

Understanding the cultural determinants of health: A scoping review



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Abstract

Purpose Current approaches to Indigenous health education are predominantly deficit-based, with limited inclusion of the cultural needs of Indigenous communities. This approach has widespread impacts on education by influencing healthcare students' societal views and clinical healthcare delivery to Indigenous peoples, potentially contributing to Indigenous health inequities. Social determinants of health (SDH) have been used in literature to describe these inequities, yet this concept contributes to the deficit discourse narrative. Implementing the cultural determinants of health alongside the SDH shifts the focus to a strengths-based approach and provides a holistic and comprehensive lens to Indigenous health and wellbeing. However, cultural determinants of health is a new concept and there is still an unclear understanding of the term within literature. This scoping review aimed to develop an understanding of how the cultural determinants of health are represented in the literature and their role within healthcare curricula.

Methods This scoping review was guided by Indigenous ways of knowing, being and doing, and systematically followed the five scoping review phases outlined by Westphal et al. (2021).

Main findings Forty-two publications were included in the scoping review and seven emerging themes were used to represent the findings: Shared definition of the cultural determinants of health; Mutual understanding of factors; Cultural determinants of health promote a strengths-based approach to holistically enhance health; Ambiguity associated with broader determinants; Research should be by, with

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<https://doi.org/10.1016/j.fnhli.2024.100036>





and for Indigenous peoples; Limited literature supporting cultural determinants of health in curricula; and Future research needs to consider the cultural determinants of health.

Principal conclusions The themes provided a thorough representation of the cultural determinants of health within literature, although some ambiguities are still prominent. Future research conducted by, with and for Indigenous peoples, particularly in addressing the cultural determinants of health within education, may contribute to a clearer representation of the cultural determinants of health in the literature.

Keywords: Cultural determinants of health; Indigenous; Social determinants of health; Scoping review; Strengths-based

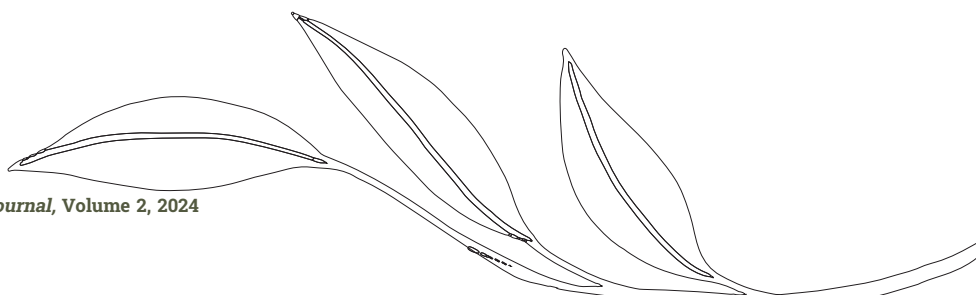
Highlights

- Cultural determinants of health positively impact health and wellbeing outcomes.
- Cultural determinants of health promote a strengths-based approach.
- There is an emerging understanding of the cultural determinants of health.
- Research should be by, with and for Indigenous peoples.
- Future research is needed on the cultural determinants of health.

Introduction

Current approaches to healthcare curricula place a focus on the inequities faced by Indigenous communities in Australia, which contribute to the deficit discourse (Fogarty et al. 2018). The deficit discourse is centred around Indigenous inequities and is defined as ‘a mode of thinking that frames and represents Aboriginal and Torres Strait Islander people in a narrative of negativity, deficiency and failure’ (Fogarty et al. 2018, p. 3). Literature has identified that these inequities have a direct connection to the social determinants of health (SDH) (Australian Institute of Health and Welfare [AIHW] 2024). SDH are a key focus within healthcare curricula and important in highlighting the factors that can contribute to Indigenous health inequities; however, there is a need to bring attention to the cultural factors that address and mitigate these inequities (Sharma et al. 2018). Educational curricula can have significant influences

on healthcare students’ perceptions and beliefs, making it essential to adopt a strengths-based and holistic approach when discussing Indigenous health (Rashid et al. 2023; Sarikhani et al. 2020). A strengths-based approach is simply an approach that seeks ‘to move away from the traditional problem-based paradigm and offer a different language and a set of solutions to overcoming an issue’ (Fogarty et al. 2018, p. 9). There is an emerging call to action within literature to identify cultural needs of Indigenous peoples through understanding the cultural determinants of health (Kelly et al. 2023). Cultural determinants of health is a new concept that offers a complimentary lens to SDH, and addresses Indigenous health and wellbeing (Islam 2019). This scoping review aimed to develop an understanding of how cultural determinants of health are represented in the literature and their role within healthcare curricula.



Background

The global literature highlights the inequities faced by Indigenous communities in Australia, often reinforcing negative stereotypes and contributing to a deficit discourse (Fernandez-Bou et al. 2021; Stoneham et al. 2014). The representation of Indigenous communities in Australia is often centred around potentially false stereotypes, statistics and health gaps within these communities, contributing to the deficit discourse in literature (Fogarty et al. 2018; Jackson and Engelman 2022; Stoneham et al. 2014; Williams 2012). The inequities between Indigenous and non-Indigenous peoples are related to, and largely drawn from, the SDH within the literature (AIHW 2023). The AIHW identified the SDH as accounting for 35% of the gap between Indigenous and non-Indigenous health outcomes in Australia (AIHW 2023). The World Health Organization (WHO) identifies SDH as factors that explain and impact health inequities globally. The WHO defines SDH as:

...the non-medical factors that influence health outcomes. They are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life (WHO n.d.).

SDH are fundamental to understanding the health inequities faced by Indigenous communities; therefore, their inclusion is essential to healthcare curricula. However, there is literature to support that the SDH on their own may unintentionally reinforce deficit discourses, highlighting the need to promote a strengths-based and culturally informed approach (Bond et al. n.d.; Islam 2019; Sharma et al. 2018). The SDH are broad and include factors such as income, education, unemployment and housing (WHO n.d.). The SDH are widely and meaningfully used to inform healthcare curricula to provide students with the

knowledge and skills to consider the factors contributing to Indigenous health gaps (Lewis et al. 2020). The focus on SDH can significantly influence societal stance, beliefs and shape healthcare students' perceptions of Indigenous peoples (Alsubaie 2015; Rashid et al. 2023; Sarikhani et al. 2020). The content on SDH included in healthcare curricula often focuses on the health statistics and inequities faced by Indigenous communities, rather than framing them as determinants to be addressed through social justice (Sharma et al. 2018). Sharma et al. (2018) argue that SDH, while intended to address the root causes of inequities in Indigenous communities, may contribute to perpetuating these disparities. This approach within healthcare curricula can contribute to the deficit discourse of Indigenous communities and therefore add to these inequities (Sharma et al. 2018). There is an undeniable need for education about the SDH and health gaps faced by Indigenous communities; however, there is still an opportunity in healthcare curricula to consider the cultural factors alongside the SDH, which may help to address these gaps (Fogarty et al. 2018b; Stoneham et al. 2014). Providing education that incorporates both the SDH and cultural determinants of health would therefore promote a holistic and strengths-based approach to education about Indigenous health (Sharma et al. 2018).

There is an emerging focus in the literature on the cultural determinants of health as a strengths-based approach that can complement the SDH (Bond et al. n.d.; Islam 2019). The cultural determinants of health originate from the Lowitja Institute cultural roundtables, with the *Mayi Kuwayu* study being a driving force behind research within this area (Lowitja Institute 2014; *Mayi Kuwayu National Study 2024*). The cultural determinants of health are factors that recognise the benefits of connecting to culture and Country, which promotes identity and resilience for



Indigenous peoples (Brown 2014; Lowitja Institute 2021). The cultural determinants of health are rooted in Indigenous ways of knowing, being and doing, highlighting the determinants that can help reduce health inequities within Indigenous communities. The Lowitja Institute (2014, p.13) identifies the cultural determinants of health as 'Country; Indigenous beliefs and knowledge; Indigenous language; family, kinship and community; cultural expression and continuity; and self-determination and leadership'. There is growing evidence to support that these determinants can provide a holistic perspective of the health needs of Indigenous peoples (Bond et al. n.d.; Fernandez 2014). Verbunt et al. (2021) conducted a literature review on the cultural determinants of health within Australia and argued that there is limited evidence to support a high-quality definition. Therefore, there is a need to provide a clearer picture of the cultural determinants of health to support their implementation within healthcare curricula.

