, making positive choices based on past decisions, keeping busy, meditation, empathising and forgiving others, and upholding values such as honesty, acceptance and courage (Kilcullen et al., 2016). Participants reported the impact and importance of knowledge of mental and physical health as a protective factor for good mental health (Kilcullen et al., 2016). This included knowledge of diet and exercise and of mental health services. Participants identified the importance of social support to well-being, including personal resources such as education, income, help-seeking behaviours and engaging in the wider community. Lastly, the theme of connectedness was found to be central to influencing all aspects of mental health for the Indigenous people in this study (Kilcullen et al., 2016). The model of Indigenous mental health developed in this study fit well with the SEWB model and within a cognitive-behavioural framework. Authors concluded that increasing SEWB from a cognitive-behavioural framework could enhance coping skills in cognitive, emotional and behavioural domains while increasing social support, knowledge and skills in daily living (Kilcullen et al., 2016). Therefore, using a CBT framework within the SEWB model has the potential to form a culturally appropriate and effective psychotherapy for urban Indigenous Australians.

Bennett-Levy and colleagues (2014) explored Aboriginal counsellors' perspectives for the suitability and effectiveness of CBT as a treatment method for Australian's living in Aboriginal communities). A Participatory Action Research (PAR) design was implemented over a 12-month period. Community involvement was encouraged in every stage of the project. The study provided ten days of in-depth formal CBT training to five university-educated Aboriginal counsellors. Additionally, a follow up 5-day training course was provided, 3 months post formal training, with an added 1-day workshop, 4-months post training. Results of the PAR study indicated that CBT was endorsed by all counsellors as a useful psychotherapy for working with Indigenous client as it produced positive impacts on both client and counsellor's wellbeing (Bennett-Levy et al., 2014). Counsellors identified

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qualities of CBT which were effective when treating psychological distress in Aboriginal clients. These qualities included CBT's adaptability, structure, focus on the present, and the time-limited nature of the therapy. Clients also reported that they would often share techniques with their family or communities who had not attended the sessions (Bennett-Levy et al., 2014). Counsellors identified that the empowering, skill-building and agentic nature of CBT was highly consistent with the aspirations of Aboriginal people. No client outcome data was obtained (Bennett-Levy et al., 2014).

Bennett-Levy and colleagues (2014) recommended three adaptations to CBT interventions for Aboriginal Australians. Firstly, low-intensity CBT was endorsed by counsellors, such as irregular visits to remote communities or flexible appointment times with options for walk-ins and cancellations. It was recommended that these interventions were delivered in informal spaces (e.g. outdoors, walking, sharing tea) or remotely (e.g. by phone, internet or mobile apps). Secondly, it was suggested that the structure of CBT is emphasised when working with Aboriginal clients. Counsellors reported that clients would often focus on past events, however keeping the sessions solution- and present- focused helped clients to elicit stronger perceived outcomes. Aboriginal counsellors valued self-practicing CBT as a stress reduction tool and as protection from burnout. Authors acknowledged that the modifications and adaptations of delivering CBT were not uniquely relevant to Indigenous people (Bennett-Levy et al., 2014). Bennett-Levy and colleagues (2014) also noted that it was likely the results were influenced by confirmatory bias as authors of the project were also participants who invested time and energy into training and therefore desired to validate the therapy (Bennett-Levy et al., 2014). While no outcome measures were administered to clients, these positive findings show promise for a cross-cultural fit for delivering CBT.

Bennett-Levy and colleagues (2015) conducted a secondary analysis from their earlier study (Bennett-Levy et al., 2014), where 10 days of CBT specific CBT training was provided to five Australian Aboriginal counsellors. This article reported counsellor's perceptions on the effectiveness of self-practiced CBT. Authors conducted an analysis of conversational data recorded from discussions occurring in two reflective group meetings at 3- and 5-months post CBT training. Although the previous study (Bennett-Levy et al., 2014) did not specifically advocate for counsellors to self-practice CBT, all counsellors reported a

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positive effect upon their practice of self-practice and self-reflection during and after the study. No standardised method for self-reflection was used and limited information was provided regarding data methodologies. Counsellors delivered CBT to clients and suggested that CBT was a culturally appropriate, effective psychotherapy for Indigenous clients (Bennett-Levy et al., 2015).

CBT was also demonstrated to be useful in both personal and professional contexts (Bennett-Levy et al., 2015). Within a professional context, counsellors reported an increase in confidence of skills and practice in delivering CBT. Counsellors perceived CBT to prevent burnout by increasing their resilience and skills to manage personal stress. Counsellors reported that due to living in a rural location, they frequently connected with clients on a personal level, outside of the therapeutic space. Overall, authors concluded that CBT was perceived as an effective psychotherapy for Aboriginal clients and counsellors. As in the previous study, no outcome measures were reported (Bennett-Levy et al., 2015).

Titov and colleagues (2017) analysed website traffic data to determine patterns of use by 458, 921 Australian's visiting the MindSpot Clinic website. The MindSpot Clinic was a component of the Australian Government e-Mental Health Strategy and provided Australian adults with online mental health services addressing anxiety and depression (Titov et al., 2017). MindSpot provided brief online assessments, referrals to local services and therapist-guided Internet-delivered CBT (iCBT). MindSpot courses consisted of four to six CBT modules consisting of PowerPoint presentations over an eight-week duration. The aim of the program was to target symptoms of depression and anxiety, obsessive compulsive disorder (OCD) and post-traumatic stress disorder (PTSD). The authors noted that the proportion of Aboriginal and Torres Strait Islander people in the study reflected the national statistics.

Titov and colleagues (2017) collected MindSpot Clinic data from two data points between January 2013 and June 2015. Data was firstly collected by Australian users who publicly accessed the internet website. A second set of data was obtained by patients who registered to receive services provided by mental health professionals delivering online CBT. Patients were administered a range of psychometric testing, including the 9-Item Patient Health Questionnaire (PHQ-9), Generalised Anxiety Disorder 7-Item Scale (GAD-7), Yale-Brown Obsessive Compulsive Scale- Self Report (YBOCS-SR), Post-Traumatic Stress Disorder Checklist- Civilian Version (PCL-C) and the Kessler-10 Item Scale (K10). 6, 149 patients

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completed assessment and enrolled in a MindSpot treatment course. 72% were female with a mean age of 36.4 years. 3.1% of the sample identified as an Aboriginal or Torres Strait Islander person, approximating the percentage of Australian Indigenous population. Results indicated that MindSpot enhanced access to mental health services, knowledge and provided effected online treatment. CBT was also effective in improving health outcomes ($p = 0.001$), decreasing psychological distress ($p = 0.001$), decreasing symptoms of OCD ($p = <0.001$) and decreasing symptoms of PTSD ($p = <0.001$). A significant reduction in symptoms was reported at 3-month post-treatment follow up ($ps = <0.001$). No specific analysis of outcome data was recorded for Aboriginal and Torres Strait Islander people. It may be extrapolated from the outcomes data that the delivery of online CBT may be cross-culturally appropriate, however, further evidence is required.

In Barrett and colleague's (2015) study, a Seeking Safety program, was delivered to male Australian prisoners aged between 22-65 years. Seeking Safety is a manualised treatment program with a present-focused treatment of substance use disorder (SUD) and post-traumatic stress disorder (PTSD) designed from CBT. The program has been endorsed as an effective evidence-based treatment by the International Society for Traumatic Stress Studies (ISTSS) (Barrett et al., 2015). Of the 30 participants, 15 were provided with the Seeking Safety program and 15 were placed in a treatment-as-usual (TAU) control group. The sample included 23.3% Indigenous Australians. This percentage was representative of the population of incarcerated males in NSW (Barrett et al., 2015). The program provided psycho-education and coping skills to reduce trauma and substance-related problems. A total of 25 treatment topics addressed a core theme of safety via cognitive, behavioural, interpersonal and case management domains. Topics were delivered by counsellors in a flexible sequence, delivered to individuals or groups, to males and females, to outpatients or inpatients and for any types of trauma and substance use.

The study used eight modules from Seeking Safety and were delivered weekly by a clinical psychologist in eight 90-minute sessions (Barrett et al., 2015). All participants were eligible to participate in the TAU control group for substance use and PTSD. The TAU control group contained the model of care provided in accordance to NSW standard practice in prisons. Just over half of the participants of Seeking Safety participated in treatment for substance use at baseline ($n = 53.3\%$), 20 percent were accessing mental health treatment

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(compared to $n = 13.3\%$ of TAU group) and equal proportions of both groups were prescribed antidepressant medication ($n = 46.7\%$). Participants undertook a clinical interview and diagnostic assessment including items from the 2009 NSW Inmate Health Survey, the World Mental Health Composite International Diagnostic Interview version 3.0 (WMH-CIDI 3.0), Drug-Taking Confidence Questionnaire (DTCQ-8), Composite Diagnostic Interview version 2.1 (CIDI 2.1), Clinical Administered PTSD Scale (CAPS) and the Posttraumatic Cognitions Inventory (PTCI). Assessments were abbreviated and administered at eight-week and six-months.

Due to a limited sample size, statistical analyses of outcome data were restricted, and significance levels and effect sizes were not obtained (Barrett et al., 2015). Given this limitation, no strong conclusions could be made regarding treatment outcomes. However, based on standard deviation scores, authors suggested that compared to the TAU group, symptom severity related to PTSD was reduced in individuals who undertook the Seeking Safety program and participants reported increased confidence in their ability to resist the urge to use substances (Barrett et al., 2015). Results from face-to-face interactions between clinical psychologist and clients indicated a high level of treatment satisfaction from participants undertaking Seeking Safety. It was not clear if an effective reduction of SUD symptomology or posttraumatic cognitions occurred. Furthermore, although Indigenous Australians comprised 23.3% of the sample, no Indigenous specific outcome data was recorded (Barrett et al., 2015). High levels of reported treatment satisfaction may reflect culturally appropriate delivery of CBT in this program however, more specific evidence is required.

