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Gaawaadhi Gadudha: understanding how cultural camps impact health, well-being and resilience among Aboriginal adults in New South Wales, Australia—a collaborative study protocol

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ABSTRACT

Introduction The health and well-being of Aboriginal Australians is inextricably linked to culture and Country. Our study challenges deficit approaches to health inequities by seeking to examine how cultural connection, practice and resilience among Aboriginal peoples through participation in 'cultural camps' held on sites of cultural significance promotes health and well-being.

Methods and analysis The study will be undertaken in close collaboration and under the governance of traditional cultural knowledge holders from Yuwaalaraay, Gamilaraay and Yuin nation groups in New South Wales, Australia. Three cultural camps will be facilitated, where participants (n=105) will engage in activities that foster a connection to culture and cultural landscapes. A survey assessing connection to culture, access to cultural resources, resilience, self-rated health and quality of life will be administered to participants pre-camp and post-camp participation, and to a comparative group of Aboriginal adults who do not attend the camp (n=105). Twenty participants at each camp (n=60) will be invited to participate in a yarning circle to explore cultural health, well-being and resilience. Quantitative analysis will use independent samples' t-tests or χ^2 analyses to compare camp and non-camp groups, and linear regression models to determine the impact of camp attendance. Qualitative analysis will apply inductive coding to data, which will be used to identify connections between coded concepts across the whole data set, and explore phenomenological aspects. Results will be used to collaboratively develop a 'Model of Cultural Health' that will be refined through a Delphi process with experts, stakeholders and policymakers.

Ethics and dissemination The study has ethics approval from the Aboriginal Health and Medical Research Council (#1851/21). Findings will be disseminated through a combination of peer-reviewed articles, media communication, policy briefs, presentations and summary documents to stakeholders.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ This study will generate novel evidence of the relationship between connecting to and practicing culture and its impacts on Aboriginal health, well-being and resilience. This will contribute to challenging dominant deficit-based approaches.

⇒ Collection of a wide range of cultural, social, psychometric and self-rated health data through quantitative and qualitative methods will allow for a triangulated, rigorous and strengths-based understanding of 'cultural health'.

⇒ The study operates under a cultural governance structure that places Aboriginal traditional custodians and knowledge holders from three nation groups as decision-makers on all study aspects.

⇒ The study will engage experts, stakeholders and policymakers in developing a model of cultural health that can be used to place the generated evidence in policy environments.

⇒ Limitations of this study include that it is being conducted only in New South Wales, and that the comparison group of participants who did not attend the camp will not be followed up.

INTRODUCTION

Aboriginal and Torres Strait Islander (respectfully hereafter Aboriginal) peoples are custodians to the oldest continuous culture in the world, centred on close kin relationships to 'Country' (land) dating back at least 50 000 years.[1] The health and well-being of Aboriginal peoples is inextricably linked to the continuation of Aboriginal cultures and connection to Country.[2] A key limitation in promoting equity in Aboriginal health outcomes is the dominant use of

deficit-based approaches[3] to explain inequitable differences in health outcomes between Aboriginal and non-Aboriginal people. This typically involves comparing incidence or prevalence, morbidity, mortality and treatment outcomes between Aboriginal and non-Aboriginal people, with documented differences commonly referred to as 'the gap'. In doing so, 'the gap' implicitly and perhaps inadvertently positions Aboriginal Australians as deficient, by focusing on benchmarking individual health outcomes against non-Aboriginal counterparts.[3 4]

A complex array of historical, socioeconomic, cultural and political factors creates barriers to accessing health systems and services for Aboriginal peoples.[2 5] It is acknowledged that 'culture' is a complex concept that is neither tangible nor static, can refer to a way of life of a group of people, or society, that is shared and learnt, and intersects with many different sources of identity including class, age, gender, sexuality, race and ethnicity, and religion.[6 7] For the purpose of this paper, Aboriginal culture(s)—as centred in this research—primarily refers to the values, beliefs and perceptions shaped by continuing cultural laws and practices pre-invasion (e.g., 'traditional'); in addition to collective experience, understanding, and practice both pre-invasion and post-invasion. Cultural marginalisation (e.g., tensions between Aboriginal cultural norms, beliefs and practices vis-à-vis the structures and institutions of the dominant Western neoliberal society)[5] and racism are at the core of inequitable access,[5] indicating the need to prioritise both 'culture'[8] and the cultural determinants (eg, cultural factors that shape health outcomes) of health[9] in addressing 'the gap' in health outcomes.

