# **Discover** Psychology



Perspective

# Psychological research involving Indigenous people: Australia and Aotearoa (New Zealand)

Richard Tindle<sup>1</sup> · Maria Raciti<sup>1</sup> · Ahmed A. Moustafa<sup>2</sup>

Received: 20 October 2021 / Accepted: 23 December 2021 Published online: 17 January 2022 © The Author(s) 2022 OPEN

#### **Abstract**

In this article, we discuss the current state of psychological research with Indigenous peoples, with a specific focus on research including Aboriginal and Torres Strait Islander peoples of Australia and the Māori people of Aotearoa (New Zealand). We identify how the mental health of Indigenous people is often significantly poorer than non-Indigenous people and could be contributing to the increased prevalence of comorbidity between mental health and substance abuse. However, we also show that there are concerns about the reliability of these data and that comparing Indigenous to non-Indigenous data is contested and often unreliable. The gap between Indigenous and non-Indigenous people is discussed within the context of competencies required for psychologists within Australia and Aotearoa (New Zealand), concerning their relevant National Psychology Boards accreditation standards, and core competencies for clinicians. Finally, we show that there is a paucity of research measuring the effectiveness of Western developed psychotherapies with Indigenous people, question their relevance and note the conspicuous silence around Indigenous psychological knowledge. In conclusion, we show that Aboriginal and Torres Strait Islander Peoples are lagging in most health statistics compared to Maori people and other Indigenous peoples which may reflect different experiences of colonisation in each country. However, these statistics also show that progress is possible to help Indigenous people, globally, to achieve their mental health goals.

# 1 Background

Indigenous protocol matters. For Indigenous Australians, all things come from Country. Country is sentient, has and gives agency, knowledge, and perspectives [1, 2]. We ask you to pause, take in the lands and waters that surround you and join us in acknowledging the Traditional Custodians of Country where you are reading our paper. Along with us, acknowledge the continuing connections to Country that Indigenous people have and pay your respects to Elder's past, present, and emerging.

We recognise that collective nouns to describe the First Peoples of a country are contested, politically-loaded, and typically imposed denying the right to self-define. In this article, we have attempted to carefully select collective nouns and do not intend any disrespect by our choices. When we use the term "Indigenous" we are referring to Indigenous people within a global context, in accordance with the United Nations Permanent Forum on Indigenous Issues [3]. However, we use the specific terms "Aboriginal and Torres Strait Islander Peoples" when referring to the Indigenous People of Australia; and Māori when referring to the First People of Aotearoa (New Zealand). Within this perspective article, we will first identify prevalence data on the mental health of Indigenous people with a specific

<sup>⊠</sup> Richard Tindle, rtindle@usc.edu.au | ¹University of the Sunshine Coast, Sunshine Coast, Australia. ²Western Sydney University, Penrith, Australia.



Discover Psychology (2022) 2:6 | https://doi.org/10.1007/s44202-021-00014-2



focus on Aboriginal and Torres Strait Islander People and Māori people. We will then discuss the treatment of mental health (as defined by Western psychology) in Indigenous people and how cultural competency is integral to moving forward as a discipline.

The goal of the paper is to uplift the mental health of Indigenous peoples globally by showing that it is possible to improve mental health outcomes. Achieving this goal is not quick, easy, or straightforward and we wrangled with a range of complexities (e.g., experiences of colonisation) and moral tensions related to comparing Indigenous peoples to others in writing this article. While it would have been easier to shy away from the issues of data politics and the ethics of comparison, we felt that the benefits for Indigenous people globally were more compelling. We undertook this scholarship in good faith. Equally, we trust that you read it in good faith.