Davies (2011) conducted a systematic review of 20 journal articles to explore the feasibility of a structured CBT based program, Cool Kids. The study addressed acute and chronic anxiety among Aboriginal children living in remote areas. While the efficacy of an appropriately adapted Cool Kids for Indigenous children was not examined, the study explored the unique cultural factors effecting mental health including learned helplessness from colonisation, and expressions of mental health symptomology such as anxiety producing symptoms of dizziness (Davies, 2011). The author noted that flexible narrative approaches, such as the inclusion of yarning circles, were advantageous when delivering the program for Indigenous clients living remotely (Davies, 2011). Additionally, Davies (2011)

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noted that community engagement was essential for treatment and program success. It should be noted that the author did not state how many articles were included in the review that were children specific or provided CBT interventions for Indigenous people.

Summary – CBT

In summary, six articles were identified examining the utility of CBT when working with Aboriginal and Torres Strait Islander people (Barrett et al., 2015; Bennett-Levy et al., 2015; Bennett-Levy et al., 2014; Kilcullen et al., 2016; Titov et al., 2017). Although differences in population, study aims, and quality were evident across articles, all six articles concluded that CBT has potential to be effective when working with Indigenous Australians. Three common themes of potentially effective theoretical components of CBT, including knowledge and confidence, to enhance SEWB were identified in five of the six articles. These themes were 1) knowledge, 2) confidence, and 3) perceived client satisfaction.

Knowledge was identified within two articles as a benefit of CBT for Indigenous people. Kilcullen, Swinbourne and Cadet-James (2016) stated that Indigenous people living in urban areas identified that obtaining knowledge regarding mental health facilitators and concepts would likely increase SEWB. Further, when CBT was delivered through an electronic medium, Titov and colleagues (2017) found that participants reported an increase of knowledge for accessible mental health services. While psychoeducation was not specifically identified among articles, CBT characteristically includes psychoeducation and therefore likely provided within therapy.

The theme of confidence was reported within two studies for both clinicians and clients (Barrett et al., 2015; Bennett-Levy et al., 2015). In Barrett and colleagues study (2015), the Australian Aboriginal counsellor's delivering CBT reported an increase in confidence in their ability to successfully deliver CBT to Aboriginal clients. For clients, male prisoners undertaking a manualised program based on CBT demonstrated an increased confidence in their ability to resist the urge to use substances (Barrett et al., 2015)(Barrett et al., 2015). Therefore, using a CBT approach provided practitioners and clients with an increased confidence across domains.

Two articles reported participants to rate CBT with high levels of treatment satisfaction (Barrett et al., 2015; Bennett-Levy et al., 2014). While Barrett and colleagues

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(2015) noted client satisfaction with a CBT approach, an extension of this study identified that Australian Aboriginal people living remotely reported to respond well to the adaptability, structure, present focus and time-limited nature of CBT programs (Bennett-Levy et al., 2015). Not only does CBT display evidence of cross-cultural commonalities with SEWB, Indigenous clients reported satisfaction when engaged in the therapy.

Narrative Therapy

Stock, Mares and Robinson (2012) examined adaptations made to a manualised parent-child narrative therapy program, Let's Start (Robinson et al., 2009). The Let's Start program aimed to improve Indigenous parents' educational, social and emotional outcomes as well as their four-to seven-year- old children's outcomes. The Let's Start program is a 10-week multi-therapeutic group program implemented in Darwin and within remote Indigenous communities in the Northern Territory. Stock and colleagues (2012) implemented culturally appropriate adaptations based upon a Narrative Therapy approach such as incorporating extended family and wider systems into the intervention. This extension of therapy into the broader context drew upon narrative, expressive and reflective approaches such as sharing stories through drawing. Of the ten families who were invited to participate, six families and 3 group leaders living in remote community in the Northern Territory participated in the program. Sessions were conducted in public open spaces, such as under trees or on the veranda of a house. Parent/family sessions were delivered in a group setting and primarily included participants sharing narratives via drawings that related to their and their children's relationship or daily life experiences. From the sharing of narratives, group participants and leaders collectively offered suggestions for improving the situation. Additionally, a parent-child interactive group was provided in which parents or caregivers and two to three group leaders attended sessions with games or drawing encouraging story sharing. Although no outcomes measures were reported, the authors suggested that the use of stories was appropriate for these families and decreased symptomology of problem behaviours in parents and children.

Smith and colleagues (2017) reported a case study that demonstrated support for the cultural appropriateness of an Australian mental health and wellbeing initiative, KidsMatter. Frameworks for the project included participatory action, critically reflective practice and Narrative Therapy. Within an Indigenous context, NT has been referred to as

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the process of storytelling. This approach aims to separate a person from their distress with the focus of enhancing one's skills, competencies and abilities that align with an individual's values and beliefs (Smith et al., 2017). The case study described the participatory process of developing of resources such as videos, animations and written resources in the KidsMatter Aboriginal Children's SEWB project (Smith et al., 2017). KidMatter was designed to enhance the SEWB of children within Aboriginal primary school and early childhood education and care services. This program was based on participatory action, NT and reflective practice. However, the specific influence of NT within resources was not identified. The efficacy of resources was reflected upon by participants including cultural consultants, Indigenous psychologists, non-Indigenous psychologists, KidsMatter staff, early childhood educators, a policy officer, child and family worker and counsellor (Smith et al., 2017). The authors concluded that the principles of participatory action, narrative therapy and critically reflective practice could guide culturally appropriate interventions to support positive SEWB outcomes for Indigenous children (Smith et al., 2017).

Bacon (2007) conducted a literature review examining the delivery of an NT approach with Indigenous people misusing substances. Qualitative articles written by practitioners were identified which described the use of NT in their practice. The study reviewed articles which included children, young women with eating problems, young women who had experienced sexual abuse and people experiencing substance misuse (Bacon, 2007). The review reported minimal demographic information (e.g. population size, mean age/gender). Substance misuse programs, such as Alcohol Anonymous, and interventions conducted by social workers were included in the review. Programs incorporated 'Learning Circles' to link connections between therapeutic efficacy of sharing one's personal narrative and healing. While outcome measures were not obtained, successful outcomes were reported based upon client feedback in sessions, the present-problems clients discussed in session appeared resolved, and symptoms reduced. While the quality of reviewed literature was low, Bacon (2007) stated it was likely that NT had treatment efficacy and was culturally appropriate for delivery to Indigenous people who experience substance misuse.

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Summary – Narrative Therapy

While all three articles supported the efficacy of NT for Indigenous clients (Bacon, 2007; Smith et al., 2017; Stock et al., 2012), these articles demonstrated the lowest quality rating of literature. All three studies were based on $n=1$ studies and did not provide outcome data. The only outcome data in the reviewed articles was from a secondary study. These outcomes indicated that an NT based program significantly increased parental confidence, assertiveness and forged stronger parent-child relationships for Indigenous parents and children (Stock et al., 2012). Although three studies suggested NT has potential treatment efficacy and cultural appropriateness for Indigenous clients, further empirical research is required.

Acceptance-based and strength-based therapies

Kilcullen, Swinbourne and Cadet-James (2018) explored urban Aboriginal and Torres Strait Islanders' perceptions of well-being and the fit to strength-based frameworks. 19 participants (female $n = 14$) aged between 22 and 56 were asked open-ended semi-structured questions in focus groups and individual interviews. Respondents reported values aligning with ACT approaches, such as valuing acceptance and mindfulness to increase mental well-being (Kilcullen, Swinbourne & Cadet-James, 2017). Thematic analysis identified seven strengths-based attributes and values, included acceptance, respect, forgiveness and integrity, honesty, courage, empathy, mindfulness and spirituality (Kilcullen et al., 2018). From these findings, it was suggested that current strength- and values-based psychological approaches such as ACT, may provide meaningful contributions to understanding cross-cultural conceptualisations of mental health (Kilcullen et al., 2018). While the authors suggested that it was likely Indigenous conceptualisations of mental health align with ACT frameworks and may be an effective psychotherapy for urban Indigenous Australians, empirical application of this framework is required.

Tighe and colleagues (2017) delivered a psychological e-therapy via an app, iBobbly. The customised app was created by authors, community members and with the Black Dog Institute to target suicide prevention in Aboriginal Indigenous youth. The iBobby app was created based on acceptance-based therapies including ACT and included three modules (Tighe et al., 2017). Module 1 provided education to identify thoughts, feelings and

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behaviours and to learn distancing techniques. Module 2 educated participants to regulate emotions with mindfulness and acceptance techniques. This module also encouraged social self-soothing activities such as calling a friend or storytelling to support good mental health. In module 3, participants identified values and set small achievable goals in an action plan based upon the identified personal values. Participants included 61 Indigenous Australians aged between 18-35 years who lived in remote and very remote Kimberly region of northern Western Australia. Participants were randomised to either an intervention group or waitlist (6-week) control group (Tighe et al., 2017). Both groups received a 6-week e-intervention and were also administered face-to-face measures pre-and-post intervention that assessed suicidal ideation (Depression Symptom Inventory-Suicidality Subscale [DSI-SS]), depression (Patient Health Questionnaire-9 [PHQ-9]), psychological distress (Kessler-10 [K10]) and impulsivity (The Barratt Impulsivity Scale [BIS-II]). Participants reported a significant reduction in depression ($p = .01$) and psychological distress ($p = .02$). However, a significant reduction in suicide ideation or impulsivity was not reported. The authors noted that the non-significant findings were likely attributed to flaws in methodological design, such as small sample size of people experiencing suicidal ideation, and the assessment measure targeting temperament rather than impulsivity (Tighe et al., 2017). While a measure of client satisfaction or cultural acceptability of the app was not reported, the inclusion of community members in the design and development of the app enhances the potential for cultural acceptability of both the app and the therapeutic approach.

Summary – acceptance and strengths-based therapies

Two articles suggested that Acceptance-based therapies, mainly Acceptance Commitment Therapy (ACT) and mindfulness-based interventions, are potentially culturally appropriate when working with Indigenous people (Kilcullen et al., 2018; Tighe et al., 2017). Strength-based psychological approaches, such as positive psychology and ACT, describe mental health not only as the absence of illness or disorders, but also one's ability to develop and maintain mental health. Aboriginal and Torres Strait Islander's conceptualisation of mental health have demonstrated theoretical alignment with the principles and values of acceptance and strength-based therapies (Kilcullen et al., 2018) and reduction in depression and psychological distress using this framework (Tighe et al., 2017).