The United Nations Declaration on the Rights of Indigenous Peoples of which Australia is a signatory,[10] sets out the right to not be subjected to forced assimilation and destruction of culture (Article 8) and the right to practice and revitalise cultural traditions and customs (Article 11).[11] Dominant 'Western' models of living, welfare and economic development are predicated on a violent history of colonisation, dispossession, exploitation and mechanisation, leading smoothly and uncritically to the adoption of (neo) liberal models of statehood. Previous research has documented the role of Aboriginal cultural expression (e.g., expressing cultural values, norms, beliefs and perceptions), and the tensions created at its interface with the dominant culture underpinning health systems, and how this contributes to and reinforces inequitable health outcomes.[5 7 12 13] This is exemplified by the centrality of cultural 'brokerage' functions within health systems, usually provided by Aboriginal Health Workers or Practitioners,[14] cultural liaison officers, language interpreters[15 16] and family members, who play a pivotal role in the accessibility of clinical care.[17 18] Cultural competence among non-Aboriginal clinicians is also fundamental.[19] However, these aspects focus on experiences within health services and systems, rather than understanding how connection with culture, alongside practice and maintenance of culture, can serve as protective factors for Aboriginal health and well-being.

Applying a 'strengths-based' approach centres connection, practice and maintenance of culture as protective factors in Aboriginal health and well-being has been widely recognised as a way to shift the 'deficit-based' approaches described,[3 5 8] and progress these unmet targets.[20] 'Cultural health' is an emerging concept, and research in this area seeks to understand how an individual's connection to, and practice of, culture, along with the availability and accessibility of cultural resources (people, knowledge, physical sites), and cultural governance structures, impact health and well-being among Aboriginal peoples. Some studies have shown that the practice and maintenance of Aboriginal culture is protective for cardiovascular[21] and diabetes[22] associated risk, as well as related psychosocial risk factors.[23] Traditional medicine practices, such as the use of medicinal plants,[24] and traditional healers who provide physical and spiritual healing methods (e.g., Ngangkari healers, clever men or women)[25] are also integral to the concept of cultural health; as they provide remedy to (physical and non-physical) illness while simultaneously strengthening culture and identity.

However, further place-based, and localised evidence is needed to better understand how cultural health and physical and mental health are related.[8] Resilience is another important but not well-understood concept that shapes health outcomes among Aboriginal peoples.[8] While there is no single definition of resilience, previous scholarship has identified 'tenacity', self-esteem, quality of life and spirituality as traits that are positively correlated with self-reported resilience.[26] There are relatively few studies exploring Aboriginal resilience, with available evidence showing a positive relationship between resilience and health and well-being.[27 28] Currently, there is a lack of evidence on how Aboriginal cultural resilience is promoted and maintained, and how it may differ from Western concepts of resilience that focus on 'positive adaptation despite adversity'.[29]

A small body of emergent scholarship shows cultural connection and resilience as protective factors, yet how they serve as a mechanism of health and well-being and what those mechanisms are, remains poorly understood. This is because practices that seek to enhance cultural health—such as spending time on 'Country' (ancestral lands),[2] engaging with ancestral languages, cultural knowledge transmission and exchange, practicing traditional healing methods and using cultural foods and medicines—often (and for good reason) occur outside of health systems.[30–32] As a result, a disconnection exists between the rhetoric of culture as a protective factor in health policy, and the reality of funding and resourcing activities that strengthen culture, cultural identity and practices. Consequently, culture, cultural health and resilience remain ill-defined concepts in Aboriginal health policy and practice, creating barriers to their effective

application, and further restricting tangible outcomes for Aboriginal peoples.