There is an opportunity to provide greater inclusion of the cultural needs of Indigenous communities to promote a strengths-based perspective within healthcare curricula (Fellner, 2018; Sharma et al. 2018). The provision of education on the positive factors that uplift Indigenous communities holistically addresses health and can reduce health gaps (Markey et al. 2023; Orón Semper and Blasco 2018). Kelly et al. (2023) conducted a longitudinal study to address cultural curricula gaps by embedding cultural determinants of health into medical curricula. The study found that embedding cultural content had positive impacts on medical student perceptions, skills, knowledge and future clinical healthcare delivery with Indigenous peoples (Kelly et al. 2023). This study also identified that cultural competency was increased amongst these medical students (Kelly et al. 2023). However, to date, their publication is the only available research

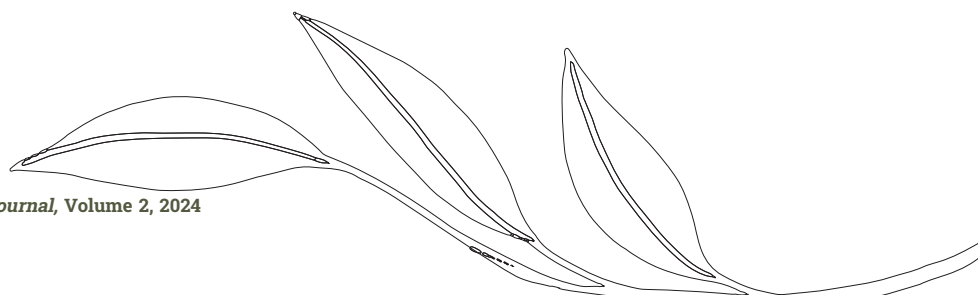
providing evidence to support the role of the cultural determinants of health in promoting strengths-based healthcare curricula. Additionally, there is a gap within the literature regarding a clear definition of the cultural determinants of health. Therefore, it is necessary to provide research that supports a deeper understanding of the cultural determinants of health and their influence on promoting strengths-based healthcare curricula.


This scoping review aimed to develop an understanding of how the cultural determinants of health are represented in the literature and their role within educational curricula. The purpose of the scoping review was to inform a larger PhD project to consider the influence of embedding the cultural determinants of health within healthcare curricula. Therefore, the objectives of this scoping review were to:

1. Identify how the cultural determinants of health are understood in the literature
2. Understand what factors are included in the cultural determinants of health
3. Determine how the cultural determinants of health are used within healthcare curricula.

Indigenous positionality statement

This positionality statement reflects understanding of Indigenous ways of knowing, being and doing, and the relationship to the research and those around us. The author team comprises three Aboriginal women (one descendant of the Wiradjuri peoples, one descendant of the Kamilaroi peoples and one descendant of the Murrwarri peoples) and two non-Aboriginal women. Among the authors, three are nurses, one is a social scientist and one is an anthropologist. The lead author is a PhD student and a proud Aboriginal woman. The two non-Aboriginal women have deeply considered their positionality and the influence of their culture on





their relationship with Country and Aboriginal peoples. The team upholds the values of respect, responsibility and reciprocity in their approach to this scoping review. Strong reciprocal relationships with Mother Earth were maintained and the team is grateful for the wisdom and guidance that Country provides.

Theoretical underpinning

The Indigenous Standpoint Theory underpins this research. The Indigenous Standpoint Theory enables Indigenous researchers to investigate how Indigenous voice and culture is acknowledged and embedded within Western practices and knowledge systems, known as the cultural interface (Moreton-Robinson 2013; Nakata 2007). The Indigenous Standpoint Theory was chosen because this scoping review brought two perspectives together to create an understanding of how the cultural determinants of health could be integrated in healthcare curricula, to assist understanding of Indigenous peoples' needs (Nakata 2007). The Indigenous Standpoint Theory supports researchers in providing insightful research that is rooted in Indigenous self-determination and Indigenous knowledges (Moreton-Robinson 2013; Nakata 2007). These groundings are significant, as three of the authors identify as Indigenous, including the lead author. Due to the premise and underpinnings of the research, the authors focused on privileging and promoting the voice of Indigenous peoples.

Methodology and Methods

The scoping review followed the first five phases of the Westphal et al. (2021) scoping review recommendations, based on the Arksey and O'Malley (2005) scoping review framework. The five phases are: (1) identify the research question, (2) identify relevant literature, (3) select studies (publications), (4) extract, map and chart the data (5) summarise, synthesise and report the results (Westphal et al. 2021, p. 12). The

optional sixth phase (expert consultation) was excluded because further consultation with community members will be sought later, as this scoping review is part of a larger PhD research project.

Indigenous methodology principles were upheld throughout the scoping review by means of Indigenous researchers providing leadership within the scoping review and ensuring the privileging of Indigenous ways of knowing, doing and being throughout each of the steps of the scoping review (Walter and Andersen 2016). The five phases of Westphal et al. (2021) were enhanced with the Brodie et al. (2023) approach to include Indigenous perspectives in scoping review methodology. This approach aligned with the theoretical underpinning of the Indigenous Standpoint Theory, which informed the overall PhD theoretical framework (Nakata 2007). Incorporation of the Indigenous Standpoint Theory influenced the interpretation and analysis of the scoping review findings.

(1) *Identify the research question*

To identify the research question, a rapid scan of the literature was first undertaken to identify what literature was available. The research question was established utilising an iterative process and kept broad due to the small results returned in the initial rapid scan. The research question created for this review was 'How are the cultural determinants of health understood in literature?'. The key terms were selected in consultation with the university librarian to inform the search strategy (Table 1).

(2) *Identify relevant literature*

The search was conducted across electronic databases. The databases were identified and decided



KEY TERM/S:	CULTURAL DETERMINANTS OF HEALTH
SEARCH TERMS	“Cultural determinants of health” OR “Cultural determinant of health”

Table 1: Search strategy

upon with the assistance of a librarian and included Web of Science, Scopus, Informat, ProQuest, Australian Indigenous Health/InfoNet, Education Research Complete, Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), grey literature (Google Advanced Search), Cumulative Index of Nursing and Allied Health Literature (CINAHL) and Aboriginal and Torres Strait Islander Studies. The search results were imported to Covidence systematic review software (Veritas Health Innovation, Melbourne, Australia) to collaboratively guide the scoping review.

(3) *Select publications*

The search strategy returned 388 resources across the 10 databases and via citation searching, with 217 of these removed due to being duplicates. This left 171 publications for title and abstract screening against the inclusion and exclusion criteria (Table 2).

Screening of the included records against the inclusion and exclusion criteria was undertaken by two of the authors to promote rigour (Pham et al. 2014). Any conflicts that arose were discussed and resolved. Following the title and abstract screening, 110 records moved to full-text screening. At this time, it was evident that further refinement of the inclusion and exclusion criteria was needed. The authors added that

the cultural determinants of health must be core to the publication to be included in the information extraction phase. On completion of the full-text screening, 42 publications were included for information extraction. By employing the Covidence software, the quantitative findings are represented using the Preferred Reporting Items for Systematic Reviews and meta-Analyses (PRISMA) flowchart (Figure 1) (PRISMA 2020).