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However, application of these theoretical understanding is required to support these findings.

Multisystemic Therapy

Multisystemic Therapy (MST) was assessed by Porter and Nuntavisit (2016). MST uses a social ecological understanding of behaviour, particularly emphasising the development of behaviour in complex interactions between individuals and the system in which they belong. MST interventions aim to reduce antisocial behaviour in youth by using empirically validated treatments, including CBT, parental skills training and structural family therapy. MST is high in intensity, with in-home therapy sessions delivered three times a week for 4-6 months and clinical phone support 24 hours per day, 7 days per week (Porter & Nuntavisit, 2016). MST was delivered to 330 Australian families engaged with Specialist Child and Adolescent Mental Health Services (CAMHS), of whom 11% identified as Australian Aboriginal people. Average age of youths was 13.6 years and majority were male ($n = 71\%$). Families completed various assessment measures including the Child Behaviour Checklist (CBCL), Parenting Styles and Dimensions Questionnaire (PSDQ) and the Depression, Anxiety and Stress Scale-21 (DASS-21) (Porter & Nuntavisit, 2016).

Using an MST approach, significant improvements across all measures were evident at pre-and post-intervention, and at 6- and 12-month follow-ups (Porter & Nuntavisit, 2016). A significant reduction in total behavioural problems was reported by youth, including internalising and externalising behaviour. Changes in parenting styles were reported, including an increase in authoritative parenting ($p = .001$), and a decrease in both authoritarian ($p = .001$) and permissive ($p = .001$) styles. Decreases in parent's depression, anxiety and stress ($p = .001$) were also reported over a 12-month period post-intervention. While 11% of the participants identified as Aboriginal and/or Torres Strait Islander, no Indigenous specific outcome data was obtained (Porter & Nuntavisit, 2016). It is therefore unclear whether Indigenous participants demonstrated improvements similarly to the non-Indigenous families. Additionally, participant demographic data was not obtained, and it is uncertain if Indigenous participants lived in urban or remote areas. From this study, MST appears to demonstrate potential efficacy and cultural appropriateness when working with Indigenous families, however, further research, particularly with urban and remote Indigenous families is required.

Limitations

Despite a comprehensive search strategy, limited literature met criteria for inclusion in the current review. Of the included studies, several provided intervention data while other provided theoretical support for culturally appropriate use of Western therapeutic intervention. Further, of the studies with broader samples of non-Indigenous and Indigenous people, specific data for Indigenous participants was not reported. Compounding this difficulty, articles that met criteria for the review included various populations, study aims, quality and data analyses. Further, results specific to Indigenous participants in these studies were not reported. Due to the range scope of data, comparing articles to find commonalities was challenging. Additionally, minimal empirical data was obtained for Indigenous children or for Indigenous people living in urban areas.

Studies were not identified in the current review that support the use of other evidence-based psychotherapies with Indigenous people. For example, no studies were found that reported on the delivery of therapies such as Interpersonal Therapy (IPT), Dialectical Behaviour Therapy (DBT), Psychoanalysis, Psychodynamic Therapy and Schema Therapy (Australian Psychological Society, 2018). Given this gap in knowledge, it is unclear whether these approaches are appropriate when working with Indigenous Australians.

Clinical implications and conclusion

Evidenced-based therapies such as CBT, NT, ACT and MST, were identified in this review as having potential for working at the cultural interface with Aboriginal and Torres Strait Islander people. Few intervention studies with outcome data were identified. Several of the studies identified common cross-cultural elements for therapies and provided theoretical support for delivery with Indigenous clients. Further, studies identified a cross-cultural understanding of health and wellbeing, where many common values, conceptualisations or beliefs of improving SEWB, fit into Western psychological interventions. Particularly, elements of CBT that may enhance SEWB included knowledge, confidence and perceived client satisfaction within this approach. Findings demonstrate that psychological interventions such as CBT, ACT and MST may have the potential to enhance SEWB. However, these elements require empirical support via further intervention studies. In doing so, Indigenous clients and communities need to be consulted to gain appropriate

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cultural adaptations and acceptability of such research. The current review further highlights the paucity of empirical evidence for the use of evidence-based psychotherapies, such as IPT, DBT, Psychoanalysis, Psychodynamic Therapy and Schema Therapy when working with Indigenous people. The review provides a foundation to inform future research regarding implementation of culturally appropriate psychotherapy for Indigenous clients. Such a foundation provides practitioners with a culturally responsive approach to delivering evidence-based psychological therapies to enhance the social and emotional wellbeing of Aboriginal and Torres Strait Islander people.

For Review Only

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References

- Australian Bureau of Statistics. (2016). 4714.0 - *National Aboriginal and Torres Strait Islander Social Survey, 2014-2015*. Canberra: Australian Bureau of Statistics. Retrieved from [https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4714.0~2014-15~Feature%20Article~Aboriginal%20and%20Torres%20Strait%20Islander%20people%20with%20a%20mental%20health%20condition%20\(Feature%20Article\)~10](https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4714.0~2014-15~Feature%20Article~Aboriginal%20and%20Torres%20Strait%20Islander%20people%20with%20a%20mental%20health%20condition%20(Feature%20Article)~10).
- Australian Health Practitioner Regulation Agency (Ahpra) & National Boards. (2019). *Annual report 2019/2020*. Retrieved from <https://www.ahpra.gov.au/Publications/Annual-reports/Annual-Report-2020.aspx>
- Australian Institute of Health and Welfare. (2017). *Mental health services in Australia*. Canberra: AIHW. Retrieved from <https://www.aihw.gov.au/reports/mental-health-services/mental-health-services-in-australia/report-contents/summary-of-mental-health-services-in-australia>.
- Australian Psychological Society. (2018). *Evidence-based psychological interventions in the treatment of mental disorders*. Retrieved from <https://www.psychology.org.au/getmedia/23c6a11b-2600-4e19-9a1d-6ff9c2f26fae/Evidence-based-psych-interventions.pdf>
- Bacon, V. (2007). What potential might narrative therapy have to assist Indigenous Australians reduce substance misuse? *Australian Aboriginal Studies*, (1), 71-82. Retrieved from <https://search.informit-com-au.elibrary.jcu.edu.au/documentSummary;dn=715952694372581;res=IELIND>
- Barrett, E. L., Indig, D., Sunjic, S., Sannibale, C., Sindicich, N., Rosenfeld, J., . . . Mills, K. (2015). Treating comorbid substance use and traumatic stress among male prisoners: A pilot study of the acceptability, feasibility, and preliminary efficacy of Seeking Safety. *International Journal of Forensic Mental Health*, 14(1), 45-55. doi:10.1080/14999013.2015.1014527
- Bennett-Levy, J., Wilson, S., Nelson, J., Rotumah, D., Ryan, K., Budden, W., . . . Beale, D. (2015). Spontaneous Self-Practice of Cognitive Behavioural Therapy (CBT) by Aboriginal Counsellors

Evidence-based psychological interventions and Aboriginal and Torres Strait Islander people

- During and Following CBT Training: A Retrospective Analysis of Facilitating Conditions and Impact. *Australian Psychologist*, 50(5), 329-334. doi:10.1111/ap.12154
- Bennett-Levy, J., Wilson, S., Nelson, J., Stirling, J., Ryan, K., Rotumah, D., . . . Beale, D. (2014). Can CBT Be Effective for Aboriginal Australians? Perspectives of Aboriginal Practitioners Trained in CBT. *Australian Psychologist*, 49(1), 1-7. doi:10.1111/ap.12025
- Commonwealth of Australia. (2017). *National strategic framework for Aboriginal and Torres Strait Islander peoples' mental health and social and emotional wellbeing*. Canberra: Department of the Prime Minister and Cabinet. Retrieved from https://www.niaa.gov.au/sites/default/files/publications/mhsewb-framework_0.pdf.
- Crowe, M., Sheppard, L., & Campbell, A. (2012). Reliability analysis for a proposed critical appraisal tool demonstrated value for diverse research designs. *Journal of Clinical Epidemiology*, 64(4), 375-383. doi:10.11124/JPISIRIR-2017-003439
- Davies, M. (2011). Anxiety In Children: Remote Area Sensitivities and Considered Changes in Structuring a Cool Kids Approach. *Australasian Psychiatry*, 19(1_suppl), S23-S25. doi:10.3109/10398562.2011.583055
- Dingwall, K. M., & Cairney, S. (2010). Psychological and cognitive assessment of Indigenous Australians. *Australian and New Zealand Journal of Psychiatry*, 44(1), 20-30. doi:10.3109/00048670903393670
- Emden, C., Kowanko, I., de Crespigny, C., & Murray, H. (2005). Better medication management for Indigenous Australians: findings from the field. *Australian Journal of Primary Health*, 11(1), 80-90. doi:10.1071/PY05011
- Garvey, D. C. (2008). A review of the social and emotional wellbeing of Indigenous Australian peoples. *Australian Indigenous InfoNet*, 8(4), 1-29. Retrieved from http://www.healthinonet.ecu.edu.au/sewb_review
- Gee, G., Dudgeon, P., Schultz, C., Hart, A., & Kelly, K. (2014). Aboriginal and Torres Strait Islander social and emotional wellbeing. In P. Dudgeon, H. Milroy, & R. Walker (Eds.), *Working*

Evidence-based psychological interventions and Aboriginal and Torres Strait Islander people

together: Aboriginal and Torres Strait Islander mental health and wellbeing principles and practice (pp. 55-68). Canberra: Department of Health and Ageing.