Initiatives that centre culture and cultural connection are often led by traditional cultural knowledge holders who have the sociocultural role and responsibility of ensuring that culture is practiced, maintained and passed down to younger generations, and that sites of cultural significance are taken care of (custodianship).[2] However, establishing connections between cultural initiatives, health systems and health policy is rare. 'Cultural work' and 'health work' operate in silos, instead of working in tandem to enhance overall health outcomes, and enable a more holistic approach to health and well-being.[12] This lack of connectivity is related to skewed power in 'health work' decision-making and resourcing, which are largely reflective of Western neoliberal biomedical value systems that prioritise individual care, epidemiological targets and tangible numerical goals for disease reduction and treatment events.[33]

In comparison, 'cultural work' is not merely less recognised, but is often actively disrespected, with previous studies documenting cultural marginalisation[5] and racism in health systems and clinical practice.[34 35] For example, a (2022) scoping review of Indigenous traditional healing programmes within health services in Canada, Australia and New Zealand found only one Australian example.[36] This differs from New Zealand, where Māori Traditional healers are widely recognised and supported within mainstream healthcare systems through an independent national network (Whare Oranga).[36] Working within the (Western) paradigm of 'evidence' engages with this power imbalance, and through localised processes of 'evidence-making' offers an opportunity to create connections between culture and health outcomes. Failure to identify and address the structural and epistemic power imbalances in these settings will consolidate rather than transform systemic inequities,[37] continuing to create barriers to integrating cultural health with clinical care.

Why is a cultural health study needed?

In acknowledging the need to challenge Western neoliberal biomedical approaches to improving Aboriginal health and well-being, and the ontological and epistemological power structures that support such approaches, an empirical understanding of 'cultural health' grounded in localised evidence-making is needed. Without this, the role of culture in Aboriginal health will remain ambiguous in health policy-making, funding and translational outcomes, despite rhetorical acknowledgement of its centrality by Aboriginal peak bodies, community controlled health and social sectors,[38] and government.[39] Further, in order to shift away from the epistemological grounding of disease as the primary indicator of the health 'gap', cultural health must be recognised as indicative of closing the health gap if a strength-based approach is to be realised. Centring culture in Aboriginal health and well-being not only highlights the need to rethink current approaches, but to rethink the gap itself. Currently, the

only data relative to cultural health being collected on a regular and national scale concerns the use of Aboriginal languages.[40] While this is important it is only one aspect of cultural health. To shift to strengths-based approaches, a clear and evidence-informed definition of what constitutes the 'cultural gap' (eg, gaps in cultural outcomes or access to cultural resources), as opposed to the gap in disease risk and outcomes, is also needed.

We draw on the concept of 'evidence-making intervention'[41] which deals with evidence as a matter of ontology (ways of being), focusing on how 'interventions' come into being through knowledge making practices, how their complexities are translated and how they are made to matter locally.[41] Justification for this study was realised through existing relationships with cultural knowledge holders from the Yuwaalaraay, Gamilaraay (Kamilaroi) and Yuin Nations. Anecdotal understandings from existing Yuwaalaraay, Gamilaraay and Yuin cultural camps and initiatives, which are organised by cultural knowledge holders irrespective of the research study, suggest that participation enhances health and well-being through promoting strength in Aboriginal identity, intergenerational healing, sociocultural cohesion, connection to Country and sharing of cultural and health information. Grounded in Aboriginal ontology, we will study Aboriginal cultural camps as therapeutic immersive experiences, to understand, measure and develop the evidence needed to create an empirical basis for the concept of cultural health. Rather than testing an 'intervention' or programme that was developed externally, or 'co-designed' with non-Aboriginal people, a strength-based approach is taken that privileges Aboriginal culture and ways of being, knowing and doing as a starting point, rather than a middle or end point.