(4) *Extract, map and chart the data*

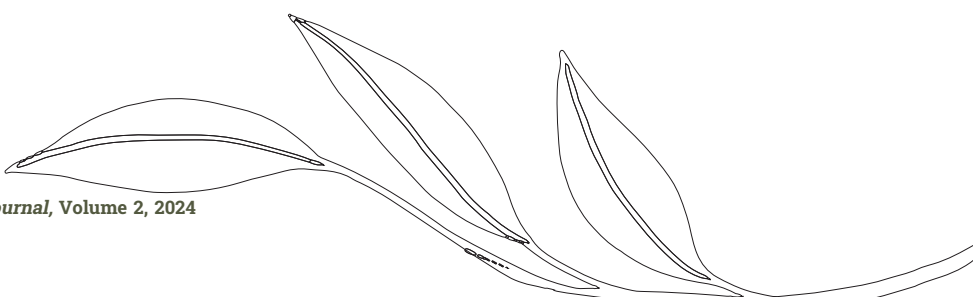
A tabular method was utilised for information extraction of the 42 included publications. The table headings that were chosen were informed by the research question and objectives to reflect Indigenous ways of knowing, being and doing (Brodie et al. 2023) (Appendix 1). Indigenous authorship was included in the data extraction table to assess whether an Indigenous author was interpreting and representing Indigenous voice (Knibb-Lamouche 2013). The inclusion of Indigenous authorship was determined by whether authors included self-identification within their publication.

(5) *Summarise, synthesise and report the results*

Overall, 42 publications met the inclusion criteria and were included in the extraction phase. These included peer-review journal articles (n = 22), book chapters (n = 6), thesis/dissertations (n = 3), website directories (n = 1), video presentations (n = 2), government reports (n = 6) and guidelines (n = 2). Reflexive thematic analysis is derived from thematic analysis and was

Inclusion criteria	Exclusion criteria
Include all countries and settings Do not limit publications to a timeframe “Cultural determinant/s of health” is included in the title or abstract of the publication	Any publication not in English Any publications without full-text access Any article that does not include “Cultural determinant/s of health” in the title or abstract of the publication

Table 2: Title and abstract screening: Inclusion and exclusion criteria



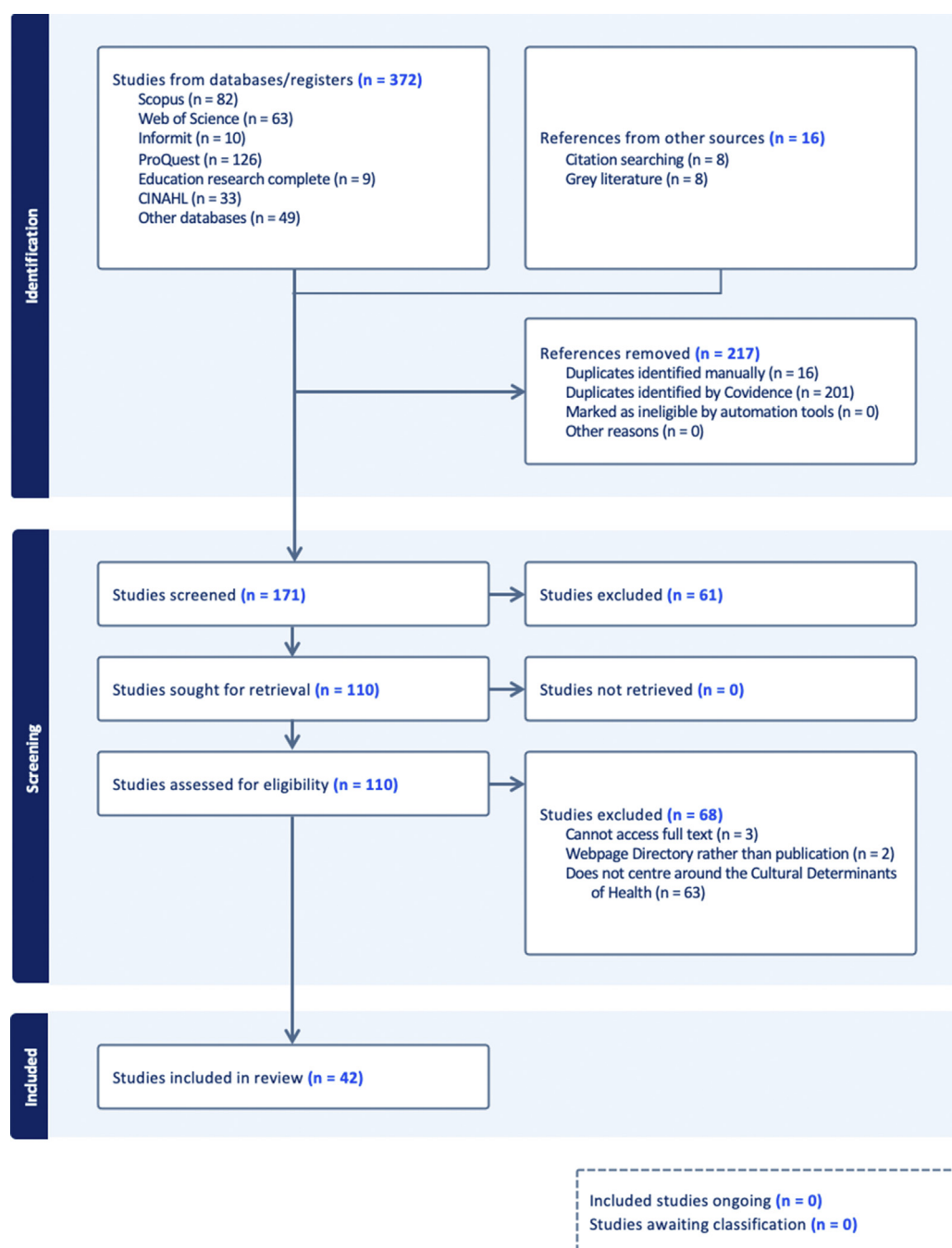


Figure 1: PRISMA flowchart.

utilised as an iterative approach to interpret and represent the findings of this scoping review (Braun and Clarke 2020; Pollock et al. 2023; Westphaln et al.

2021). Brodie et al. (2023) support the idea that thematic analysis appropriately integrates Indigenous knowledges, reflects Indigenous ways of knowing,



being and doing, and is underpinned by reflexivity. [Braun and Clarke \(2020\)](#) identified that researcher positionality can influence interpretation of codes or themes within reflexive thematic analysis. To mitigate this risk, positionality is shared in the introduction of the paper and a collaborative approach was adopted ([Byrne 2022](#)). The triangulation of analysis through collaboration enables researchers to validate themes and supports member checking, which is significant in Indigenous research ([Pollock et al. 2023](#); [Renz et al. 2018](#); [Wilson 2008](#)). The contemporary application of reflexive thematic analysis described by Braun and Clarke has six phases ([Braun and Clarke 2020](#), p. 331). The six phases and description of their application for this scoping review are explored in [Table 3](#).

Findings

Theme one: Shared definition of the cultural determinants of health

Theme one was derived from the common definition used to describe the cultural determinants of health within the publications. Twenty-five of the included publications cited either the Lowitja Institute cultural determinants of health roundtables or the *Mayi*

Kuwayu study, which originates from the Lowitja Institute ([Arabena 2020](#); [2021](#); [Australian Indigenous HealthInfoNet 2024](#); [Backholer et al. 2021](#); [Bourke et al. 2018](#); [Bourke 2020](#); [Commonwealth of Australia 2017](#); [Government of South Australia 2022](#); [Kingsley et al. 2018](#); [Langmaid et al. 2020](#); [Lovett and Brinckley 2021](#); [Lowitja Institute 2021](#); [Luke et al. 2021](#); [Mohamed et al. 2020](#); [Olson et al. 2021](#); [Parter et al. 2023](#); [Prehn et al. 2024](#); [Salmon et al. 2019](#); [Smith et al. 2023](#); [Sunderland et al. 2023](#); [Urquhart et al. 2023](#); [Verbunt et al. 2021](#); [Wright and Lewis 2017](#); [Wright et al. 2022](#)). The Lowitja Institute roundtables and *Mayi Kuwayu* study both originate from Australia ([Lowitja Institute 2014](#); [Mayi Kuwayu National Study 2024](#)). Furthermore, 35 of the included publications identified Australia as the country of origin, meaning that most of the included publications reflected an Australian perspective of the cultural determinants of health. The findings will reflect this Australian underpinning by focusing on Indigenous Australians ([Appendix 1](#)).