Kilcullen, M., Swinbourne, A., & Cadet-James, Y. (2016). Aboriginal and Torres Strait Islander health and well-being: Implications for a Cognitive Behavioural Therapy framework. *Australian Psychologist*, 51(6), 453-462. doi:10.1111/ap.12159

Kilcullen, M., Swinbourne, A., & Cadet-James, Y. (2018). Aboriginal and Torres Strait Islander health and wellbeing: Social emotional wellbeing and strengths-based psychology. *Clinical Psychologist*, 22(1), 16-26. doi:10.1111/cp.12112

Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A., . . . Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: Explanation and elaboration. *PLoS Med*, 6(7), e1000100. doi:10.1371/journal.pmed.1000100

Porter, M., & Nuntavisit, L. (2016). An Evaluation of Multisystemic Therapy with Australian Families. *Australian and New Zealand Journal of Family Therapy*, 37(4), 443-462. doi:10.1002/anzf.1182

Robinson, G., Zubrick, S. R., Silburn, S., Tyler, W., Jones, Y., D'Aprano, A., . . . Stock, C. (2009). *Let's Start: Exploring Together: An early intervention program for Northern Territory children and families - Final evaluation report*. Darwin: School for Social and Policy Research, Institute of Advanced Studies, Charles Darwin University. Retrieved from <https://webarchive.nla.gov.au/awa/20100113034754/http://pandora.nla.gov.au/pan/86522/20100719-0146/www.cdu.edu.au/sspr/documents/lets-start-evaluation-web.pdf>.

Smith, S., O'Grady, L., Cubillo, C., & Cavanagh, S. (2017). Using culturally appropriate approaches to the development of KidsMatter Resources to support the social and emotional wellbeing of Aboriginal children. *Australian Psychologist*, 52(4), 299-305. doi:10.1111/ap.12284

Stock, C., Mares, S., & Robinson, G. (2012). Telling and Re-telling Stories: The Use of Narrative and Drawing in a Group Intervention with Parents and Children in a Remote Aboriginal

Evidence-based psychological interventions and Aboriginal and Torres Strait Islander people

Community. *Australian and New Zealand Journal of Family Therapy*, 33(2), 157-170.

doi:10.1017/aft.2012.17

Thomas, A., Cairney, S., Gunthorpe, W., Paradies, Y., & Sayers, S. (2010). Strong Souls: development and validation of a culturally appropriate tool for assessment of social and emotional well-being in Indigenous youth. *Australian and New Zealand Journal of Psychiatry*, 44(1), 40-48.

doi:10.3109/00048670903393589

Tighe, J., Shand, F., Ridani, R., Mackinnon, A., De La Mata, N., & Christensen, H. (2017). Ibobbly mobile health intervention for suicide prevention in Australian Indigenous youth: a pilot randomised controlled trial. *BMJ Open*, 7(1), e013518. doi:10.1136/bmjopen-2016-013518

Titov, N., Dear, B. F., Staples, L. G., Bennett-Levy, J., Klein, B., Rapee, R. M., . . . Nielssen, O. B. (2017). The first 30 months of the MindSpot Clinic: Evaluation of a national e-mental health service against project objectives. *Australian & New Zealand Journal of Psychiatry*, 51(12), 1227-1239. doi:10.1177/0004867416671598

Vicary, D. A., & Bishop, B. (2005). Western psychotherapeutic practice: Engaging Aboriginal people in culturally appropriate and respectful ways. *Australian Psychologist*, 40, 8 - 19.

doi:10.1080/00050060512331317210

Vicary, D. A., & Westerman, T. (2004). 'That's just the way he is': some implications of Aboriginal mental health beliefs. *Australian e-Journal for the Advancement of Mental Health*, 3(3), 1-10.

doi:10.5172/jamh.3.3.103

Ypinazar, V. A., Margolis, S. A., Haswell-Elkins, M., & Tsey, K. (2007). Indigenous Australians understandings regarding mental health and disorders. *Australian and New Zealand Journal of Psychiatry*, 41(6), 467 - 478. doi:10.1080/00048670701332953

Abstract

Objective: Limited empirical literature exists examining the application of evidenced-based psychotherapies when working with Aboriginal and Torres Strait Islander people. Further, Australian Aboriginal and Torres Strait Islander people's view of Social and Emotional Wellbeing differs to Western ideologies of mental health. In the present study, a qualitative systematic review explored evidenced-based psychological therapies with Indigenous clients. *Method:* A systematic review was conducted using the PRISMA framework. A total of 12 articles that met criteria for inclusion in the review were extracted through hand- and database searching. Therapies identified in the articles included Narrative Therapy (NT), Cognitive-Behaviour Therapy (CBT), Acceptance-based Therapies and Multisystemic Therapy (MST). *Results:* CBT was the most commonly reported therapy in the review. Three articles, rated lower in quality, also identified NT. Although limited in quantity, acceptance-based and strength-based therapies and MST were also identified as having cross-cultural applications. *Conclusions:* While, CBT, ACT and MST have been used when working at the cultural interface with Indigenous people, further empirical evidence with outcome data is required. Such evidence is required to assess acceptability and suitability of such psychotherapies and for clinicians to provide culturally responsive practice when working with Indigenous people.

Keywords: Aboriginal, evidence-based, Torres Strait Islander, psychotherapy, efficacy, SEWB.

Key points:

- 1) Indigenous SEWB differs from Western mental health conceptualisations.
- 2) A cross-cultural interface was found in CBT, ACT, NT and MST.
- 3) Further empirical testing of psychotherapy interventions with Indigenous clients to confirm cultural acceptability, suitability and efficacy.

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Australian Aboriginal and Torres Strait Islander experience greater risk of mental health issues such as depression, anxiety, substance use and suicide (Australian Institute of Health and Welfare, 2017; Thomas, Cairney, Gunthorpe, Paradies, & Sayers, 2010; Vicary & Westerman, 2004; Ypinazar, Margolis, Haswell-Elkins, & Tsey, 2007). Higher rates of mental illness have been associated with disadvantage through health, unemployment, poverty, isolation, trauma, discrimination and other social, historic and political determinants (Australian Bureau of Statistics, 2016; Smith, O'Grady, Cubillo, & Cavanagh, 2017). Mental health conditions are twice as likely to be reported by Aboriginal and Torres Strait Islander people living in non-remote areas than in remote areas (Australian Bureau of Statistics, 2016). Further, suicide rates for Aboriginal people living in remote communities are double those of non-Indigenous Australians (Vicary & Westerman, 2004). Despite this, Indigenous mental illness is often unnoticed, undiagnosed and untreated (Ypinazar et al., 2007). With respect, the term 'Indigenous' refers to Australian Aboriginal and Torres Strait Islander people while acknowledging two separate cultural groups, each with their own world views and cultural values and beliefs. The term 'non-Indigenous' is used to describe Australians who do not identify as an Aboriginal or Torres Strait Islander person.

Western mental health definitions, terms and concepts are not easily transferable to Indigenous cultures or languages (Emden, Kowanko, de Crespigny, & Murray, 2005; Garvey, 2008). While Western conceptualisations of mental health is largely framed in relation to an individual's mental state, mental health for Australian Indigenous people is seen as a holistic conceptualisation of broader social and emotional well-being (SEWB) for individuals and community (Gee, Dudgeon, Schultz, Hart, & Kelly, 2014). Six domains shape Aboriginal and Torres Strait Islander holistic conceptualisations of SEWB, including connection to the body, mind and emotions, family and kinship, community, culture and land and spirituality. Poor SEWB is likely to be experienced when people or communities experience disruptions to connectedness across these domains from factors such as historical and current governing policies associated with colonisation or discrimination (Thomas et al., 2010; Vicary & Westerman, 2004).

Expressions of poor SEWB and psychological distress differ between Australian Indigenous and non-Indigenous people (Thomas et al., 2010; Vicary & Westerman, 2004). Indigenous people also express psychological distress in ways not recognised in DSM-IV

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diagnostic criteria (Thomas et al., 2010; Vicary & Westerman, 2004). For example, for some Indigenous people, psychological distress is more likely to be expressed through somatic symptoms such as dizziness, indigestion and breathing difficulties, whereas anxiety may manifest as low mood or sadness and depression may be expressed as anger (Thomas et al., 2010; Vicary & Westerman, 2004). Due to differences in expression, psychological distress may not be identified by non-Indigenous practitioners and thus affect access to treatment.

Australian Indigenous people have expressed fear of approaching Western mental health services (Ypinazar et al., 2007). Reported difficulties contributing to fear include stigma, shame, previous negative experiences, misunderstanding of treatment and diagnoses, fear of being away from country during hospitalisation, medication side effects, impact on community and culturally inappropriate treatment methodologies (Ypinazar et al., 2007). Further, Indigenous people often wait until crisis occurs before engaging in services and often reported seeking Western modes of treatment for psychological distress only when traditional methods had been explored (Vicary & Bishop, 2005). This delay in service engagement may be due to the disconnection between Western and Indigenous conceptualisations of health and wellbeing and a lack of evidence for Western treatment frameworks (Dingwall & Cairney, 2010; Vicary & Westerman, 2004).

Despite recognised differences in the conceptualisation and expression of mental health and SEWB for non-Indigenous and Indigenous Australians, little research has examined the efficacy of evidence-based psychological interventions with Indigenous people (Bacon, 2007; Vicary & Westerman, 2004; Ypinazar et al., 2007). Rather, psychological interventions have focused on developing cultural competent clinicians and services (Commonwealth of Australia, 2017). Guidelines recommended that clinicians enhance their awareness, knowledge and understanding of Indigenous culture, history, SEWB conceptualisation and expression of mental illness (Commonwealth of Australia, 2017). As most psychologist in Australia are non-Indigenous clinicians (Australian Health Practitioner Regulation Agency (Ahpra) & National Boards, 2019), it is crucial to build cultural competence in clinicians. However, it is not clearly understood whether Western treatment frameworks provide culturally appropriate interfaces when working with Indigenous clients.

Aim of the current study

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A ~~qualitative~~ systematic review was conducted of literature that reported on the use of evidence-based psychological interventions with Australian Indigenous people. The aim of the current review was to identify evidenced-based psychological therapies used in a cross-cultural context. For the purposes of this review, evidence-based therapies are defined as those identified in the Australian Psychological review (Australian Psychological Society, 2018), including but not limited to Acceptance and Commitment Therapy (ACT), Cognitive Behaviour Therapy (CBT), Dialectical Behaviour Therapy (DBT), and Interpersonal Psychotherapy (IPT). This project was conducted under the guidance of an Aboriginal researcher who has an ongoing research relationship with the second author (MK).