Gaawaadhi Gadudha: a culturally governed approach

This study was conceptualised in close collaboration with traditional cultural knowledge holders from Yuwaalaraay, Gamilaraay and Yuin Aboriginal Nations of New South Wales (NSW) Australia. They wanted to build an evidence base concerning how their cultural initiatives (in the form of cultural camps in places of cultural significance) impact the health, well-being and quality of life of their peoples. The idea for the study was conceptualised several years before grant funding was received, and traditional cultural knowledge holders were involved in developing the grant proposal. Funding was awarded through the Australian Government's Medical Research Future Fund (MRF2009522) and the study commenced in late 2021. An intercultural alliance was formed to govern and guide the study, under the name *Gaawaadhi Gadudha* which translates to 'from the river/freshwater, to the ocean/saltwater' and represents the cultural connection and collaboration between freshwater (Yuwaalaraay, Gamilaraay) and saltwater (Yuin) traditional cultural knowledge holders. An artist with freshwater (Wailwaan) and saltwater (Yuin) heritage was chosen to create a logo based on the name and its meaning (figure 1).
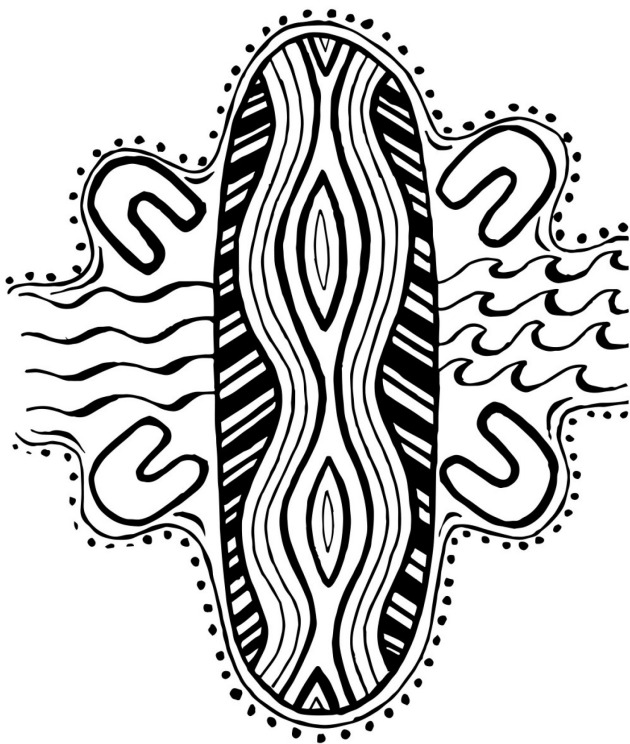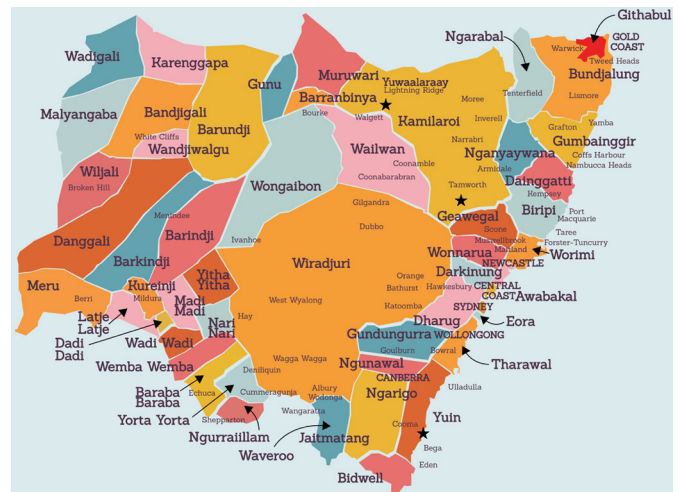
Figure 1 Gaawaadhi Gadudha logo representing freshwater and saltwater connection and collaboration.

Figure 2 Adapted Aboriginal language map of NSW.[47] Study sites in the Yuwaalaraay, Gamilaraay (Kamilaroi) and Yuin Nations are marked with a star. NSW, New South Wales.