The most prominent definition used within nine publications to describe the cultural determinants of health arose from Professor Ngaire Brown, a Yuiin Nation

Phase	Description of phase
Phase one: Dataset familiarisation	Data familiarisation involved reviewing the publications included in the scoping review before extracting key data through a data extraction table (Appendix 1).
Phase two: Coding	Coding was informed by identifying salient points within the publications that addressed the research question and objectives.
Phase three: Generating initial themes	Repetitive codes were compared, combined and categorised to identify shared themes. A miscellaneous theme was initially included to consider outlier codes.
Phase four: Developing and reviewing themes	The previously generated themes were iteratively reviewed by all authors against the scoping review objectives, which informed phases four and five.
Phase five: Refining, defining and naming themes	The initial themes were refined and seven themes emerged: Shared definition of cultural determinants of health; Mutual understanding of factors; Cultural determinants of health promote a strengths-based approach to holistically enhance health; Ambiguity associated with broader determinants; Research should be by, with and for Indigenous peoples; Limited literature supporting cultural determinants of health in curricula; and Future research needs to consider the cultural determinants of health.
Phase six: Writing up	The seven themes were established in response to the research question: How are the cultural determinants of health understood in literature? Figure 2 represents the seven themes. The figure utilises a flower to represent the current growth in the literature regarding the cultural determinants of health, and the themes from this review (petals) depict new understanding blooming within the space of the cultural determinants of health (centre point of flower). The findings will explore these petals.

Table 3: Reflexive thematic analysis application

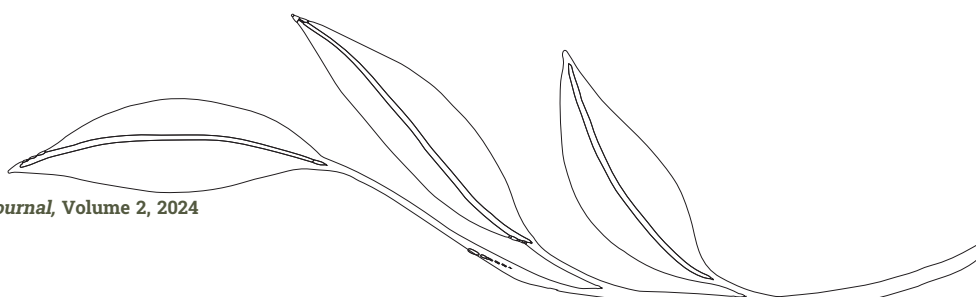




Figure 2: Growing themes of cultural determinants of health.

woman who was part of the Lowitja Institute cultural determinants roundtables (Australian Indigenous HealthInfoNet 2024; Backholer et al. 2021; Government of South Australia 2022; Kingsley et al. 2018; Langmaid et al. 2020; Lovett and Brinckley 2021; Mohamed et al. 2020; Sunderland et al. 2023; Wright and Lewis 2017). The shared definition of the cultural determinants of health was identified as:

The cultural determinants of health have been described as originating from, and promoting perspectives that are strengths based, and

acknowledge that stronger connections to Country and culture build stronger individual and collective identities, a sense of self-esteem, and resilience. (Lowitja Institute 2014, p. 2)

The authors identified the definition provided by Lowitja Institute (2014) as the unified definition of the cultural determinants of health, as it was the most frequently cited in the included publications. This definition appropriately encompasses and provides a comprehensive description of the cultural determinants of health.



Theme two: Mutual understanding of factors

Like theme one, theme two emerged from the identification of the same or similar factors within the cultural determinants of health. Twelve publications identified the same six factors that constituted the cultural determinants of health, as cited by Lowitja Institute (Arabena 2020; Australian Indigenous HealthInfoNet 2024; Backholer et al. 2021; Bourke et al. 2018; Bourke 2020; Department of Health and Aged Care 2021; Government of South Australia 2022; Lowitja Institute 2014, Lowitja Institute 2021; Mohamed et al. 2020; Parter et al. 2023; Salmon et al. 2019; Urquhart et al. 2023). These six factors were: 'Country; Indigenous beliefs and knowledge; Indigenous language; family, kinship and community; cultural expression and continuity; and self-determination and leadership' (Lowitja Institute, 2014, p. 13).

Within the results, 14 publications identified one or more of the above factors, thereby supporting these factors as the cultural determinants of health (Arabena 2021; Commonwealth of Australia 2017; Dune et al. 2021; Kingsley et al. 2018; Langmaid et al. 2020; Lethborg et al. 2021; Lovett and Brinckley 2021; Luke et al. 2021; Prehn et al. 2024; Rice and Liamputting 2021; Smith et al. 2023; Sunderland et al. 2023; Verbunt et al. 2021; Wright et al. 2022). For instance, Lovett and Brinckley (2021) identified kinship, connection to land and Country and self-determination as cultural determinants of health but did not identify the inclusion of Indigenous beliefs and knowledge, Indigenous language or leadership. Although six mutual factors were identified across the results, there were two outliers identified as factors within the cultural determinants of health, which were spirituality and cultural identity. Figure 3 illustrates how the cultural determinants of health were represented in the results, with the size of the circles indicating the

prevalence within literature (and represented numerically within the circle).

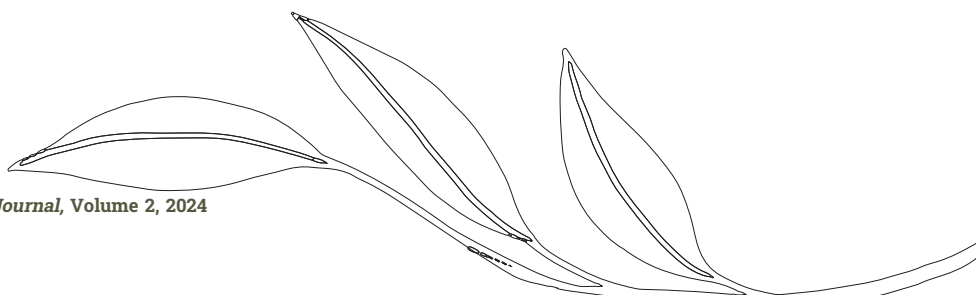
Theme three: Cultural determinants of health promote a strengths-based approach to holistically enhance health

The results provide evidence of a link between the cultural determinants of health and positive health and wellbeing outcomes for Indigenous peoples. These positive outcomes include reducing health inequities, promoting a holistic lens to health and supporting a strengths-based approach. These positive health outcomes were identified in 16 publications (Arabena 2021; Australian Indigenous HealthInfoNet 2024; Backholer et al. 2021; Bird et al. 2023; Bourke et al. 2018; Commonwealth of Australia 2017; Kingsley et al. 2013; Lethborg et al. 2021; Lovett and Brinckley 2021; Mohamed et al. 2020; Northern Territory Government 2022; Parter et al. 2023; Salmon et al. 2019; Verbunt et al. 2021; Wright and Lewis 2017; Yadav et al. 2024). Positive outcomes were evident for Indigenous peoples when:

...living in a way that incorporated the Cultural Determinants into their everyday lives, which enabled them to acquire and maintain exceptional health and wellbeing to avoid today's diseases of civilisation (Bird et al. 2023, pp. 36-37).