Method

Eligibility criteria

Articles were required to include Australian Aboriginal and/or Torres Strait Islander people and evidence-based psychological interventions within the study methodology. No limitations were placed on population factors such as age, sex and location, or on the percentage of participants who identified as an Indigenous person. Quantitative and qualitative literature was included in the review. Scoping reviews or responses to commentaries were excluded. A flexible and inclusive approach was taken to ensure the review captured a broad range of peer-reviewed articles that addressed the research question.

Search strategy

The search of multiple databases was conducted in March 2018 using the PRISMA framework (Liberati et al., 2009). There was no protocol or registration for this systematic review. A research librarian supported the authors in the searches of the databases. Databases included PsychINFO (ProQuest), Medline (Ovid), Informit, SCOPUS, CINAHL and Emcare (Ovid). Articles published in peer-reviewed journals were identified within searches to ensure maximum retrieval of qualitative and quantitative studies. For example, the following search terms were entered into ProQuest (returning 37 articles for review) :

((Psychotherapy) OR ("cognitive behavio*r therap*") OR ("acceptance and commitment therap*") OR ("systemic therap*") OR ("dialectical behavio*r therap*") OR ("Psychodynamic therap*") OR ("psychoanaly*

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~~therap*") OR ("family therap*") OR ("schema therap*") OR
 (mindfulness) OR ("interpersonal therap*") OR ("systems therap*") OR
 ("social emotion* well*being")) AND (("Australian Aborigin*") OR
 ("Australian indigenous") OR ("torres strait island*"))~~

~~*No exclusions~~

~~Eligibility criteria~~

~~Articles were required to include Australian Aboriginal and/or Torres Strait Islander people and evidence-based psychological interventions within the study methodology. No limitations were placed on population factors such as age, sex and location, or on the percentage of participants who identified as an Indigenous person. Quantitative and qualitative literature was included in the review. Scoping reviews or responses to commentaries were excluded.~~

Data extraction and study selection

An Endnote library was used to manage data collection including authors, year, title, Journal/secondary title, volume, number, pages and the name of the database articles. Duplicates were removed. Of the remaining articles, titles and abstracts were examined and screened for eligibility criteria. Articles that did not meet criteria were removed. Full-text articles that met inclusion criteria were retrieved for evaluation. Data extraction was cross-checked during four stages of the review, including the database search, removal of duplicates, removal of articles not meeting criteria and assessment of full-text articles. Due to limited quantitative data, authors were not contacted for further data and a meta-analysis was not conducted. All qualitative data was retrieved from the published article.

Quality assessment

The Crowe Critical Appraisal Tool (CCAT) was used to evaluate the quality of the reviewed literature (Crowe, Sheppard, & Campbell, 2012). The CCAT is used to rate each article reflecting the quality of an article's preliminaries, introduction, design, sampling, data collection, ethical matters, results and discussion. A total score was calculated across each domain. Quality ratings were scored on a scale between 0 = lowest score reflecting poor quality, and 5 = highest score reflecting high quality, and expressed as a percentage score by

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dividing total score by 40 (8 x max. score of 5). CCATs scores were completed and cross-checked (see Table 2 for CCAT scores).

Results and discussion

A total of 103 articles were extracted through database searching and nine articles via hand searching. After the initial review, 14 duplicates were removed. The title and abstracts of a further 69 articles did not meet criteria and were removed after screening, and the remaining 29 full-text articles were reviewed. An additional 17 articles were excluded as research design or psychotherapy criteria were not met. A total of 12 studies met inclusion criteria for review (see Figure 1). Of the identified articles, only two articles implemented psychological interventions (MST and e-psychotherapy based on ACT) with Australian Indigenous people and reported outcome data. The other articles included reviews, therapeutic adaptations and recommendations for clinicians, theoretical implications for using therapies, and suggested potential application. Given the small number of eligible studies, a qualitative synthesis of results was conducted.

[INSERT FIGURE 1 HERE]

Figure 1: PRISMA flowchart indicating identification, screening, eligibility and included articles.

Five articles included male and female participants, 1 article included only males and 6 articles did not record gender of participants. Two articles reported on Australian families. Four articles did not record participant demographic data. Ten articles included adult participants. Two articles included urban Indigenous participants, 2 articles included participants living remote or very remote, 1 article included incarcerated participants. Seven articles did not specifically report participant location. Three studies included Australian Aboriginal and/or Indigenous participants as part of a broader sample. In these studies, Aboriginal and/or Indigenous participants were 3.1%, 11% or 23.3% of the sample. In order to identify the types of evidence-based psychotherapies that are delivered with Australian Indigenous people, studies were included that did not specifically report outcomes for Indigenous people. While this is not ideal, it provides some insights in the context of so few eligible articles.

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Study designs included qualitative analysis ($n = 3$), quantitative research ($n = 2$), case studies ($n = 2$), RCT ($n = 1$), systematic review ($n = 1$), Participatory Action Research (PAR) ($n = 1$), pilot RCT ($n = 1$) and a literature review ($n = 1$). Cognitive Behaviour Therapy (CBT) was the most commonly used therapeutic approach. It was delivered in various modalities including face-to-face with high- and low-intensity ($n = 1$), self-administered by trained counsellors ($n = 1$), within a manualised program designed from CBT principles ($n = 1$) and through internet-delivery ($n = 1$). Three articles examined Narrative Therapy in case studies ($n = 2$) and an examination of published literature ($n = 1$). Additional psychological interventions included Multisystemic Therapy (MST) ($n = 1$) and a psychotherapy app designed from acceptance-based therapies including Acceptance and Commitment Therapy (ACT) ($n = 1$). Three articles did not administer CBT however analysed findings from qualitative interviews ($n = 1$) and a systematic review ($n = 1$) in the context of CBT, and strength- and values-based approaches (such as positive psychology and ACT) ($n = 1$). The quality of each article ranged from CCAT ratings from 40-83%. The average CCAT rating per article was 60%. Table 1 provides a summary of articles meeting inclusion criteria.

[INSERT TABLE 1 HERE]

Cognitive Behavioural Therapy

Kilcullen and colleagues (2016) explored urban Aboriginal and Torres Strait Islander peoples' understanding of mental health and fit with a cognitive-behavioural framework. Participants included 19 people aged between 22 and 56 (female $n = 14$), living in Townsville, Queensland who were asked open-ended questions within semi-structured interviews and focus groups about mental health and cultural identity. Approximately 20 hours of recorded data was gathered over approximately 60 hours of interviews or focus groups. Findings indicated that four themes emerged: coping strategies, knowledge, social support and connectedness (Kilcullen et al., 2016).

Coping skills included behavioural, emotional and cognitive skills to enhance well-being, such as self-talk, making positive choices based on past decisions, keeping busy, meditation, empathising and forgiving others, and upholding values such as honesty, acceptance and courage (Kilcullen et al., 2016). Participants reported the impact and importance of knowledge of mental and physical health as a protective factor for good mental health (Kilcullen et al., 2016). This included knowledge of diet and exercise and of

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mental health services. Participants identified the importance of social support to well-being, including personal resources such as education, income, help-seeking behaviours and engaging in the wider community. Lastly, the theme of connectedness was found to be central to influencing all aspects of mental health for the Indigenous people in this study (Kilcullen et al., 2016). The model of Indigenous mental health developed in this study fit well with the SEWB model and within a cognitive-behavioural framework. Authors concluded that increasing SEWB from a cognitive-behavioural framework could enhance coping skills in cognitive, emotional and behavioural domains while increasing social support, knowledge and skills in daily living (Kilcullen et al., 2016). Therefore, using a CBT framework within the SEWB model has the potential to form a culturally appropriate and effective psychotherapy for urban Indigenous Australians.

Bennett-Levy and colleagues (2014) explored Aboriginal counsellors' perspectives for the suitability and effectiveness of CBT as a treatment method for Australian's living in Aboriginal communities). A Participatory Action Research (PAR) design was implemented over a 12-month period. Community involvement was encouraged in every stage of the project. The study provided ten days of in-depth formal CBT training to five university-educated Aboriginal counsellors. Additionally, a follow up 5-day training course was provided, 3 months post formal training, with an added 1-day workshop, 4-month post training. Results of the PAR study indicated that CBT was endorsed by all counsellors as a useful psychotherapy for working with Indigenous client as it produced positive impacts on both client and counsellor's wellbeing (Bennett-Levy et al., 2014). Counsellors identified qualities of CBT which were effective when treating psychological distress in Aboriginal clients. These qualities included CBT's adaptability, structure, focus on the present, and the time-limited nature of the therapy. Clients also reported that they would often share techniques with their family or communities who had not attended the sessions (Bennett-Levy et al., 2014). Counsellors identified that the empowering, skill-building and agentic nature of CBT was highly consistent with the aspirations of Aboriginal people. No client outcome data was obtained (Bennett-Levy et al., 2014).

Bennett-Levy and colleagues (2014) recommended three adaptations to CBT interventions for Aboriginal Australians. Firstly, low-intensity CBT was endorsed by counsellors, such as irregular visits to remote communities or flexible appointment times

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with options for walk-ins and cancellations. It was recommended that these interventions were delivered in informal spaces (e.g. outdoors, walking, sharing tea) or remotely (e.g. by phone, internet or mobile apps). Secondly, it was suggested that the structure of CBT is emphasised when working with Aboriginal clients. Counsellors reported that clients would often focus on past events, however keeping the sessions solution- and present- focused helped clients to elicit stronger perceived outcomes. Aboriginal counsellors valued self-practicing CBT as a stress reduction tool to and protection from burnout. Authors acknowledged that the modifications and adaptations of delivering CBT were not uniquely relevant to Indigenous people (Bennett-Levy et al., 2014). Bennett-Levy and colleagues (2014) also noted that it was likely the results were influenced by confirmatory bias as authors of the project were also participants who invested time and energy into training and therefore desired to validate the therapy (Bennett-Levy et al., 2014). While no outcome measures were administered to clients, these positive findings show promise for a cross-cultural fit for delivering CBT.