Understanding the psychological health of Indigenous peoples is an ethical and moral responsibility of psychology as a discipline. In 2017, the Australian Psychology Society [4] released a statement apologising to Aboriginal and Torres Strait Islander peoples and identified the current inequalities in psychological wellbeing when compared to non-Indigenous Australians. For example, data from the Australian Institute of Health and Welfare [5] indicated that approximately 31% of Aboriginal and Torres Strait Islander peoples experience high levels of psychological distress compared to only 10% of non-Indigenous Australians. These levels of psychological distress may stem from persistent day-to-day racism, denigration of culture, ongoing dispossession, material poverty, absence and omission from everyday Australian life, and the deep impact of intergenerational trauma associated with colonisation [2, 6, 7]. Similar discrepancies are also found in other Indigenous peoples around the world demonstrating the profound and ongoing impact of colonisation. Indeed, it is critical that colonisation is understood to be both historical and contemporary—it is still unfolding and will continue to. Differences in the colonisation experiences in settler-colonies such as Australia, Aotearoa (New Zealand), Canada, and the United States must be foregrounded within considering the impact that colonisation has on health outcomes.

Colonisation is a root cause of psychological health inequalities and as Paradies rightly calls out "there has been scant attention paid to precisely how colonial processes contribute to contemporary disparities in health between indigenous and non-indigenous peoples in these nation states" ([8], p. 83). Given the role that colonisation plays in health inequalities, we must question if it is manifestly unfair to expect Indigenous psychological health to be equal to non-Indigenous psychological heath? As Indigenous academic Maggie Walter's points out, numbers are not neutral entities but are imbued with meaning and that the comparison of Indigenous to non-Indigenous peoples should be challenged [9]. This issue of data politics is bigger than the remit of this paper and requires further discussion among the psychology academy. Until then, unfortunately, the available data that does (unfairly) compare Indigenous to non-Indigenous peoples is all that is available and is used in this paper.

By way of illustration, the prevalence of psychological distress among Māori people of Aotearoa (New Zealand) was ~ 50% higher compared to non-Māori [10, 11]. First Nation and Inuit people of Canada also reported similar trajectories in mental health status and psychological distress, with approximately 50% reporting high to very high levels of distress and rates of suicide up to 30 times higher than non-Indigenous Canadians [12, 13]. Native Americans also have levels of psychological distress that are significantly higher than any other race/ethnicity group in the USA (e.g., non-Hispanic White, African American, Asian, Pacific Islander, Mexican, Puerto Rican, Cuban; [14]). These findings highlight the current globally inequalities in the mental health status of Indigenous peoples, especially for those in settler-colonies for whom the unceasing colonisation process continues to stretch out into the infinite future.

These findings also highlight another important issue. The power of statistics to present population data in a form that is considered important by the nation-state (which are Anglo-European in settler-colonies). However, using these statistics is inherently devoid of Indigenous self-determination, cultural frameworks, or lenses and lead to the deficit-framing of Indigenous peoples [9]. This deficit-framing is not to be underestimated as it shapes how non-Indigenous people view Indigenous people and how Indigenous people view themselves. It can do *more* harm to people already experiencing vulnerability, may promote a 'white saviour' complex among health professionals and, thus, is a source of the continued colonisation experienced by Indigenous peoples. These statistics also reflect nation-state defined deficits that ignore or silence Indigenous defined health aspirations. Indigenous peoples have their own health aspirations and, as per Article 23 of the United Nations Declaration on the Rights of Indigenous Peoples, "have the right to determine and develop priorities and strategies for exercising their right to development. In particular, indigenous peoples have the right to be actively involved in developing and determining [their] health [priorities and strategies]" [15].



# 2 Mental health status of Indigenous people

The mental health status of Indigenous people is often reported as being worse (i.e., deficit) compared to non-Indigenous people and are often at a greater risk of experiencing depression, anxiety, substance use, and suicide (AIHW, 2017; Thomas et al., 2010; Vicary & Westerman, 2004; Ypinazar et al., 2007). For example, an Australian survey found that 29% of Aboriginal and Torres Strait Islander peoples reported having a mental health condition (e.g., depression, anxiety, and behavioural problems); [16] compared to 16.9% of the non-Indigenous population [16]. Similarly, Māori adults are 1.5 times more likely to meet the criteria for anxiety and depression compared to non-Māori adults. These statistics are concerning, not only because of the psychological wellbeing of Indigenous people but because of the known high comorbidity between poor mental health status and higher incidence of suicide and risk of participating in adverse health behaviours (e.g., smoking, alcohol, and substance abuse; [17, 18]). Consequently, this can lead to higher rates of chronic diseases which are often comorbid with mental health conditions. However, it is important to note that a 2018 review of the harmful use of alcohol among Aboriginal and Torres Strait Islander people found that "There are no comparable data for Aboriginal and Torres Strait Islander people" ([19]; p. 17).