Four publications indicated the cultural determinants of health as holistic in their approach by enhancing the physical, spiritual, mental and emotional health outcomes of Indigenous peoples (Arabena 2020; Bird et al. 2023; Department of Health and Aged Care 2021; Yadav et al. 2024). These publications support that the cultural determinants of health are influential in the health and wellbeing needs of Indigenous peoples. For instance:

There is clear evidence that addressing holistic needs for Aboriginal and Torres Strait Islander people enables



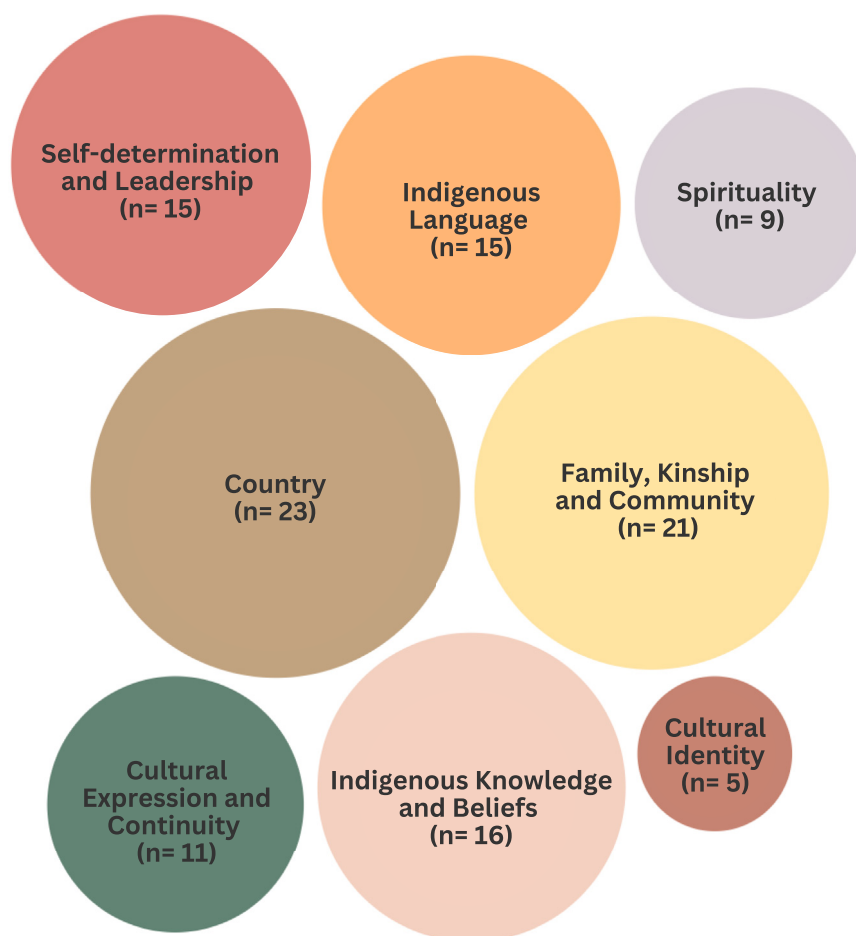


Figure 3: Cultural determinants of health factors and their prevalence within literature.

greater engagement, rather than a narrow clinical focus on physical aspects of health. This requires primary care services to acknowledge and address the broader social and cultural determinants of health for Aboriginal and Torres Strait Islander people (Yadav et al. 2024, p. 11).

Additionally, the data reinforced the positive impact of the cultural determinants of health in reducing the health inequities faced by Indigenous peoples; this is known as a strengths-based approach. Ten publications demonstrated that the cultural determinants of health promote a strengths-based approach (Australian Indigenous HealthInfoNet 2024; Bourke 2020; Olson et

al. 2021; Government of South Australia 2022; Lovett and Brinckley 2021; Lowitja Institute 2021; Mohamed et al. 2020; Prehn et al. 2024; Verbunt et al. 2021; Wright et al. 2022). Bourke (2020) states that the 'cultural determinants of health are specifically linked to strengths-based approaches' (p. 38). Theme three illustrates the synergy between positive Indigenous health outcomes and the cultural determinants of health.

Theme four: Ambiguity associated with broader determinants

Theme four emerged in contradiction to theme one. Although theme one established a shared definition of



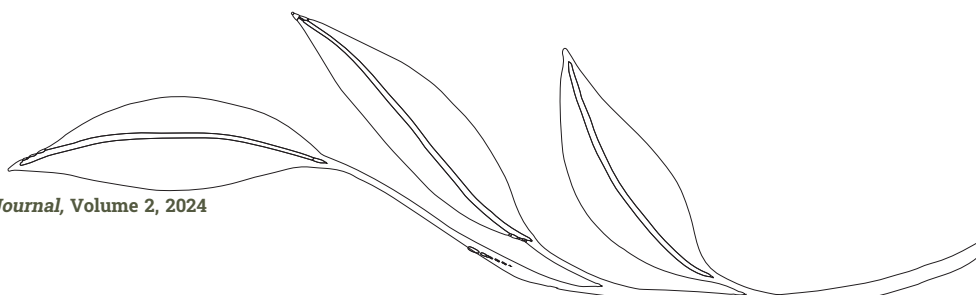
the cultural determinants of health, there was ambiguity surrounding the influence of other determinants of health within 19 of the publications (Akaka et al. 2023; Australian Indigenous HealthInfoNet 2020; Bird et al. 2023; Commonwealth of Australia 2017; Davy et al. 2016; Department of Health and Aged Care 2021; Kingsley et al. 2013; Langmaid et al. 2020; Lethborg et al. 2021; Lovett and Brinckley 2021; Luke et al. 2021; Martsolf and Hall 2019; McCalman et al. 2018; McIntosh et al. 2021; Northern Territory Government 2022; Prehn et al. 2024; Rice and Liamputting 2021, Stubber 2014; Wright and Lewis 2017). Langmaid et al. (2020, p. 8) highlight that the literature references social, structural, ecological and environmental determinants: 'Indigenous Knowledge systems were considered immensely important when addressing ecological and cultural determinants of health' (Langmaid et al. 2020, p. 8). Within these publications, SDH was commonly grouped alongside the cultural determinants of health. Among the 19 publications, 17 of these considered the cultural determinants of health and SDH together (Akaka et al. 2023; Australian Indigenous HealthInfoNet 2020; Lovett and Brinckley 2021; Bird et al. 2023; Commonwealth of Australia 2017; Davy et al. 2016; Department of Health and Aged Care 2021; Kingsley et al. 2013; Lethborg et al. 2021; Martsolf and Hall 2019; McCalman et al. 2018; McIntosh et al. 2021; Northern Territory Government 2022; Prehn et al. 2024; Rice and Liamputting 2021, Stubber 2014; Wright and Lewis 2017).

Additionally, six of the publications within the scoping review highlighted that the cultural determinants of health negatively influence Indigenous health by contributing to health inequities. This conclusion was reached due to the SDH being grouped alongside the cultural determinants of health (Akaka et al. 2023; Australian Indigenous HealthInfoNet 2020; Davy et al.

2016; McIntosh et al. 2021; Northern Territory Government 2022; Olson et al. 2021). For example: 'We found issues relating to both the social and cultural determinants of health hampered Indigenous patients, their families and communities from accessing care' (Davy et al. 2016, p. 6). The occasional grouping of these determinants led the literature to confuse these terms and influence readers' individual understanding of the SDH and the cultural determinants of health. The provided definitions encompassed both terms, so the distinction between the two terms was unclear. Marrying these determinants contributed to confusion on understanding the cultural determinants of health. The identified definitions in the 17 articles did not include culture, or the shared understanding of the cultural determinants of health initially identified in the first theme. For example:

Factors known as the social and cultural determinants of health impact the health and wellness of individuals. They are the conditions that people are born into, grow and live in. The social and cultural determinants of health play a large part in health inequities between population groups, such as the differences between Aboriginal and Torres Strait Islander people and non-Indigenous people (Australian Indigenous HealthInfoNet 2020, p. 8).

Notable within this quote was the assumption that the cultural determinants of health have a direct correlation to health inequities faced by the Indigenous community. The quote does not identify whether the cultural determinants of health have a positive or negative influence on health inequities. These elements contribute to the ambiguity associated with the cultural determinants of health and unclearly clarify their role within Indigenous health outcomes. The confusion and ambiguity across the different health determinants add to the existing lack of clarity





about the definition and components of the cultural determinants of health within the literature.