Bennett-Levy and colleagues (2015) conducted a secondary analysis from their earlier study (Bennett-Levy et al., 2014), where 10 days of CBT specific CBT training was provided to five Australian Aboriginal counsellors. This article reported counsellor's perceptions on the effectiveness of self-practiced CBT. Authors conducted an analysis of conversational data recorded from discussions occurring in two reflective group meetings at 3- and 5-months post CBT training. Although the previous study (Bennett-Levy et al., 2014) did not specifically advocate for counsellors to self-practice CBT, all counsellors reported a positive effect upon their practice of self-practice and self-reflection during and after the study. No standardised method for self-reflection was used and limited information was provided regarding data methodologies. Counsellors delivered CBT to clients and suggested that CBT was a culturally appropriate, effective psychotherapy for Indigenous clients (Bennett-Levy et al., 2015).

CBT was also demonstrated to be useful in both personal and professional contexts (Bennett-Levy et al., 2015). Within a professional context, counsellors reported an increase in confidence of skills and practice in delivering CBT. Counsellors perceived CBT to prevent burnout by increasing their resilience and skills to manage personal stress. Counsellors reported that due to living in a rural location, they frequently connected with clients on a

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personal level, outside of the therapeutic space. Overall, authors concluded that CBT was perceived as an effective psychotherapy for Aboriginal clients and counsellors. As in the previous study, no outcome measures were reported (Bennett-Levy et al., 2015).

Titov and colleagues (2017) analysed website traffic data to determine patterns of use by 458, 921 Australian's visiting the MindSpot Clinic website. The MindSpot Clinic was a component of the Australian Government e-Mental Health Strategy and provided Australian adults with online mental health services addressing anxiety and depression (Titov et al., 2017). MindSpot provided brief online assessments, referrals to local services and therapist-guided Internet-delivered CBT (iCBT). MindSpot courses consisted of four to six CBT modules consisting of PowerPoint presentations over an eight-week duration. The aim of the program was to target symptoms of depression and anxiety, obsessive compulsive disorder (OCD) and post-traumatic stress disorder (PTSD). The authors noted that the proportion of Aboriginal and Torres Strait Islander people in the study reflected the national statistics.

Titov and colleagues (2017) collected MindSpot Clinic data from two data points between January 2013 and June 2015. Data was firstly collected by Australian users who publicly accessed the internet website. A second set of data was obtained by patients who registered to receive services provided by mental health professionals delivering online CBT. Patients were administered a range of psychometric testing, including the 9-Item Patient Health Questionnaire (PHQ-9), Generalised Anxiety Disorder 7-Item Scale (GAD-7), Yale-Brown Obsessive Compulsive Scale- Self Report (YBOCS-SR), Post-Traumatic Stress Disorder Checklist- Civilian Version (PCL-C) and the Kessler-10 Item Scale (K10). 6, 149 patients completed assessment and enrolled in a MindSpot treatment course. 72% were female with a mean age of 36.4 years. 3.1% of the sample identified as an Aboriginal or Torres Strait Islander person, approximating the percentage of Australian Indigenous population. Results indicated that MindSpot enhanced access to mental health services, knowledge and provided effected online treatment. CBT was also effective in improving health outcomes ($p = 0.001$), decreasing psychological distress ($p = 0.001$), decreasing symptoms of OCD ($p = <0.001$) and decreasing symptoms of PTSD ($p = <0.001$). A significant reduction in symptoms was reported at 3-month post-treatment follow up ($ps = <0.001$). No specific analysis of outcome data was recorded for Aboriginal and Torres Strait Islander people. It may be

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extrapolated from the outcomes data that the delivery of online CBT may be cross-culturally appropriate, however, further evidence is required.

In Barrett and colleague's (2015) study, a Seeking Safety program, was delivered to male Australian prisoners aged between 22-65 years. Seeking Safety is a manualised treatment program with a present-focused treatment of substance use disorder (SUD) and post-traumatic stress disorder (PTSD) designed from CBT. The program has been endorsed as an effective evidence-based treatment by the International Society for Traumatic Stress Studies (ISTSS) (Barrett et al., 2015). Of the 30 participants, 15 were provided with the Seeking Safety program and 15 were placed in a treatment-as-usual (TAU) control group. The sample included 23.3% Indigenous Australians. This percentage was representative of the population of incarcerated males in NSW (Barrett et al., 2015). The program provided psycho-education and coping skills to reduce trauma and substance-related problems. A total of 25 treatment topics addressed a core theme of safety via cognitive, behavioural, interpersonal and case management domains. Topics were delivered by counsellors in a flexible sequence, delivered to individuals or groups, to males and females, to outpatients or inpatients and for any types of trauma and substance use.

The study used eight modules from Seeking Safety and were delivered weekly by a clinical psychologist in eight 90-minute sessions (Barrett et al., 2015). All participants were eligible to participate in the TAU control group for substance use and PTSD. The TAU control group contained the model of care provided in accordance to NSW standard practice in prisons. Just over half of the participants of Seeking Safety participated in treatment for substance use at baseline ($n = 53.3\%$), 20 percent were accessing mental health treatment (compared to $n = 13.3\%$ of TAU group) and equal proportions of both groups were prescribed antidepressant medication ($n = 46.7\%$). Participants undertook a clinical interview and diagnostic assessment including items from the 2009 NSW Inmate Health Survey, the World Mental Health Composite International Diagnostic Interview version 3.0 (WMH-CIDI 3.0), Drug-Taking Confidence Questionnaire (DTCQ-8), Composite Diagnostic Interview version 2.1 (CIDI 2.1), Clinical Administered PTSD Scale (CAPS) and the Posttraumatic Cognitions Inventory (PTCI). Assessments were abbreviated and administered at eight-week and six-months.

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Due to a limited sample size, statistical analyses of outcome data were restricted, and significance levels and effect sizes were not obtained (Barrett et al., 2015). Given this limitation, no strong conclusions could be made regarding treatment outcomes. However, based on standard deviation scores, authors suggested that compared to the TAU group, symptom severity related to PTSD was reduced in individuals who undertook the Seeking Safety program and participants reported increased confidence in their ability to resist the urge to use substances (Barrett et al., 2015). Results from face-to-face interactions between clinical psychologist and clients indicated a high level of treatment satisfaction from participants undertaking Seeking Safety. It was not clear if an effective reduction of SUD symptomology or posttraumatic cognitions occurred. Furthermore, although Indigenous Australians comprised 23.3% of the sample, no Indigenous specific outcome data was recorded (Barrett et al., 2015). High levels of reported treatment satisfaction may reflect culturally appropriate delivery of CBT in this program, however, more specific evidence is required.

Davies (2011) conducted a systematic review of 20 journal articles to explore the feasibility of a structured CBT based program, Cool Kids. The study addressed acute and chronic anxiety among Aboriginal children living in remote areas. While the efficacy of an appropriately adapted Cool Kids for Indigenous children was not examined, the study explored the unique cultural factors effecting mental health including learned helplessness from colonisation, and expressions of mental health symptomology such as anxiety producing symptoms of dizziness (Davies, 2011). The author noted that flexible narrative approaches, such as the inclusion of yarning circles, were advantageous when delivering the program for Indigenous clients living remotely (Davies, 2011). Additionally, Davies (2011) noted that community engagement was essential for treatment and program success. It should be noted that the author did not state how many articles were included in the review that were children specific or provided CBT interventions for Indigenous people.

Summary –CBT

In summary, six articles were identified examining the utility of CBT when working with Aboriginal and Torres Strait Islander people (Barrett et al., 2015; Bennett-Levy et al., 2015; Bennett-Levy et al., 2014; Kilcullen et al., 2016; Titov et al., 2017). Although differences in population, study aims, and quality were evident across articles, all six articles

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concluded that CBT has potential to be effective when working with Indigenous Australians. Three common themes of potentially effective theoretical components of CBT, including knowledge and confidence, to enhance SEWB were identified in five of the six articles. These themes were 1) knowledge, 2) confidence, and 3) perceived client satisfaction.

Knowledge was identified within two articles as a benefit of CBT for Indigenous people. Kilcullen, Swinbourne and Cadet-James (2016) stated that Indigenous people living in urban areas identified that obtaining knowledge regarding mental health facilitators and concepts would likely increase SEWB. Further, when CBT was delivered through an electronic medium, Titov and colleagues (2017) found that participants reported an increase of knowledge for accessible mental health services. While psychoeducation was not specifically identified among articles, CBT characteristically includes psychoeducation and therefore likely provided within therapy.

The theme of confidence was reported within two studies for both clinicians and clients (Barrett et al., 2015; Bennett-Levy et al., 2015). In Barrett and colleagues study (2015), the Australian Aboriginal counsellor's delivering CBT reported an increase in confidence in their ability to successfully deliver CBT to Aboriginal clients. For clients, male prisoners undertaking a manualised program based on CBT demonstrated an increased confidence in their ability to resist the urge to use substances (Barrett et al., 2015)(Barrett et al., 2015). Therefore, using a CBT approach provided practitioners and clients with an increased confidence across domains.

Two articles reported participants to rate CBT with high levels of treatment satisfaction (Barrett et al., 2015; Bennett-Levy et al., 2014). While Barrett and colleagues (2015) noted client satisfaction with a CBT approach, an extension of this study identified that Australian Aboriginal people living remotely reported to respond well to the adaptability, structure, present focus and time-limited nature of CBT programs (Bennett-Levy et al., 2015). Not only does CBT display evidence of cross-cultural commonalities with SEWB, Indigenous clients reported satisfaction when engaged in the therapy.

Narrative Therapy

Stock, Mares and Robinson (2012) examined adaptations made to a manualised parent-child narrative therapy program, Let's Start (Robinson et al., 2009). The Let's Start

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program aimed to improve Indigenous parents' educational, social and emotional outcomes as well as their four-to seven-year- old children's outcomes. The Let's Start program is a 10-week multi-therapeutic group program implemented in Darwin and within remote Indigenous communities in the Northern Territory Stock and colleagues (2012) implemented culturally appropriate adaptations based upon a Narrative Therapy approach such as incorporating extended family and wider systems into the intervention . This extension of therapy into the broader context draw upon narrative, expressive and reflective approaches such as sharing stories through drawing. Of the ten families who were invited to participate, six families and 3 group leaders living in remote community in the Northern Territory participated in the program. Sessions were conducted in public open spaces, such as under trees or on the veranda of a house. Parent/family sessions were delivered in a group setting and primarily included participants sharing narratives via drawings that related to their and their children's relationship or daily life experiences. From the sharing of narratives, group participants and leaders collectively offered suggestions for improving the situation. Additionally, a parent-child interactive group was provided in which parents or caregivers and two to three group leaders attended sessions with games or drawing encouraging story sharing. Although no outcomes measures were reported, the authors suggested that the use of stories was appropriate for these families and decreased symptomology of problem behaviours in parents and children.