The study moves away from models of governance that are based on Aboriginal 'advisory' or 'reference' groups, often comprising people in health service or other organisational leadership positions, who may or may not hold cultural or place-based knowledge and authority. Instead, the study employs a cultural governance model, which ensures that place-based traditional cultural knowledge holders or custodians lead decision-making and are supported by researchers facilitating and guiding the study in their respective locations. A recent systematic review and appraisal of 'community-driven' research in Aboriginal health found that this approach is not common.[42] Examples of approaches that respect Aboriginal cultural governance in research include the Kimberly Land Council Research Protocol.[43] Such an approach ensures that localised cultural protocols are recognised and respected and provide a foundation for collaboration between Aboriginal and non-Aboriginal researchers who are not from the study sites (see figure 2 for study sites).

Traditional cultural knowledge holders from each study site formed the Gaawaadhi Gadudha Cultural Governance Group and meet monthly to discuss issues, progress and aspects of cultural governance separate from the research team. All members of the Cultural Governance Group are part of the research team, although they also have regular independent meetings and discussions on key issues. Decisions made by the governance group are then fed back to the research team and incorporated in the ongoing process of the study. At the beginning of the study, it was communicated to members of the research team, that the study would operate using a cultural governance approach, and that decisions would be made by the Cultural Governance Group, ensuring ownership and respect throughout the course of the study. This approach challenged colonised ways of working in research with Aboriginal peoples, and allowed the space for the research team (both Aboriginal and non-Aboriginal) to consider their roles in the study from a strength-based (e.g., what skills, including lived experience do I contribute?) perspective, rather than one of assumed authority based on academic experience or position. The research team comprises: a Yuwaalaraay/Gamilaraay man and knowledge holder, experienced community researcher who is a Chief Investigator on the project, a Gamilaraay woman and knowledge holder, experienced community researcher, a Yuin-Djirringanj senior lawman and knowledge holder, a Murrawarri man and academic researcher with an allied health background, a Noongar woman and academic in geography, and seven non-Aboriginal researchers who have expertise in Indigenous health, psychology, policy, community development, health systems and qualitative research.

Study aims

The aims of the study are to:

1. Explore the impact of attendance at NSW cultural camps on individual and collective access to culture, cultural knowledge and resources, resilience, quality of life and self-rated health among Aboriginal adults (>18 years).
2. Explore how and in what ways cultural health and resilience are phenomenologically connected to Country, and cultural camps, practices, foods, medicines and languages.
3. Develop an evidence-informed model of cultural health that links regional health systems and cultural camps, in collaboration with Aboriginal Community Controlled Health Services.

Table 1 Study sites and participant samples

Aboriginal nation group	Regional communities*	Cultural camp site	Camp participants (n)	Comparative cohort participants (n)
Yuwaalaraay	Walgett, Lightening Ridge, Collarenebri, Goodooga	Narran Lakes	35	35
Gamilaraay	Tamworth, Gunnedah, Walhallow, Quirindi	Wallabadah	35	35
Yuin	Narooma, Wallaga Lake, Bermagui	Mystery Bay	35	35
Total			105	105

*Control participants will be recruited from regional communities.

4. Develop a policy framework that enables health systems to support cultural health through institutional transformation.

METHODS AND ANALYSIS
Patient and public involvement statement
Participants will not be directly involved in the design of the study. However, members of the Gaawaadhi Gadudha Alliance, who form the Cultural Governance Group, are recognised community members and cultural leaders from the sites where the study is taking place, and will be involved in all aspects of the study including governance, design, implementation, data collection, data analysis and dissemination.

The study began in January 2022, with the cultural camps and data collection commencing in April 2022 and predicted to be completed by May 2024. Study phases are outlined below.