Theme five: Research should be by, with and for Indigenous peoples

Theme five reflects how the Indigenous voice was incorporated and represented in the literature. Thirty-one publications incorporated Indigenous voice into the methodology (Appendix 1). Although this finding is significant in providing inclusion of Indigenous peoples within the research, there were 23 publications that either did not have Indigenous authorship or did not identify whether Indigenous authorship was present (Appendix 1). Twelve publications advocated for research within Indigenous spaces to be Indigenous led, include the collaboration of Indigenous community and be controlled by Indigenous peoples (Akaka et al. 2023; Arabena 2020; Backholer et al. 2021; Government of South Australia 2022; Kingsley et al. 2018; Lethborg et al. 2021; Lowitja Institute 2021; Luke et al. 2021; Martsolf and Hall 2019; McCalman et al. 2018; Verbunt et al. 2021; Wright and Lewis 2017). The following quote supports theme five: 'Promoting partnerships, two-way engagement, and inclusion; to build capacity in the implementation of cultural determinants of health...' (Arabena, 2020, p. 21). Theme five identifies that current literature on the cultural determinants of health should provide inclusion of Indigenous voice and clearly identify Indigenous authorship.

Theme 6: Limited literature supporting cultural determinants of health in curricula

Theme six arose to determine how the cultural determinants of health are used within healthcare curricula. Theme six aligns with the larger project being undertaken by the authors to support the implementation of the cultural determinants of health within an educational context. Five publications advocated for Indigenous knowledges to be more

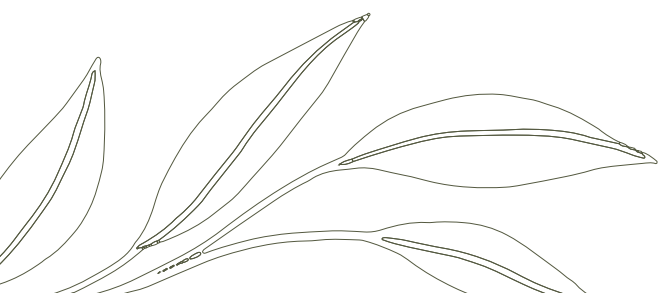
broadly integrated into healthcare curricula (Arabena 2020; Kelly et al. 2023; Luke et al. 2021; Smith et al. 2023). The five publications discussed that the current inclusion of Indigenous content in healthcare curricula was deficit-based and there was a lack of representation or misrepresentation of Indigenous peoples, leading students to feel culturally unsafe. This was evident in the following quote:

....education systems place multiple constraints on Indigenous peoples participating and achieving in higher education and how the presentation of knowledge and failure to incorporate Indigenous knowledges appropriately can lead to feelings of alienation or loss of connection (Smith et al. 2023, p. 123).

Although five publications referred to the significance of embedding Indigenous knowledges within curricula, there were limited links provided to embedding the cultural determinants of health. One of these publications (Kelly et al. 2023) highlighted that including the cultural determinants of health could support the integration of Indigenous knowledge into curricula. Kelly et al. (2023) discussed the need for medical curricula to include the cultural determinants of health to enhance students' cultural competency. Theme six found limited literature that supported the role of the cultural determinants of health within healthcare curricula.

Theme 7: Future research needs to consider the cultural determinants of health

The final theme identified future research needs to more broadly consider the cultural determinants of health. Thirty-eight of the included publications have been published within the last five years; therefore, the research focus is an emerging area that still requires further evidence (Appendix 1). Furthermore, 10 of the publications were from grey literature such as





government reports (n = 6) ([Australian Indigenous HealthInfoNet 2020](#); [Australian Indigenous HealthInfoNet 2024](#); [Commonwealth of Australia 2017](#); [Lowitja Institute 2021](#); [Mohamed et al. 2020](#); [Wright and Lewis 2017](#)), video presentations (n = 2) ([Arabena 2021](#); [Northern Territory Government 2022](#)) and guidelines (n = 2) ([Arabena 2020](#); [Government of South Australia 2022](#)). Therefore, there is an opportunity for future research that is peer reviewed and from scholarly sources.

Among the included publications, 13 indicated that future research is needed to clarify the use and application of the cultural determinants of health ([Backholer et al. 2021](#); [Bourke et al. 2018](#); [Davy et al. 2016](#); [Kelly et al. 2023](#); [Kingsley et al. 2013](#); [Kingsley et al. 2018](#); [Langmaid et al. 2020](#); [Luke et al. 2021](#); [Mackell et al. 2022](#); [Sunderland et al. 2023](#); [Parter et al. 2023](#); [Verbunt et al. 2021](#); [Wright et al. 2022](#)). The 13 publications referenced that future research is needed that identifies strategies to implement the cultural determinants of health within education, policy, practice and programs. [Langmaid et al. \(2020\)](#) identified that the cultural determinants of health currently have limited attention within the literature. [Davy et al. \(2016\)](#) supported this statement by indicating that future research is needed on the cultural determinants of health. The final theme therefore reinforces the need for the broader PhD project to provide further evidence on the cultural determinants of health.

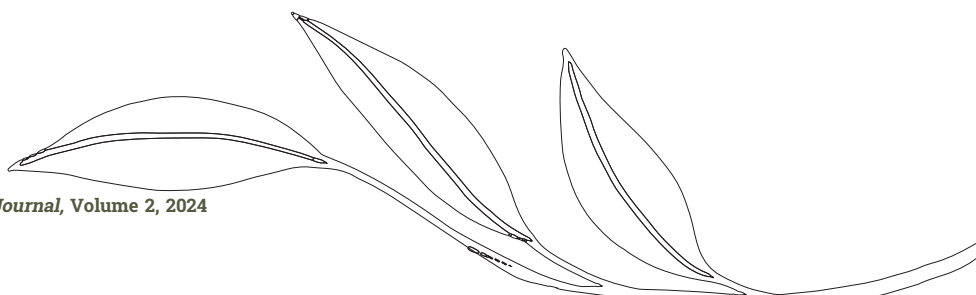
Discussion


This scoping review examined what is currently known about the cultural determinants of health, the factors that constitute this concept and how the determinants are used in healthcare curricula. The findings indicate that current literature could add to

the ambiguity associated with understanding the cultural determinants of health by marrying this term alongside SDH. Additionally, the findings highlight the significance of representing Indigenous voices and inclusion of Indigenous authorship within Indigenous research. The included publications reinforced the need for future research within the space of the cultural determinants of health, particularly their role and implementation within healthcare curricula.

Ambiguity associated with the cultural determinants of health

Within the findings, there was ambiguity identified in the understanding of the cultural determinants of health. Many publications did not explicitly define the cultural determinants of health or specify the factors that constitute these determinants. There is an opportunity for this to be addressed in future research and provide greater clarity on the cultural determinants of health ([Backholer et al. 2021](#); [Salmon et al. 2019](#)). [Verbunt et al. \(2021\)](#) argue that there is limited high-level evidence to support an understanding of the cultural determinants of health ([Backholer et al. 2021](#)). The findings of this review reinforce this finding by [Verbunt et al. \(2021\)](#), whereby many publications are derived from grey literature and unable to be classified as high-level evidence. Additionally, [Arnault \(2018\)](#) conducted a literature scan and found significant difficulties in capturing a clear definition for the cultural determinants of health, leading them to propose their own definition. Much of the literature provides evidence that the cultural determinants of health have strong benefits in health and wellbeing outcomes for Indigenous peoples and encourage their implementation. However, without a distinctive definition, it is unclear how the cultural determinants of health can be applied ([Bourke et al. 2018](#); [Stubber 2014](#)). [Rice and Liamputting \(2021\)](#) further argued that without a thorough understanding





of the cultural determinants of health, there is the potential to further add to the health inequities of Indigenous communities on a global scale. The findings of this review work towards providing clarity on the current understanding of the cultural determinants of health by providing a unified definition (identified within theme one).