Smith and colleagues (2017) reported a case study that demonstrated support for the cultural appropriateness of an Australian mental health and wellbeing initiative, KidsMatter. Frameworks for the project included participatory action, critically reflective practice and Narrative Therapy-. Within an Indigenous context, NT has been referred to as the process of storytelling. This approach aims to separate a person from their distress with the focus of enhancing one's skills, competencies and abilities that align with an individual's values and beliefs (Smith et al., 2017). The case study described the participatory process of developing of resources such as videos, animations and written resources in the KidsMatter Aboriginal Children's SEWB project (Smith et al., 2017). KidMatter was designed to enhance the SEWB of children within Aboriginal primary school and early childhood education and care services. This program was based on participatory action, NT and reflective practice. However, the specific influence of NT within resources was not identified. The efficacy of

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resources was reflected upon by participants including cultural consultants, Indigenous psychologists, non-Indigenous psychologists, KidsMatter staff, early childhood educators, a policy officer, child and family worker and counsellor (Smith et al., 2017). The authors concluded that the principles of participatory action, narrative therapy and critically reflective practice could guide culturally appropriate interventions to support positive SEWB outcomes for Indigenous children (Smith et al., 2017).

Bacon (2007) conducted a literature review examining the delivery of an NT approach with Indigenous people misusing substances. Qualitative articles written by practitioners were identified which described the use of NT in their practice. The study reviewed articles which included children, young women with eating problems, young women who had experienced sexual abuse and people experiencing substance misuse (Bacon, 2007). The review reported minimal demographic information (e.g. population size, mean age/gender). Substance misuse programs, such as Alcohol Anonymous, and interventions conducted by social workers were included in the review. Programs incorporated 'Learning Circles' to link connections between therapeutic efficacy of sharing one's personal narrative and healing. While outcome measures were not obtained, successful outcomes were reported based upon client feedback in sessions, the present-problems clients discussed in session appeared resolved, and symptoms reduced. While the quality of reviewed literature was low, Bacon (2007) stated it was likely that NT had treatment efficacy and was culturally appropriate for delivery to Indigenous people who experience substance misuse.

Summary – Narrative Therapy

While all three articles supported the efficacy of NT for Indigenous clients (Bacon, 2007; Smith et al., 2017; Stock et al., 2012), these articles demonstrated the lowest quality rating of literature. All three studies were based on n=1 studies and did not provide outcome data. The only outcome data in the reviewed articles was from a secondary study. These outcomes indicated that an NT based program significantly increased parental confidence, assertiveness and forged stronger parent-child relationships for Indigenous parents and children (Stock et al., 2012). Although three studies suggested NT has potential treatment efficacy and cultural appropriateness for Indigenous clients, further empirical research is required.

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Acceptance-based and strength-based therapies

Kilcullen, Swinbourne and Cadet-James (2018) explored urban Aboriginal and Torres Strait Islanders' perceptions of well-being and fit to strength-based frameworks (. 19 participants (female $n = 14$) aged between 22 and 56 were asked open-ended semi-structured questions in focus groups and individual interviews. Respondents reported values aligning with ACT approaches, such as valuing acceptance and mindfulness to increase mental well-being (Kilcullen, Swinbourne & Cadet-James, 2017). Thematic analysis identified seven strengths-based attributes and values, included acceptance, respect, forgiveness and integrity, honesty, courage, empathy, mindfulness and spirituality (Kilcullen et al., 2018). From these findings, it was suggested that current strength- and values-based psychological approaches such as ACT, may provide meaningful contributions to understanding cross-cultural conceptualisations of mental health (Kilcullen et al., 2018). While the authors suggested that it was likely Indigenous conceptualisations of mental health align with ACT frameworks and may be an effective psychotherapy for urban Indigenous Australians, empirical application of this framework is required.

Tighe and colleagues (2017) delivered a psychological e-therapy via an app, iBobbly. The customised app was created by authors, community members and with the Black Dog Institute to target suicide prevention in Aboriginal Indigenous youth. The iBobby app was created based on acceptance-based therapies including ACT and included three modules (Tighe et al., 2017). Module 1 provided education to identify thoughts, feelings and behaviours and to learn distancing techniques. Module 2 educated participants to regulate emotions with mindfulness and acceptance techniques. This module also encouraged social self-soothing activities such as calling a friend or storytelling to support good mental health. In module 3, participants identified values and set small achievable goals in an action plan based upon the identified personal values. Participants included 61 Indigenous Australians aged between 18-35 years who lived in remote and very remote Kimberly region of northern Western Australia. Participants were randomised to either an intervention group or waitlist (6-week) control group (Tighe et al., 2017). Both groups received a 6-week e-intervention and were also administered face-to-face measures pre-and-post intervention that assessed suicidal ideation (Depression Symptom Inventory-Suicidality Subscale [DSI-SS]), depression (Patient Health Questionnaire-9 [PHQ-9]), psychological distress (Kessler-10

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[K10]) and impulsivity (The Barratt Impulsivity Scale [BIS-II]). Participants reported a significant reduction in depression ($p = .01$) and psychological distress ($p = .02$). However, a significant reduction in suicide ideation or impulsivity was not reported. The authors noted that the non-significant findings were likely attributed to flaws in methodological design, such as small sample size of people experiencing suicidal ideation, and the assessment measure targeting temperament rather than impulsivity (Tighe et al., 2017). While a measure of client satisfaction or cultural acceptability of the app was not reported, the inclusion of community members in the design and development of the app enhances the potential for cultural acceptability of both the app and the therapeutic approach.

Summary –acceptance and strengths-based therapies

Two articles suggested that Acceptance-based therapies, mainly Acceptance Commitment Therapy (ACT) and mindfulness-based interventions, are potentially culturally appropriate when working with Indigenous people (Kilcullen et al., 2018; Tighe et al., 2017). Strength-based psychological approaches, such as positive psychology and ACT, describe mental health not only as the absence of illness or disorders, but also one's ability to develop and maintain mental health. Aboriginal and Torres Strait Islander's conceptualisation of mental health have demonstrated theoretical alignment with the principles and values of acceptance and strength-based therapies (Kilcullen et al., 2018) and reduction in depression and psychological distress using this framework (Tighe et al., 2017). However application of these theoretical understanding is required to support these findings.

Multisystemic Therapy

Multisystemic Therapy (MST) was assessed by Porter and Nuntavisit (2016). MST uses a social ecological understanding of behaviour, particularly emphasising the development of behaviour in complex interactions between individuals and the system in which they belong. MST interventions aim to reduce antisocial behaviour in youth by using empirically validated treatments, including CBT, parental skills training and structural family therapy. MST is high in intensity, with in-home therapy sessions delivered three times a week for 4-6 months and clinical phone support 24 hours per day, 7 days per week (Porter & Nuntavisit, 2016). MST was delivered to 330 Australian families engaged with Specialist

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Child and Adolescent Mental Health Services (CAMHS), of whom 11% identified as Australian Aboriginal people. Average age of youths was 13.6 years and majority were male ($n = 71\%$). Families completed various assessment measures including the Child Behaviour Checklist (CBCL), Parenting Styles and Dimensions Questionnaire (PSDQ) and the Depression, Anxiety and Stress Scale-21 (DASS-21) (Porter & Nuntavisit, 2016).

Using an MST approach, significant improvements across all measures were evident at pre-and post-intervention, and at 6- and 12-month follow-ups (Porter & Nuntavisit, 2016). A significant reduction in total behavioural problems was reported by youth, including internalising and externalising behaviour. Changes in parenting styles were reported, including an increase in authoritative parenting ($p = .001$), and a decrease in both authoritarian ($p = .001$) and permissive ($p = .001$) styles. Decreases in parent's depression, anxiety and stress ($p = .001$) were also reported over a 12-month period post-intervention. While 11% of the participants identified as Aboriginal and/or Torres Strait Islander, no Indigenous specific outcome data was obtained (Porter & Nuntavisit, 2016). It is therefore unclear whether Indigenous participants demonstrated improvements similarly to the non-Indigenous families. Additionally, participant demographic data was not obtained, and it is uncertain if Indigenous participants lived in urban or remote areas. From this study, MST appears to demonstrate potential efficacy and cultural appropriateness when working with Indigenous families, however, further research, particularly with urban and remote Indigenous families is required.

Limitations

Despite a comprehensive search strategy, limited literature met criteria for inclusion in the current review. Of the included studies, several provided intervention data while other provided theoretical support for culturally appropriate use of Western therapeutic intervention. Further, of the studies with broader samples of non-Indigenous and Indigenous people, specific data for Indigenous participants was not reported. Compounding this difficulty, articles that met criteria for the review included various populations, study aims, quality and data analyses. Further, results specific to Indigenous participants in these studies were not reported. Due to the range scope of data, comparing articles to find commonalities was challenging. Additionally, minimal empirical data was obtained for Indigenous children or for Indigenous people living in urban areas.

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Studies were not identified in the current review that support the use of other evidence-based psychotherapies with Indigenous people. For example, no studies were found that reported on the delivery of therapies such as Interpersonal Therapy (IPT), Dialectical Behaviour Therapy (DBT), Psychoanalysis, Psychodynamic Therapy and Schema Therapy (Australian Psychological Society, 2018). Given this gap in knowledge, it is unclear whether these approaches are appropriate when working with Indigenous Australians.