Phase 1: planning and engagement
Phase 1 will involve supporting the Gaawaadhi Gadudha Cultural Governance Group members in planning one cultural camp in each nation group region (table 1). Cultural camps involve the teaching of cultural lore, learning traditional languages and connection to and understanding of cultural landscapes including identification of medicines and food. The term 'cultural landscapes' is used to describe specific sites of cultural and spiritual significance that have been minimally modified by the impact of colonisation and differ from the broader concept of Country.[2] The camps aim to promote cultural and kinship connection, decolonisation, healing and agency, through transgenerational and intercultural knowledge exchange and connection to cultural landscapes. The research team will work closely with the Cultural Governance Group to develop and discuss data collection methods and protocols to ensure culturally safe and localised approaches. Aboriginal Community Controlled Health Organisations (ACCHOs) within proximity of the study sites will be invited to partner on the study, particularly in terms of involvement during Phase 3.

Phase 2: cultural camps and data collection
Aboriginal community-based researchers across the study's three regions will recruit participants. The study aims to recruit a total of 105 camp participants (people who attend a cultural camp) and 105 comparative cohort participants (people who do not attend a cultural camp) (total n=210 adults) (table 1). The cultural camps already exist and are organised and facilitated by the cultural knowledge holders, welcome all Aboriginal nation groups and respect gender sensitive norms and practices. This context means that not all people who attend the camp will be participants in the research. Rather, camp attendees will be invited by camp facilitators to participate in the research at their own discretion. It will not be compulsory to participate in the research study in order to attend the camp. The cultural knowledge holders will also invite individuals in their regions to be a part of the comparative cohort group (e.g., people who do not participate in the camp) by completing the 'Cultural Health Survey' described below (table 2). The cultural camps will involve the following common activities: connection to Country and cultural landscapes, ceremonial activities, cultural food knowledge, cultural medicine knowledge and language reclamation. The impact of these activities on participants' resilience, well-being, quality of life and self-rated health will be explored using quantitative and qualitative methods. Participants who complete a survey will be offered a $40 voucher.

Quantitative data collection
Each participant will be invited to complete a Cultural Health Survey, built in Qualtrics, which will collect data on several domains related to cultural health, resilience, self-reported health and quality of life before each cultural camp. The survey was piloted within the research team and the Cultural Governance Group to make sure its length would not be too onerous for respondents. Respondents will have the choice to complete the survey on their own, or with assistance from a research team member. Online and printed versions of the survey will be offered.

These domains and their associated measures are outlined in table 2. We note where measures have been

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Table 2 Cultural Health Survey domains and adapted measures

Domain	Aspects	Adapted measures
Demographics	Age; gender; community; income; housing; transport access	N/A
Cultural identity	Mob/nation group; pride; connection to Country	Mayi Kuwayu Survey[48]
Individual connection to culture	Cultural practice and obligation; traditional foods and medicines; language knowledge and practice	Cultural Connectedness Scale[49]
Access to cultural resources	Access to: cultural sites; knowledge and knowledge holders; ceremonies; traditional foods and medicine; cultural leadership; men's and women's governance	N/A
Resilience	Ability to cope with stress; adaptation to change; individual strengths; relational/cultural resilience	Connor Davidson Resilience Scale (CD-RISC)[50] Aboriginal Resilience & Recovery Questionnaire (ARRQ)[51]
Health-related quality of life (QoL)	Physical functioning; self-care; usual activities; pain/discomfort; role limitations; anxiety/depression; overall self-reported health	EQ-5D-5L[52]

adapted for inclusion in this study. In this pilot study, the survey is only administered twice: once prior to camp and once immediately following each camp. Participants from the comparison group will be invited to complete the survey before each camp takes place. Purposive and snowball sampling will be used to recruit participants into the comparative cohort group, and draw from the cultural knowledge holder's community networks.

In this pre-camp survey, participants will be asked to indicate if they identify as Aboriginal and which nation group/s they belong to. This is also where they can offer other demographic information. Unlike the pre-camp survey, the post-camp survey will not include personal characteristics that would not have changed during the camp (eg, sociodemographic information, cultural background, roles). The follow-up survey will, however, repeat questions on individual connection to culture, access to cultural resources, resilience and quality of life. The follow-up survey will also include new items on the impact of the camp on cultural indicators, as well as any other general feedback about the camp.