Unclear distinction between social and cultural determinants of health

Among the publications, the cultural determinants of health were often discussed alongside the SDH. The grouping of these determinants adds to the existing ambiguity surrounding the cultural determinants of health (Fernandez 2014; Verbunt et al. 2021). Through consideration of the WHO (n.d.) definition of the SDH and the shared understanding of the cultural determinants of health (theme one), there are significant differences between these definitions. The WHO (n.d.) identifies that SDH aim to consider the factors that contribute to inequities for Indigenous communities (AIHW 2024; Islam 2019), whilst the cultural determinants of health aim to address and minimise these inequities (Bond et al. n.d.; Fernandez 2014; Islam 2019). SDH are a non-Indigenous construct focused on the non-medical factors affecting health; in contrast the cultural determinants of health have originated from an Indigenous voice to consider protective factors that can promote Indigenous health (Lowitja Institute 2014; WHO n.d.). Despite these differing understandings arising from different worldviews, some of the literature tends to associate the two terms without a clear identification of either (Backholer et al. 2021; Islam 2019). Within the results, Davy et al. (2016) elaborated that the cultural and social determinants of health such as transport, unemployment and education contributed to accessing healthcare. These factors are contradictory to the mutual understanding of factors

identified as the cultural determinants of health (theme two) and are rather reflective of the SDH (Davy et al. 2016; Fernandez 2014; Sharma et al. 2018; WHO n.d.).

The SDH are more widely defined and understood; however, there is a need for more research, to better understand the cultural determinants of health. Undeniably, the cultural determinants of health could complement the SDH by considering aspects of culture or cultural needs for Indigenous communities (Bourke 2020; Fernandez 2014). There is a growing understanding that the SDH and cultural determinants of health can come together to help health practitioners to understand how they can holistically care for Indigenous peoples. Nonetheless, when referring to both terms there is still a need to clearly separate these by distinctly defining each. Providing education on the cultural determinants of health alongside the SDH could provide a more comprehensive and holistic approach to Indigenous health and wellbeing (Bond et al. n.d.).

Greater opportunity to represent Indigenous voice

Indigenous authorship within the included records was at times unclear. Some publications did not self-identify whether Indigenous authorship was present, even though it is possible that Indigenous authors may have been involved. However, the issue remains that these publications do not clearly identify Indigenous authorship (Gower 2012; Mamanyjun 2006). The omission of Indigenous authorship meant that Indigenous voice may not be appropriately interpreted and represented (Gower 2012; Mamanyjun 2006). Knibb-Lamouche (2013) indicated that the interpretations and representation of Indigenous knowledge and worldviews are directly dependent on a researcher's own worldviews, values and beliefs. Moreover, the researcher's positionality inherently



impacts the subjective interpretation of obtained data (Knibb-Lamouche 2013; Savolainen et al. 2023). Undertaking research within a space that is unfamiliar to the researcher leads to questionable findings, outcomes and results, due to the researcher's knowledge gap (Guillemin et al. 2016). More simply, a non-Indigenous researcher investigating the cultural determinants of health may not possess the cultural knowledge or understanding needed to appropriately undertake or represent the research findings (Gray and Oprescu 2016; Guillemin et al. 2016). Previous literature has indicated the inclusion of Indigenous perspectives has supported greater knowledge translation and positive research outputs for Indigenous communities (Brodie et al. 2023). Therefore, there is an opportunity to represent the Indigenous voice by including Indigenous authors, to support Indigenous ways of knowing, being and doing within Indigenous-centred research (Australian Institute of Aboriginal and Torres Strait Islander Studies 2012).

Limited application to curricula

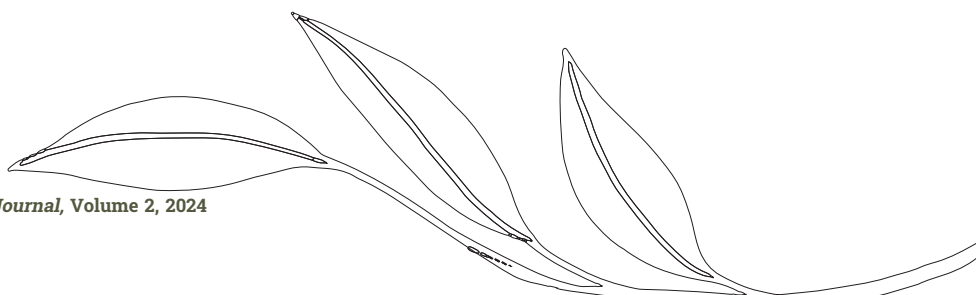
This review illustrates a limited understanding of how the cultural determinants of health are embedded or included in healthcare curricula. The scoping review revealed a limited number of publications that made a direct link to the cultural determinants of health within curricula; however five publications did refer to embedding Indigenous knowledge. A quantitative cohort study by Kelly et al. (2023) undertook research to measure the knowledge, skills and awareness of cultural competency in healthcare. The study provided evidence that medical students who participated in learning about cultural determinants of health had increased cultural competence in clinical healthcare delivery (Kelly et al. 2023). This study by Kelly et al. (2023) is the only known current research that considers the cultural determinants of health in educational settings; however, it does not

identify the content that was considered and whether it was Indigenous designed or taught.

There is a need to develop content with the Indigenous community to ensure that the included content promotes a decolonised approach and accurately interprets Indigenous ways of knowing, being and doing (Fellner 2018). Fellner (2018) advocates for developing healthcare curricula to include Indigenous peoples and culture, by establishing reciprocal relationships with Indigenous knowledge holders and Elders, to accurately pass on their teachings to students (Booth 2014; Gomes et al. 2013). Incorporating Indigenous communities in healthcare curricula design and implementing the cultural determinants of health can enhance student perception of Indigenous peoples and communities (Agius and Russell 2016; Kelly et al. 2023; Rahman 2013; Rashid et al. 2023). The research undertaken by Kelly et al. (2023) provides evidence of these benefits on student educational outcomes and, consequently, healthcare delivery to Indigenous communities. However, there is still a need for future research that proposes strategies to support the implementation of the cultural determinants of health in education, to address what is identified within the existing literature.

Future research is needed

This scoping review highlights the need for future research to support the implementation of the cultural determinants of health. There was sufficient literature that provided a thorough understanding of the cultural determinants of health, yet many of these available resources may have lacked reliability due to being sourced from grey literature (Ashiq et al. 2022; Verbunt et al. 2021). Additionally, within the results there were recommendations consistently made by authors for future research about the cultural determinants of health (Backholer et al. 2021; Bourke





et al. 2018; Langmaid et al. 2020). The recommendations were vast and included research being needed on how the cultural determinants of health could be incorporated into healthcare policy, education, programs and practice (Backholer et al. 2021; Rahman et al. 2023; Parter et al. 2023). Bourke et al. (2018) recommended that future research could adopt a mixed methods approach to understanding the cultural determinants of health. The findings support the authors' understanding that future research is needed on the cultural determinants of health.

Strengths and limitations of this review

This scoping review followed a rigorous, transparent and systematic approach to searching, collecting and analysing the available literature (Pham et al. 2014; Westphaln et al. 2021). The search strategy was broad, whereby it incorporated literature across a wide range of databases and included grey literature. The inclusion of mostly Indigenous authors serves as a strength within the premise of the research by upholding the ethical principles needed within Indigenous research (Aboriginal Health and Medical Research Council 2023). The scoping review provided a thorough understanding of the cultural determinants of health and how they are currently presented in the literature.

There are several limitations that arose within the undertaking of this scoping review. The decision to exclude the final optional step of the Westphaln et al. (2021) scoping review recommendations meant that there was no engagement with Indigenous community to inform the scoping review findings. Nonetheless, the premise of the scoping review was to inform a larger project that will incorporate consultation with Indigenous community (Hanneke et al. 2017). A further limitation of the scoping review was the decision not to

critically or culturally appraise any of the included publications (Booth et al. 2021). According to Westphaln et al. (2021), critical appraisal is not required when undertaking a scoping review; however, including a process of appraisal would help to clearly identify the reliability and validity of the publications included in the review (Booth et al. 2021). Moreover, the scoping review largely drew on grey literature. Although the inclusion of grey literature is recommended within a scoping review, these studies may lack rigour or reliability in comparison with peer-reviewed studies (Westphaln et al. 2021). The combination of including grey literature and excluding critical appraisal meant that the scoping review failed to differentiate the quality of the publications. Finally, it is an inherent limitation within scoping reviews that the broad approach to investigating literature may lack depth of analysis and increase the potential for bias (Pham et al. 2014).