Government data often report that the rates of alcohol and drug abuse are higher among Indigenous people compared to non-Indigenous people [20–23]. For example, according to the Australian Institute of Health and Welfare, Aboriginal and Torres Strait Islander Peoples smoke, drink, and use illicit drugs significantly more than non-Indigenous Australians. According to the Australian Institute of Criminology, the use of illicit drugs in the previous 12 months was 27%, which was higher in the rest of the population (15%). The abuse of methamphetamine (i.e., Ice) addiction among Aboriginal and Torres Strait Islander Peoples and is twice as much as in non-Indigenous Australians [20, 21]. As for Aotearoa (New Zealand), according to the BPAC report [22], while there is no significant difference for the number of people who drink alcohol between Māori and non-Māori, binge drinking is more common among Māori than non-Māori people. According to the HPA report [23], there are fewer Māori than non-Māori drinkers. Methamphetamine use is more common among Māori than non-Māori individuals use in Māori than non-Māori people (Ministry of Health, 2015). Although, it is not clear if there are differences in methamphetamine addiction among Māori and non-Māori individuals [24].

Much of the data highlighting the high comorbidity between substance use and mental health are based on Western non-Indigenous samples. This poses problems for the reliability and validity of these statistics. For instance, the statistics reported (1) do not consider the causes of the disparity, (2) do not consider the cultural context in which mental health status and diagnoses are made, and (3) do not utilise culturally appropriate and self-determined definitions of mental health within the context of Indigenous peoples.

The Australian National report for monitoring mental health and suicide prevention [25] reform raised concerns about reliability and access to national mental health data. For example, in general, these data are outdated and difficult to access; and these issues are exacerbated when trying to access up to date data on the mental health status of Indigenous people. As such, it is imperative for psychological research to identify the current mental health status of Indigenous people globally, to look beyond government reported data, and to ensure data is open access and available. Improving access to, and the quality of, data relating to the mental health of Indigenous people will aid in improving mental health outcomes, improve the use of appropriate psychological treatment, and provide more accurate data on the psychological and physical health status of Indigenous communities. Further, much of the data currently assessing the mental health status of Indigenous people are based on Western derived assumptions, definitions, and measures of mental health. For example, the data reported by governmental agencies are based on indicators obtained through evaluations that do not always consider the historical socio-cultural aspects of Indigenous people. For example, some of these statistics are based on a methodology that calculates the burden of disease (e.g., alcohol consumption and illicit drug use) as the difference between a population's actual health and its ideal health [21]. Using these metrics to determine the burden of disease and rates of drug and alcohol abuse is problematic because it presents the statistics using a Western derived framework of health and disease. Doing so, only reaffirms a deficit-framing of Indigenous people's drug and alcohol usage and does not consider Indigenous peoples self-determined definition of health, wellbeing, spirituality, and culture. It is important for future research investigating drug and alcohol prevalence, abuse, and the relative burden of these behaviours within the context of Indigenous culture, rather than a Western derived view of health and disease. Based on these limitations, current assessments of mental health status do not always consider how mental health is defined within non-Western and Indigenous cultures. As such, direct comparisons between the mental health status of Indigenous and non-indigenous people might not be reliable.



Nonetheless, based on the statistics presented, we can speculate that the mental health outcomes between Māori people and non-Māori people seem to be smaller than the gap that exists between Aboriginal and Torres Strait Islander people and non-Indigenous Australians. This is a likely reflection of the significantly different experience of colonisation in Australia as compared to Aotearoa—Australia's 1835 Proclamation of Terra Nullius led to the dispossession of land while the 1840 Treaty of Waitangi recognised Māori ownership of their lands. As Country is central to Aboriginal peoples' wellbeing, Terra Nullius had a profound impact. We highlight this issue, not to show that Māori people might have relatively better mental health outcomes compared to Aboriginal and Torres Strait Islander people but to emphasise that it is possible to improve the mental health outcomes of Indigenous people compared to non-Indigenous people. In the sections below, we identify some of the policies the New Zealand Government and the New Zealand Psychological Board have implemented to help reduce inequalities and improve the mental health outcomes of Māori people. We also show the progress Australian psychological organisations are making to reduce inequalities for Indigenous people.