This approach will enable the research team to understand if there are baseline differences between those who do and do not attend the camp, including identifying barriers to camp attendance that could be addressed to enable future participation in cultural camps. The post-camp survey will be administered on the final day of camp. Data from participants who only provided pre-camp survey data will be included in comparisons between the comparative and camp cohorts baseline characteristics. However, respondents who did not complete the post-camp survey will be excluded from statistical analyses of the impact of camp on indicators of cultural health, resilience and quality of life. Depending on the sample size of those lost to follow-up, we may run descriptive statistics comparing to those who completed the survey to determine if there are any systematic differences.

Quantitative data analysis

Independent samples' t-tests (for continuous outcomes) or χ^2 (for categorical outcomes) will be used to compare the camp and comparative cohorts on pre-camp measures of cultural health, resilience, self-reported health and quality of life. The same statistical approaches will also be used to compare the cohorts on sociodemographic factors (eg, access to transport) that may contribute to difficulty attending the cultural camps among the comparative cohort.

Separate linear regression models or repeated measures ANOVAs (Analysis of Variance) will be used to determine the impact of camp attendance on cultural health, resilience, self-reported health and quality of life among the camp group, controlling for covariates where appropriate (based on significant correlations between covariates and specific outcomes of interest). Interpretation of results will be guided by the Cultural Governance Group.

Where measures have been adapted for inclusion in the study, or in the case that specific measures have not been validated for use in Aboriginal community samples, we will explore the psychometric properties of those measures using data collected pre-camp from both the camp and comparative cohort groups. Exploratory factor analysis will be used for measures that have been adapted (eg, the Aboriginal Resilience & Recovery Questionnaire) and confirmatory factor analysis will be used for measures that will be administered in their original form (eg, the Connor Davidson Resilience Scale). Reliability and validity will also be computed and reported.

Qualitative data collection

Approximately 20 participants (10 women; 10 men) at each of the three cultural camps (total n=60 participants) will be recruited to participate in a yarning circle (an Aboriginal research method that reflects a relaxed topical group discussion),[44] to explore aspects of culture

and resilience and how this relates to health and well-being. Camp attendees will be briefed on the research and be given the option to approach a facilitator if interested to participate in the yarning circle. Yarning circles will follow localised cultural protocols, occur in separate self-identified male and female groups (e.g., participants choose which group they attend based on self-identified gender), and be led by a facilitator of the same gender to respect gender sensitive norms. All facilitators will be Aboriginal and where possible, members of the nation group on the land of which the yarning circle is held. They will also have experience in collecting qualitative information. Yarning circles will allow a culturally safe and trusting environment for participants to share their stories and perspectives on the topics outlined in the study aims. In-depth interviews will be offered to respondents who are unable or choose not to participate in yarning circles, due to logistics or timing. Informed consent will be obtained to audio record the yarning circles, and subsequently transcribed verbatim.

Qualitative data analysis

Transcribed data will be analysed by a qualitative working group within the research team using NVivo V.20 (QSR International [Burlington, Massachusetts]). Each member of the working group will conduct a top line inductive analysis using basic and literal code descriptors on the same sample of at least two transcripts. This is to ensure consistency in coding approach and account for potential initial misinterpretation by the research team, particularly non-Aboriginal researchers. These codes will then be used to collectively develop a coding framework. The codes will be derived from participants' own words and the more complex or ambiguous codes individually discussed by the research team in face-to-face meetings. The coding framework will be used to analyse all qualitative data, ensuring consistency across the work of all analysts. Codes will be regularly discussed by the research team during the analysis process, to provide further cultural context, meaning and validation, and an opportunity to reach consensus on inconsistent coding or newly developed codes. Codes will be cross-tabulated in NVivo V.20 to identify connections between coded concepts across the whole data set. Connections between codes will be further discussed, paying attention to coding intersections that hold the most data, to understand phenomenological connections between participation in cultural camps and resilience, health and well-being. While participants will not review the codes, the Cultural Governance Group, which has connections to the participants' regions and communities, will manage the data to ensure analysis correctly captures the sentiments of the participants. The research results will be shared with the participants on completion of the project.