Conclusions

This scoping review found that although there is sufficient literature that focuses on the cultural determinants of health and associated factors, some elements remain unclear within literature. There was some ambiguity identifying the difference between the cultural determinants of health and the broader determinants of health, particularly the SDH. The scoping review identified that there is a clear need to develop high-quality evidence that supports the implementation of the cultural determinants of health within healthcare curricula, policy and practice. Furthermore, the implementation of the cultural determinants of health should predominantly be informed and designed by Indigenous community. Conducting future research by, with and for Indigenous peoples on the cultural determinants of health and addressing the determinants within healthcare education may see a clearer understanding of the cultural determinants of health within literature.



Author Contributions

M. M. Kelly: Conceptualisation, methodology, software, formal analysis, investigation, resources, data curation, writing - original draft, writing - review and editing, visualisation, project administration.

K. Marriott-Statham: Conceptualisation, methodology, software, formal analysis, investigation, resources, data curation, writing - review and editing, visualisation, supervision.

K. Clapham: Methodology, validation, formal analysis, investigation, resources, writing - review and editing, visualisation, supervision.

C. Metusela: Validation, writing - review and editing, supervision.

M. Mackay: Conceptualisation, methodology, software, formal analysis, investigation, resources, data curation, writing - review and editing, visualisation, supervision, project administration, funding acquisition.

Declaration of Interest

The authors declare no competing interests.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial or not-for-profit sectors.

Acknowledgements

This paper was explored and written on Dharawal land. We acknowledge Indigenous peoples as the Traditional Owners of Country throughout Australia. The researchers would like to acknowledge that sovereignty of these lands has never been ceded. We recognise the relationship that Indigenous peoples share with community and kin and their ongoing

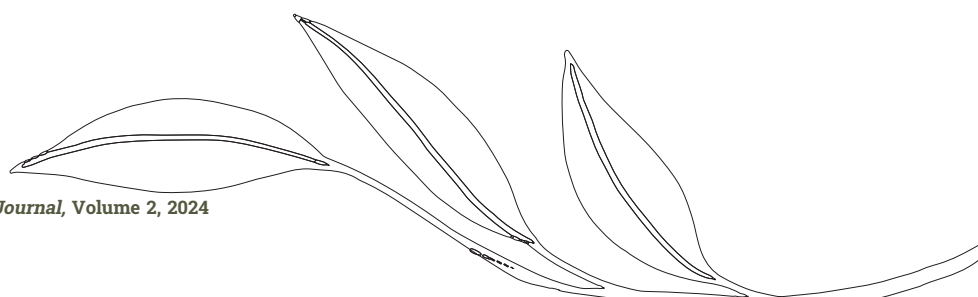
connection shared with land and waters. We acknowledge Indigenous peoples as the knowledge holders in our research and pay our respects to Elders past, present and emerging. We extend our respect to any Indigenous community included within the publications and to which we acknowledge their valuable contributions to literature.

Author Biography

Meg Kelly is a Kamilaroi woman and an Indigenous PhD candidate from the University of Wollongong (UOW). She received her Bachelor of Nursing from UOW before progressing onto her Honours in Medical, Indigenous and Health Science. Meg has a strong interest in supporting Indigenous communities by developing research that aims to bridge the gap in Indigenous literature. She is currently working on researching and developing curricula with community that has a focus on addressing the cultural needs of Indigenous peoples in a healthcare setting.

Kelly Marriott-Statham is a registered nurse and lecturer within the School of Nursing at UOW with an interest and research in Indigenous Health. Kelly has practiced nursing in rural and remote Australia and has been involved in the care and support of Aboriginal and Torres Strait Islander peoples and communities. Kelly is currently completing her PhD at Queen Margaret University, Edinburgh, in the Centre for Person-centred Practice Research.

Professor Kathleen Clapham is an Aboriginal Australian, a descendent of the Murrawarri peoples of north-western New South Wales. Kathleen is an anthropologist and Director of the Ngarruwan Ngadju First People's Health and Wellbeing Research Centre at the University of Wollongong. Kathleen's research focuses on the safety, health and wellbeing of Aboriginal children and young peoples, community-



based interventions, health equity and the social and cultural determinants of health. Kathleen has extensive experience in research, publication, and HDR supervision.

Christine Metusela is a Senior Lecturer in Public Health in the Graduate School of Medicine at the University of Wollongong, where she also leads the research and critical analysis curriculum theme. She is a qualitative and mixed methods researcher with experience in practice-based research, primary care, health services research and Indigenous health. She has a strong interest in improving health outcomes for vulnerable people and communities.

Associate Professor Maria Mackay is a registered nurse and midwife with over 35 years of clinical experience. Maria has an interest in research that focuses on social and emotional wellbeing, person-centeredness and cultural safety. Maria has multiple past publications and experience in the role of supervising and supporting postgraduate students at UOW. Maria identifies as Aboriginal Wiradjuri and has a passion for advocating for Indigenous community and strengthening Indigenous knowledges in curricula.

Supplementary material

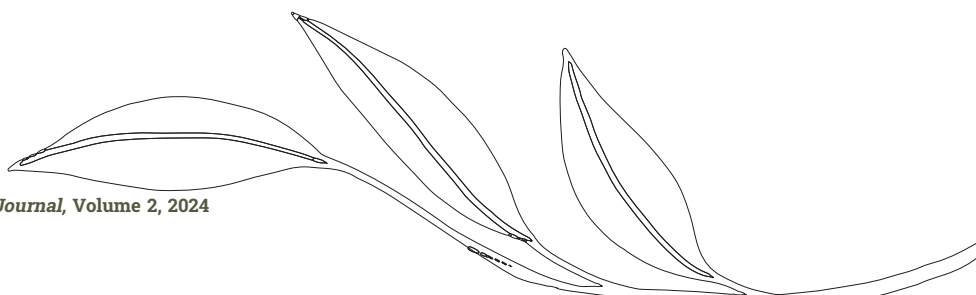
Supplementary material associated with this article can be found in the online version at <https://doi.org/10.1016/j.fnhli.2024.100036>.

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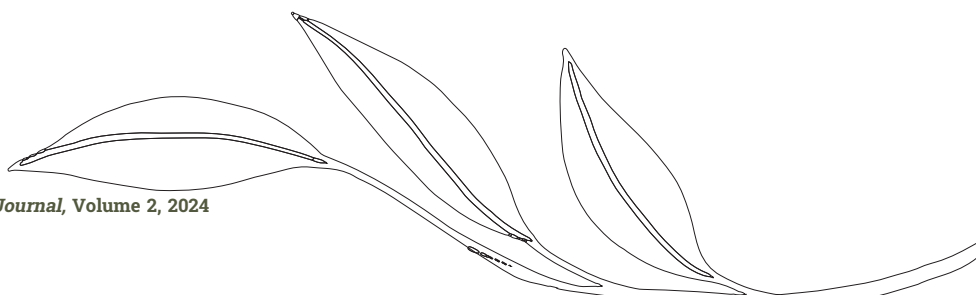
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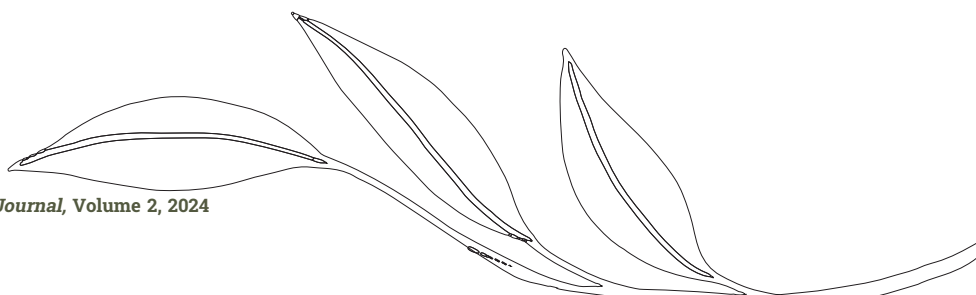


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