# 3 Treatment of mental health in Indigenous people

In psychology, research has largely utilised Western samples to understand complex psychological phenomenon. Indeed, the statistics reported above are largely derived from scales developed in Western samples, although, some measures such as the Kessler Psychological Distress scale have been validated with Indigenous samples [26]. Nonetheless, Western psychology is often individualistic, liberal, and non-religious [13]. The use of Western samples raises concerns about the generalisability, efficacy, and validity of applying Western developed theories of mental health within non-Western cultures. The implications of such practices extend beyond research but also impact how clinicians treat and care for the psychological health of Indigenous people. For example, Cognitive Behavioural Therapy is perhaps the most widely used evidence-based psychotherapy in Western culture and is endorsed by the Australian Health Practitioner Regulation Agency, the UK's National Institute for Health and Care Excellence (NICE), and the American Psychiatric Association (APA).

Research has shown that CBT is heavily influenced by Western culture, where the focus is often on the individual; whereby strategies are used to change the individual's thoughts, behaviours, and beliefs [27–29]. As such, utilising an individualistic approach for treating people from non-Western cultures may not be appropriate to help Indigenous people achieve their mental health goals or produce the best outcomes for patients. Despite these limitations, CBT is often adapted to treat individuals from different cultures [29, 30]. While there is evidence that CBT can result in the successful treatment of individuals from various cultures [29–33], the biggest concern with CBT is that it does not successfully consider (or incorporate) the role of a person's family, social networks, or religious values into the treatment plan. For example, in Western cultures, it might be considered maladaptive to consistently rely on others for help or to put aside your own psychosocial and physical needs to satisfy the family or broader community. However, these behaviours are often adaptive within non-Western collectivist cultures [19, 21, 22]. We would like to indicate that we are focussing on CBT here as it is widely used. However, these same concerns are likely to present in other psychotherapies such as acceptance and commitment therapy [34], dialectical behaviour therapy [35], and interpersonal psychotherapy [36, 37].

### 4 Cultural competencies of clinicians

In clinical practice, there also needs to be a greater emphasis on the cultural competency of clinicians. For example, in Australia, there are core competencies that a psychologist must meet before they can be registered as a psychologist. These competencies are often achieved through their undergraduate and post-graduate degrees and through demonstrating competency under clinical supervision. However, it was only recently that the Australian Psychology Accreditation Council became a partner of the Australian Indigenous Psychology Education Project which aims to "provide for better education in cultural awareness and responsiveness in the higher education and training of the psychology workforce, and to increase the number of Aboriginal and Torres Strait Islander people in the psychology workforce." [38].

In the Australian accreditation standards for psychology programs [38], there are only two references to competencies related to Aboriginal and Torres Strait Islander cultures— (1) "Cultural responsiveness, including with Aboriginal and Torres Strait Islander cultures, is appropriately integrated within the program and clearly articulated as a required learning outcome"; (2) A statement about APAC's frameworks with the Australian Indigenous Psychology Education Project which aims to "increase the number of Aboriginal and Torres Strait Islander people in the psychology workforce".



Further, in the Psychology Board of Australia's general registration guide [39], there is no specific reference to competencies related to working with Aboriginal and Torres Strait Islander peoples. Indeed, the terms "Indigenous", "Aboriginal" or "Torres Strait Islander" do not appear in the document and clinicians are only required to have a minimum of six hours of supervision focussed on Australian ethical, legal, professional, and *cultural matters*. However, the Australian Psychological Society does have a single reference to competencies when working in a cross-cultural context within Counselling Psychology "Uses evidence-based practice or best-practice standards in working with Indigenous clients" [40]. We would like to state that we are only commenting on the guidelines and competencies for registration. However, we acknowledge that many clinicians work closely with Indigenous communities to help achieve their mental health outcomes and have undergone speciality training. For example, the Australian Psychological Society indicated that 600 psychologists in Australia had undergone Cultural Competence Training. However, this only represents ~ 2.22% of their members, as the Australian Psychological Association represents ~ 27,000 psychologists.