Phase 3: developing a model of cultural health
Research and stakeholder workshops

A collaborative research workshop including the research team and the Cultural Governance Group will be convened to triangulate and discuss all data collected, and general feedback and findings from the camps, with the aim to develop the findings into a 'Model of Cultural Health'. This participatory mixed-methods approach allows for a deeper understanding of the topic, as well as enabling different kinds of data to be equally accessible between research experts, and Aboriginal cultural experts. The findings of the collaborative research workshop will be summarised, and key aspects of the Model of Cultural Health developed as a result.

ACCHO partners (e.g., representatives from ACCHOs in the study regions who have partnered with the research team) will be invited to attend a separate workshop to give feedback on key aspects of the Model of Cultural Health. Informed consent will be gained before the occurrence of the workshop. The workshop will serve two purposes: (1) to report the results of the study back to ACCHO representatives as part of a commitment to knowledge sharing, and with the aim that it will inform practice and service delivery; (2) to further develop the key components of the Model of Cultural Health, which will include identifying linkages and synergies between ACCHO clinical care, and cultural camp and traditional healing initiatives, potentially including a shared pathway focused on supporting cultural health in both clinical and non-clinical environments. The nominal group technique[45] will be used to elicit, prioritise and semi-quantify workshop participant perspectives on the Model of Cultural Health, in order to obtain a clear collective understanding. Workshops will be recorded and a research assistant present to observe and scribe.

Delphi process survey

The key aspects of the Model of Cultural Health (refined through research and stakeholder workshops) will be translated into a survey to undertake a Delphi process,[46] a group facilitation technique which is an iterative multistage process, designed to share disparate opinions and facilitate movement to group consensus. The Delphi survey will be used to gain consensus on key elements of the Model of Cultural Health. The project aims to include at least 50 participants in this multistage process. Participants will be purposively sampled using existing networks and snowball sampling, and will target traditional knowledge holders, Aboriginal Community Controlled Organisation (health and otherwise) representatives, and 'experts' in the fields of Aboriginal health, cultural heritage and policy. Participants will be invited to participate in the Delphi process to reach consensus on the key elements of the Model of Cultural Health. Informed consent will be gained before the completion of the survey. The results of the Delphi process will allow the importance and meaning of the elements within the Model of Cultural Health to be finalised, as well as ideas to platform its adaption in policymaking.

ETHICS AND DISSEMINATION

The study has ethical approval from the Aboriginal Health and Medical Research Council (#1851/21). Recruitment of participants will be through existing relationships and networks of traditional knowledge holders and community-based researchers. Participants

will be provided with an information statement and consent form. Community-based researchers will thoroughly and privately explain the study to participants to ensure informed consent and opportunity will be given to renegotiate consent. Community-based researchers will also explain how participant input will be made anonymous and their identity protected, and how data will be included in the research. A protocol will be in place if participants become distressed during the research. We predict there to be specific benefits for participants who attend the cultural camps. We do not predict there to be any explicit benefits from being part of the comparative cohort group. However, they will inform future research on improving the cultural camps. Participants from both groups will be reimbursed with a $40 voucher when they complete a survey.

The study is closely guided by the Gaawaadhi Gadudha Cultural Governance Group. The Cultural Governance Group ensures that the research is carried out according to traditional laws and knowledges, having oversight and final approval of each research methodology, including the development of the data collection instruments to ensure appropriate language use. Access to cultural sites, which provide the location for each activity, have been approved by traditional custodians. All data will be de-identified and anonymised, and stored securely. Cultural Governance Group members will provide ultimate directives in relation to handling data and protect secret or sacred business as necessary if such arises throughout the data collection.

The findings of the study will be disseminated through academic journals, conference presentations, plain language policy and technical briefs, and media communication. The derived Model of Cultural Health will be translated into a visual format to encourage its use in policy, service delivery and practice-based environments.

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Competing interests None declared.

Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

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