Clinical implications and conclusion

Evidence-based therapies such as CBT, NT, ACT and MST, were identified in this review as having potential for working at the cultural interface with Aboriginal and Torres Strait Islander people. Few intervention studies with outcome data were identified. Several of the studies identified common cross-cultural elements for therapies and provided theoretical support for delivery with Indigenous clients. Further, studies identified a cross-cultural understanding of health and wellbeing, where many common values, conceptualisations or beliefs of improving SEWB, fit into Western psychological interventions. Particularly, elements of CBT that may enhance SEWB included knowledge, confidence and perceived client satisfaction within this approach. Findings demonstrate that psychological interventions such as CBT, ACT and MST may have the potential to enhance SEWB. However, these elements require empirical support via further intervention studies. In doing so, Indigenous clients and communities need to be consulted to gain appropriate cultural adaptations and acceptability of such research. The current review further highlights the paucity of empirical evidence for the use of evidence-based psychotherapies, such as IPT, DBT, Psychoanalysis, Psychodynamic Therapy and Schema Therapy when working with Indigenous people. However the review provides a foundation to inform future research regarding implement culturally appropriate psychotherapy for Indigenous clients. Such a foundation provides practitioners with a culturally responsive approach to delivering evidence-based psychological therapies to enhance the social and emotional wellbeing of Aboriginal and Torres Strait Islander people.

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References

- Australian Bureau of Statistics. (2016). 4714.0 - *National Aboriginal and Torres Strait Islander Social Survey, 2014-2015*. Canberra: Australian Bureau of Statistics Retrieved from [https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4714.0~2014-15~Feature%20Article~Aboriginal%20and%20Torres%20Strait%20Islander%20people%20with%20a%20mental%20health%20condition%20\(Feature%20Article\)~10](https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4714.0~2014-15~Feature%20Article~Aboriginal%20and%20Torres%20Strait%20Islander%20people%20with%20a%20mental%20health%20condition%20(Feature%20Article)~10).
- Australian Health Practitioner Regulation Agency (Ahpra) & National Boards. (2019). *Annual report 2019/2020*. Retrieved from <https://www.ahpra.gov.au/Publications/Annual-reports/Annual-Report-2020.aspx>
- Australian Institute of Health and Welfare. (2017). *Mental health services in Australia*. Canberra: AIHW Retrieved from <https://www.aihw.gov.au/reports/mental-health-services/mental-health-services-in-australia/report-contents/summary-of-mental-health-services-in-australia>.
- Australian Psychological Society. (2018). *Evidence-based psychological interventions in the treatment of mental disorders*. Retrieved from <https://www.psychology.org.au/getmedia/23c6a11b-2600-4e19-9a1d-6ff9c2f26fae/Evidence-based-psych-interventions.pdf>
- Bacon, V. (2007). What potential might narrative therapy have to assist Indigenous Australians reduce substance misuse? *Australian Aboriginal Studies*, (1), 71-82. Retrieved from <https://search.informit-com-au.elibrary.jcu.edu.au/documentSummary;dn=715952694372581;res=IELIND>
- Barrett, E. L., Indig, D., Sunjic, S., Sannibale, C., Sindicich, N., Rosenfeld, J., . . . Mills, K. (2015). Treating comorbid substance use and traumatic stress among male prisoners: A pilot study of the acceptability, feasibility, and preliminary efficacy of Seeking Safety. *International Journal of Forensic Mental Health*, 14(1), 45-55. doi:10.1080/14999013.2015.1014527
- Bennett-Levy, J., Wilson, S., Nelson, J., Rotumah, D., Ryan, K., Budden, W., . . . Beale, D. (2015). Spontaneous Self-Practice of Cognitive Behavioural Therapy (CBT) by Aboriginal Counsellors

[A systematic review of eEvidence-based psychological interventions and Aboriginal and Torres Strait Islander people](#)

- During and Following CBT Training: A Retrospective Analysis of Facilitating Conditions and Impact. *Australian Psychologist*, 50(5), 329-334. doi:10.1111/ap.12154
- Bennett-Levy, J., Wilson, S., Nelson, J., Stirling, J., Ryan, K., Rotumah, D., . . . Beale, D. (2014). Can CBT Be Effective for Aboriginal Australians? Perspectives of Aboriginal Practitioners Trained in CBT. *Australian Psychologist*, 49(1), 1-7. doi:10.1111/ap.12025
- Commonwealth of Australia. (2017). *National strategic framework for Aboriginal and Torres Strait Islander peoples' mental health and social and emotional wellbeing*. Canberra: Department of the Prime Minister and Cabinet Retrieved from https://www.niaa.gov.au/sites/default/files/publications/mhsewb-framework_0.pdf.
- Crowe, M., Sheppard, L., & Campbell, A. (2012). Reliability analysis for a proposed critical appraisal tool demonstrated value for diverse research designs. *Journal of Clinical Epidemiology*, 64(4), 375-383. doi:10.11124/JBISIRIR-2017-003439
- Davies, M. (2011). Anxiety In Children: Remote Area Sensitivities and Considered Changes in Structuring a Cool Kids Approach. *Australasian Psychiatry*, 19(1_suppl), S23-S25. doi:10.3109/10398562.2011.583055
- Dingwall, K. M., & Cairney, S. (2010). Psychological and cognitive assessment of Indigenous Australians. *Australian and New Zealand Journal of Psychiatry*, 44(1), 20-30. doi:10.3109/00048670903393670
- Emden, C., Kowanko, I., de Crespigny, C., & Murray, H. (2005). Better medication management for Indigenous Australians: findings from the field. *Australian Journal of Primary Health*, 11(1), 80-90. doi:10.1071/PY05011
- Garvey, D. C. (2008). A review of the social and emotional wellbeing of Indigenous Australian peoples. *Australian Indigenous InfoNet*, 8(4), 1-29. Retrieved from http://www.healthinonet.ecu.edu.au/sewb_review
- Gee, G., Dudgeon, P., Schultz, C., Hart, A., & Kelly, K. (2014). Aboriginal and Torres Strait Islander social and emotional wellbeing. In P. Dudgeon, H. Milroy, & R. Walker (Eds.), *Working*

[A systematic review of evidence-based psychological interventions and Aboriginal and Torres Strait Islander people](#)

together: Aboriginal and Torres Strait Islander mental health and wellbeing principles and practice (pp. 55-68). Canberra: Department of Health and Ageing.

Kilcullen, M., Swinbourne, A., & Cadet-James, Y. (2016). Aboriginal and Torres Strait Islander health and well-being: Implications for a Cognitive Behavioural Therapy framework. *Australian Psychologist*, 51(6), 453-462. doi:10.1111/ap.12159

Kilcullen, M., Swinbourne, A., & Cadet-James, Y. (2018). Aboriginal and Torres Strait Islander health and wellbeing: Social emotional wellbeing and strengths-based psychology. *Clinical Psychologist*, 22(1), 16-26. doi:10.1111/cp.12112

Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A., . . . Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: Explanation and elaboration. *PLoS Med*, 6(7), e1000100. doi:10.1371/journal.pmed.1000100

Porter, M., & Nuntavisit, L. (2016). An Evaluation of Multisystemic Therapy with Australian Families. *Australian and New Zealand Journal of Family Therapy*, 37(4), 443-462. doi:10.1002/anzf.1182

Robinson, G., Zubrick, S. R., Silburn, S., Tyler, W., Jones, Y., D'Aprano, A., . . . Stock, C. (2009). *Let's Start: Exploring Together: An early intervention program for Northern Territory children and families - Final evaluation report*. Darwin: School for Social and Policy Research, Institute of Advanced Studies, Charles Darwin University Retrieved from <https://webarchive.nla.gov.au/awa/20100113034754/http://pandora.nla.gov.au/pan/86522/20100719-0146/www.cdu.edu.au/sspr/documents/lets-start-evaluation-web.pdf>.

Smith, S., O'Grady, L., Cubillo, C., & Cavanagh, S. (2017). Using culturally appropriate approaches to the development of KidsMatter Resources to support the social and emotional wellbeing of Aboriginal children. *Australian Psychologist*, 52(4), 299-305. doi:10.1111/ap.12284

Stock, C., Mares, S., & Robinson, G. (2012). Telling and Re-telling Stories: The Use of Narrative and Drawing in a Group Intervention with Parents and Children in a Remote Aboriginal

[A systematic review of eEvidence-based psychological interventions and Aboriginal and Torres Strait Islander people](#)

Community. *Australian and New Zealand Journal of Family Therapy*, 33(2), 157-170.

doi:10.1017/aft.2012.17

Thomas, A., Cairney, S., Gunthorpe, W., Paradies, Y., & Sayers, S. (2010). Strong Souls: development and validation of a culturally appropriate tool for assessment of social and emotional well-being in Indigenous youth. *Australian and New Zealand Journal of Psychiatry*, 44(1), 40-48.

doi:doi:10.3109/00048670903393589

Tighe, J., Shand, F., Ridani, R., Mackinnon, A., De La Mata, N., & Christensen, H. (2017). Ibobblly mobile health intervention for suicide prevention in Australian Indigenous youth: a pilot randomised controlled trial. *BMJ Open*, 7(1), e013518. doi:10.1136/bmjopen-2016-013518

Titov, N., Dear, B. F., Staples, L. G., Bennett-Levy, J., Klein, B., Rapee, R. M., . . . Nielssen, O. B. (2017). The first 30 months of the MindSpot Clinic: Evaluation of a national e-mental health service against project objectives. *Australian & New Zealand Journal of Psychiatry*, 51(12), 1227-1239. doi:10.1177/0004867416671598

Vicary, D. A., & Bishop, B. (2005). Western psychotherapeutic practice: Engaging Aboriginal people in culturally appropriate and respectful ways. *Australian Psychologist*, 40, 8 - 19.

doi:10.1080/00050060512331317210

Vicary, D. A., & Westerman, T. (2004). 'That's just the way he is': some implications of Aboriginal mental health beliefs. *Australian e-Journal for the Advancement of Mental Health*, 3(3), 1-10.

doi:10.5172/jamh.3.3.103

Ypinazar, V. A., Margolis, S. A., Haswell-Elkins, M., & Tsey, K. (2007). Indigenous Australians understandings regarding mental health and disorders. *Australian and New Zealand Journal of Psychiatry*, 41(6), 467 - 478. doi:10.1080/00048670701332953