As a discipline, there needs to be greater recognition of the unique experience of Aboriginal and Torres Strait Islander peoples and how family, spirituality, and colonisation might impact mental health outcomes and approaches to treatment. The Australian Psychological Association is currently working with higher education providers to better integrate cultural competency within undergraduate and postgraduate psychology degrees [41]. Further, Indigenous peoples should be given the right to define their own health aspirations and mental health status within the context of their culture, rather than their health status being dictated by Western ideals of mental health. However, to achieve this, more research needs to be conducted with Indigenous communities to identify how family, spirituality, and colonisation might define mental health outcomes and approaches.

In contrast, the New Zealand Psychologist Board has a stronger emphasis on the importance of cultural competencies of Psychologists when working with Māori clients [42]. These include recognition and knowledge of the "Treaty of Waitangi/te Tiriti o Waitangi for health care in New Zealand", the importance of correct pronunciation of Māori language, and the importance of 'Te Whare Tapa Whā', which integrates the four dimensions of Māori health; Taha tinana (physical health), Taha wairua (spiritual health), Taha whānau (family health), Taha hinengaro (mental health) [42, 43]. Taken together, there are stark differences in the cultural competencies required for psychologists working in Australia and Aotearoa (New Zealand). While Aotearoa (New Zealand) still has challenges and health inequalities between Māori and non- Māori people, there is a clear emphasis on understanding the importance of incorporating family and spirituality within psychological therapy with Māori people.

### 5 Treatment outcomes for indigenous peoples

Ponturo and Kilcullen [33] conducted a qualitative systematic review to identify the efficacy of evidence-based psychological interventions with Aboriginal and Torres Strait Islander People. In total, the systematic review identified 12 articles, of these, six articles examined CBT (i.e., [32, 44–47]), two included Acceptance Commitment Therapy, three investigated Narrative Therapy, and one evaluated Multisystemic Therapy. From the systematic review, the authors concluded that there was qualitative support for the efficacy of psychological therapy with Aboriginal and Torres Strait Islander people. However, of the included studies only a few included outcome data. As such, it is difficult to draw a conclusion about the efficacy of psychotherapy with Aboriginal and Torres Strait Islander people.

Similarly, Toombs et al. [48] conducted a systematic review of electronic mental health interventions for Indigenous youth. Only ten studies were identified to meet the criteria, half of the studies were qualitative, three were quantitative, and two were research proposals with no data. These studies also included studies of various Indigenous peoples (e.g., Native American, Aboriginal and Torres Strait Islander peoples, Indigenous Canadian, and Māori). The review identified that there was some evidence among the ten articles that eHealth services are effective treatments for Indigenous youth. These systematic reviews show that evaluations of psychological therapies of Indigenous people largely consists of qualitative research, with few studies providing measurable quantitative outcomes. Poignantly, these recent systematic reviews highlight the lack of evidence-based research evaluating the effectiveness of psychotherapy for Indigenous peoples.

There is some quantitative evidence supporting the use of culturally adapted psychotherapies for treating Māori people (e.g., [21, 40–42, 49, 50]). For example, Bennett et al. [31] integrated elements of engagement, spirituality, family involvement, and metaphor into CBT with 16 Māori clients. Their results showed a significant reduction in depressive symptoms. However, while this was one of the first studies to identify the effectiveness of culturally adapted CBT, the study did not include a control group. The results of their study need to be further supported by randomised control



trials to demonstrate the effectiveness of culturally adapted CBT for Māori clients. As of writing this article, there does not appear to be a follow-up study using a randomised control trial to assess culturally adapted CBT for Māori clients. However, these recent studies show promising findings for utilising culturally developed psychotherapy for Indigenous peoples.

#### 6 Conclusion

Globally, there is much more work that should be done to reduce psychological inequalities between Indigenous and non-Indigenous people. By looking at the differences between Māori and Aboriginal and Torres Strait Islander people, we can see that there are still discrepancies in mental health status compared to non-Indigenous New Zealanders and Australians, respectively. However, it appears that the inequalities are relatively smaller between Māori and non-Māori compared to Aboriginal and Torres Strait Islander people and non-Indigenous Australians. We could not identify a study that directly compared the mental health status of multiple Indigenous groups (e.g., Aboriginal and Torres Strait Islander People and Māori). However, Doyle [51] reported that the World Health Organisations statistical information system showed that Aboriginal and Torres Strait Islander People are lagging in most health statistics (i.e., life expectancy, physical health, and mental health) compared to Māori people and Indigenous Canadian peoples. The statistics reported have identified that Australia needs to do more. However, by looking at similar countries where Indigenous people have been impacted by the effects of colonisation, we can see that there is progress to be made. As such, it is the responsibility of Psychology at all levels of the discipline to integrate Indigenous psychology into undergraduate and postgraduate courses, encouraging research to be conducted with Indigenous communities, and integrating self-determined definitions of Indigenous mental health, providing open-access data, and improving the cultural competencies of clinicians.

Discover Psychology hopes to fill this void by encouraging submissions from Indigenous authors and research focussed on understanding the unique experiences of Indigenous people from around the world. In particular, future research investigating the mental-health status, treatment efficacy, and health outcomes of Indigenous people should recognise the importance of self-determination, the impact of colonisation as the root cause of health differences and should incorporate greater discussion about the appropriateness of comparing Indigenous and non-Indigenous data. Furthermore, there is an opportunity for Psychology to actively interrogate data politics when collecting and reporting Indigenous peoples' health data. Publications investigating Indigenous research should provide statements that position or situate the authors with Indigenous-focused publications. This is an important Indigenous protocol linked to relationality. Such transparency is important and models best practice for readers but more importantly demonstrates that one's cultural lens matters [52, 53]. Future research about Indigenous psychological knowledge is strongly encouraged.

**Authors' contributions** RT, wrote and reviewed the main manuscript text. MR, wrote and reviewed the manuscript text. AM, wrote and reviewed the manuscript text. As the paper is a perspective article, all authors contributed to writing and reviewing all parts of the manuscript. All authors read and approved the final manuscript.

#### Declarations

Competing interests Non-financial interests: Associate Professor Ahmed Moustafa is the Editor and Chief of Discover Psychology.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by/4.0/.

#### References

- 1. Martin K, Mirraboopa B. Ways of knowing, being and doing: A theoretical framework and methods for indigenous and indigenist re-search. J Aust Stud. 2003;27(76):203–14.
- 2. Rose DB, Commission AH. Nourishing terrains: Australian Aboriginal views of landscape and wilderness. 1996.



- 3. Chakrabarti O. Indigenous peoples, Indigenous voices. United Nations. 2006. p. 1–3. http://www.un.org/esa/socdev/unpfii/documents/5session\_factsheet1.pdf%0Awww.IndigenousPermanetForum.com.
- 4. Carey TA, Dudgeon P, Hammond SW, Hirvonen T, Kyrios M, Roufeil L, et al. The Australian psychological society's apology to aboriginal and torres strait islander people. Aust Psychol. 2017;52(4):261–7. https://doi.org/10.1111/ap.12300.
- 5. Australian Institute of Health and Welfare (AIHW). Australias Health 2020: Indigenous health and wellbeing. 2020..
- 6. Dudgeon P, Calma T, Holland C. The context and causes of the suicide of Indigenous people in Australia. J Indig Wellbeing. 2017;2(2):5–15.
- 7. Walter M, Academy of the Social Sciences in Australia. Australian Bureau of Statistics. Lives of diversity: indigenous Australia. Census Ser Acad Soc Sci Aust. 2008;(2):32. http://www.assa.edu.au/publications/occasional\_papers/2008\_CS2.php
- 8. Paradies Y. Colonisation, racism and indigenous health. J Popul Res. 2016;33(1):83–96.
- 9. Walter M. Data politics and Indigenous representation in Australian statistics. Indig Data Sovereignty Towar Agenda. 2016;38:79–98.
- 10. Paterson R, Durie M, Disley B, Rangihuna D, Tiatia-Seath J, Tualamali'i J. He Ara Oranga: Report of the Government Inquiry into Mental Health and Addiction. 2018.
- 11. Ministry of Health. Annual Data Explorer 2019/20: New Zealand Health Survey [Data File]. URL: 2020.
- 12. Kielland N, Simeone T. Current issues in mental health in Canada: the mental health of First Nations and Inuit Communities. Curr Issues Ment Heal Canada. 2014;6:1–8.
- 13. Allwood CM. The Nature and Challenges of Indigenous Psychologies, vol. 2. Computers and Industrial Engineering. Cambridge: Cambridge University Press; 2018. p. 6.
- 14. Bratter JL, Eschbach K. Race/ethnic differences in nonspecific psychological distress: Evidence from the national health interview survey. Soc Sci Q. 2005;86(3):620–44.
- 15. Assembly UNG. The United Nations declaration on the rights of indigenous peoples. 2008. p. 1–15.
- 16. Australian Bureau of Statistics. National Aboriginal and Torres Strait Islander Social Survey, 2014–15 (No. 4714.0). 2016.
- 17. Teesson M, Slade T, Mills K. Comorbidity in Australia: Findings of the 2007 National Survey of Mental Health and Wellbeing. Aust N Z J Psychiatry. 2009;43(7):606–14.
- 18. National Mental Health Commission. A Contributing Life, the 2012 National Report Card on Mental Health and Suicide Prevention. 2012.
- 19. Gray D, Cartwright K, Stearne A, Saggers S, Wilkes E, Wilson M. Review of the harmful use of alcohol among Aboriginal and Torres Strait Islander people. Aust Indig Heal Bull. 2018;18(1):1–42.
- 20. Reilly R, Wand H, McKetin R, Quinn B, Ezard N, Dunlop A, et al. Survey methods and characteristics of a sample of Aboriginal and Torres Strait Islander and non-Indigenous people who have recently used methamphetamine: the NIMAC survey. Drug Alcohol Rev. 2020;39(6):646–55.
- 21. Australian Institute of Health and Welfare. National Drug Strategy Household Survey 2019. Canberra; 2020.
- 22. Muriwai E, Huckle T, Romeo J. Māori attitudes and behaviours towards alcohol. Wellington: Health Promotion Agency; 2018.
- 23. Booker C, Caswell M, Cooper N. Kua warea te Māori e tetarukino, e te whakapōauau. Substance misuse and addiction in Māori. Best Pract J. 2010;28(28):18–35.
- 24. Hutt M. Te Iwi Māori me te Inu Waipiro: He Tuhituhinga Hitori Māori & Alcohol : A History, 2003.
- 25. National Mental Health Commission. Monitoring mental health and suicide prevention reform: National Report 2019. Sydney; 2019.
- 26. Bougie E, Arim RG, Kohen DE, Findlay LC. Validation of the 10-item Kessler Psychological Distress Scale (K10) in the 2012 aboriginal peoples survey. Heal Reports. 2016;27(1):3–10.
- 27. Algantani HMS, Almulhim A, Alnajjar FA, Ali MK, Irfan M, Ayub M, et al. Cultural adaptation of cognitive behavioural therapy (CBT) for patients with depression and anxiety in Saudi Arabia and Bahrain: A qualitative study exploring views of patients, carers, and mental health professionals. Cogn Behav Ther. 2019;12:1–17.
- 28. Naeem F, Gobbi M, Ayub M, Kingdon D. Psychologists experience of cognitive behaviour therapy in a developing country: a qualitative study from Pakistan. Int J Ment Health Syst. 2010;4:1–9.
- 29. Naeem F, Phiri P, Rathod S, Ayub M. Cultural adaptation of cognitive-behavioural therapy. BJPsych Adv. 2019;25(6):387-95.
- 30. Rathod S, Phiri P, Naeem F. An evidence-based framework to culturally adapt cognitive behaviour therapy. Cogn Behav Ther. 2019;12:2019.
- 31. Bennett ST, Flett RA, Babbage DR. Culturally adapted cognitive behaviour therapy for Māori with major depression. Cogn Behav Ther. 2014;7:2014.
- 32. Bennett-Levy J, Wilson S, Nelson J, Stirling J, Ryan K, Rotumah D, et al. Can CBT be effective for aboriginal Australians? Perspectives of aboriginal practitioners trained in CBT. Aust Psychol. 2014;49(1):1–7.
- 33. Ponturo A, Kilcullen M. A systematic review of evidence-based psychological interventions and Aboriginal and Torres Strait Islander people. Clin Psychol. 2021;00(00):1–14.
- 34. Woidneck MR, Pratt KM, Gundy JM, Nelson CR, Twohig MP. Exploring cultural competence in acceptance and commitment therapy outcomes. Prof Psychol Res Pract. 2012;43(3):227–33.
- 35. Appleby J, Staniforth B, Flanagan C, Millar C. Clinical social work in Aotearoa New Zealand: Origins, practice, and future implications. Aotearoa New Zeal Soc Work. 2020;32(4):103–15.
- 36. Allan BA, Campos ID, Wimberley TE. Interpersonal psychotherapy: A review and multicultural critique. Couns Psychol Q. 2016;29(3):253–73.
- 37. Verdeli H, Clougherty K, Bolton P, Speelman L, Lincoln N, Bass J, et al. Adapting group interpersonal psychotherapy for a developing country: experience in rural Uganda. World Psychiatry. 2003;2(2):114–20.
- 38. Australian Psychology Accreditation Council. Accreditation standards for psychology programs. 2019;(1):1–39.
- 39. Psychology Board of Australia, Registration Standard: General Registration, 2016.
- 40. Australian Psychological Society, Competencies of Australian Counselling Psychologists. 2012;(NOVEMBER):1-9.
- 41. The Australian Psychological Society. The Australian Psychological Society Reconciliation Action Plan 2011–2014. 2014.
- 42. New Zealand Psychologists Board. Core competencies for the practice of psychology in New Zealand. 2014; (FEBRUARY):1–36.
- 43. Durie M. Mauri ora: The dynamics of Māori health. Oxford: Oxford University; 2001.
- 44. Bennett-Levy J, Wilson S, Nelson J, Rotumah D, Ryan K, Budden W, et al. Spontaneous Self-Practice of Cognitive Behavioural Therapy (CBT) by Aboriginal Counsellors During and Following CBT Training: A Retrospective Analysis of Facilitating Conditions and Impact. Aust Psychol. 2015;50(5):329–34.



- 45. Kilcullen M, Swinbourne A, Cadet-James Y. Aboriginal and Torres Strait Islander health and wellbeing: Social emotional wellbeing and strengths-based psychology. Clin Psychol. 2018;22(1):16–26.
- 46. Titov N, Dear BF, Staples LG, Bennett-Levy J, Klein B, Rapee RM, et al. The first 30 months of the MindSpot Clinic: evaluation of a national e-mental health service against project objectives. Aust N Z J Psychiatry. 2017;51(12):1227–39.
- 47. Barrett EL, Indig D, Sunjic S, Sannibale C, Sindicich N, Rosenfeld J, et al. Treating comorbid substance use and traumatic stress among male prisoners: a pilot study of the acceptability, feasibility, and preliminary efficacy of seeking safety. Int J Forensic Ment Health. 2015;14(1):45–55.
- 48. Toombs E, Kowatch KR, Dalicandro L, McConkey S, Hopkins C, Mushquash CJ. A systematic review of electronic mental health interventions for Indigenous youth: Results and recommendations. J Telemed Telecare. 2020;123:89.
- 49. Bennett ST, Flett RA, Babbage DR. Considerations for culturally responsive cognitive-behavioural therapy for māori with depression. J Pacific Rim Psychol. 2016;10:e8.
- 50. Bennett ST, Flett RA, Babbage DR. The Adaptation of Cognitive Behavioural Therapy for Adult Maori Clients with Depression: A pilot study. Claiming Spaces Proc 2007 Natl Maori Pacific Psychol Symp. 2008. p. 83–91.
- 51. Doyle K. Modes of colonisation and patterns of contemporary mental health: towards an understanding of Canadian Aboriginal, Australian Aboriginal and Maori Peoples. Aborig Islander Heal Work J. 2011;35(1):20–3.
- 52. Kirby SL, Greaves L, Reid C. Experience research social change: Methods beyond the mainstream. Cambridge: University of Toronto Press; 2006.
- 53. Wilson S. Research is ceremony: Indigenous research methods. New York: Fernwood Publishing; 2008.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

