

Biya yadha gudjagang yadha: the cultural adaptation of the healthy dads healthy kids programme for Aboriginal fathers and their children living on Darkinjung country

AlterNative
2025, Vol. 21(4) 619–631
© The Author(s) 2025



Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/11771801251358901
journals.sagepub.com/home/aln



Jake C MacDonald (Ngarabal)¹ , Nathan Toney (Wiradjuri)¹,
Kathleen J Butler (Worimi & Bunjalung)², Myles D Young³,
Briana L Barclay⁴ , Lee M Ashton⁴ and Philip J Morgan⁴

Abstract

Despite Aboriginal parents and their children being identified as a health priority group, culturally relevant parenting support is scarce, particularly support that is tailored for Aboriginal fathers. This article reports the systematic cultural adaptation of the Healthy Dads Healthy Kids programme for Aboriginal fathers and their children living on Darkinjung Country, Central Coast of New South Wales, Australia resulting in the development of biya yadha gudjagang yadha: Healthy Dads Healthy Mob. This study highlights the need for parenting programmes involving Aboriginal participants to include Aboriginal-led cultural governance, comprehensive codesign with local Aboriginal communities, and for the knowledges, experiences, and values of local communities to be centralised in the development of culturally responsive parenting programmes.

Keywords

child health, cultural adaptation, Indigenous health, men's health, parenting

Introduction

In Australia, Aboriginal men are nearly three-times more likely to develop cardiovascular disease than non-Aboriginal men (Australian Institute of Health and Welfare, 2023) and have an average life expectancy that is a decade shorter than non-Aboriginal men (Australian Bureau of Statistics, 2022). Aboriginal children typically exhibit higher physical activity levels than non-Aboriginal children during early childhood and adolescence; however, this trend is reversed in adulthood, where increased sedentary behaviour elevates the risk of chronic disease and contributes to disproportionately poorer health outcomes among Aboriginal adults (National Indigenous Australians Agency, 2017). While health data relating to Aboriginal people is often reported, the sociocultural determinants that impact the health and well-being of Aboriginal people are rarely considered (Stevens et al., 2017), and the important link between culture, health, and well-being is often overlooked (Salmon et al., 2018). In this context, it is unsurprising that Aboriginal people are reporting that they are not receiving culturally appropriate care (Smith et al., 2017).

Despite the Australian Institute of Health and Welfare identifying Aboriginal parents and their children as a health priority group (Australian Institute of Health and Welfare, 2024), there is a dearth of culturally relevant parenting

support available (Canuto et al., 2018), particularly parenting programmes that engage Aboriginal fathers (MacDonald et al., 2024). In a recent scoping review of 109 randomised trials that evaluated parenting programmes in Australia (MacDonald et al., 2024), less than 1% of participants were reported as Aboriginal or Torres Strait Islander. Furthermore, only two studies reported consulting with Aboriginal and Torres Strait Islander people in programme design, and no studies reported the involvement of Aboriginal or Torres Strait Islander fathers. The lack of involvement of Aboriginal fathers in Australian parenting studies indicates there is a need for culturally responsive parenting support that is tailored for Aboriginal men

¹Office of Indigenous Strategy and Leadership, The University of Newcastle, Australia

²The Wollotuka Institute, The University of Newcastle, Australia

³School of Psychology, The University of Newcastle, Australia

⁴Centre for Active Living and Learning, The University of Newcastle, Australia

Corresponding author:

Jake C MacDonald (Ngarabal), Office of Indigenous Strategy and Leadership, The University of Newcastle, University Drive, Callaghan, NSW 2308, Australia.

Email: jake.macdonald@newcastle.edu.au

(MacDonald et al., 2024). This is particularly important given fathers' influential role on the health behaviours and outcomes of children (Young & Morgan, 2017).

The health and well-being of children are closely linked to parental relationships (Lamb & Lewis, 2013), with increasing evidence indicating that fathers play an important role in shaping child physical activity behaviours (Young & Morgan, 2017). Co-physical activity between fathers and children is associated with improved child social-emotional well-being among a range of health benefits for both father and child (Pollock et al., 2020). However, a systematic review conducted by Morgan et al. (2017) found that a lack of father participation in parenting trials was a global issue with authors calling for more gender-tailored parenting support that engages men.

Healthy Dads Healthy Kids (HDHK) was the first healthy lifestyle programme specifically designed for fathers and their primary-school aged children globally (Morgan et al., 2011). The HDHK programme has reported weight loss in men (Morgan et al., 2011), increased physical activity levels in children (Morgan et al., 2014), and has reported a positive impact on the father-child relationship (Ashton et al., 2024). During the programme, participants take part in an education and practical session once a week over a 9-week period (Morgan et al., 2011). The education sessions are themed, with a new health-related topic covered each week, while the practical sessions have three components; rough-and-tumble play, sport-skills, and fitness (Morgan et al., 2014). After previous trials confirmed that the programme leads to a host of positive health-related outcomes for both fathers and their children (Morgan et al., 2011), HDHK has now been adapted for a range of unique contexts around the world, including a cultural adaptation for Hispanic families in the USA (O'Connor et al., 2020). However, a comprehensive and systematic cultural adaptation process to meet the needs of Aboriginal families has not been conducted to date.

This study and its methodological approach was informed by previous formative research which involved yarning with Aboriginal fathers and father-figures living on Darkinjung Country, Central Coast of New South Wales, Australia to better understand their roles, experiences, and needs. Findings from this research have previously been reported (MacDonald et al., 2025). Although the roles and experiences of Aboriginal fathers living on Darkinjung Country have been explored, there is still a need to report on a culturally responsive adaptation process that was codesigned with members of the Darkinjung community—the Aboriginal population living on Darkinjung, resulting in the development of this study. Aboriginal people have the right to self-determination, and the right to participate in decision-making in matters which affect their rights (United Nations, 2008). Furthermore, Aboriginal-led cultural governance structures are needed for health research to be adapted for Aboriginal people (Duke et al., 2021), and health education programmes are more effective when they are culturally relevant for the populations they serve (Kreuter et al., 2003), including the evaluation of programmes using culturally appropriate methods (English et al., 2022).

We believe that privileging the voices of Aboriginal fathers, Aboriginal-led cultural governance, and a culturally sensitive framework for adaptation combined with the promising results of the original HDHK programme, can create a programme that is culturally relevant for Aboriginal fathers and their children and produce positive health and well-being outcomes. Therefore, the aim of this article is to report the process, and outcomes of a systematic approach used to culturally adapt HDHK for Aboriginal fathers and their children living on Darkinjung Country.

Methods

Positionality

It is important to identify the relationality of our research team as a fundamental element of Indigenous research practice (Moreton-Robinson, 2017). Authors include Aboriginal researcher leaders JM, NT, and KB, and non-Aboriginal researchers with expertise in family-based health and well-being programmes MY, BB, LA, and PM. Further information on the cultural background of the research team can be found in the Authors' note section.

Ethics

This research was approved by the Aboriginal Health & Medical Research Council of New South Wales Ethics Committee, Application ID: 32414513, and registered with the University of Newcastle Human Research Ethics Committee (H-2023-0137), and the Australian New Zealand Clinical Trials Registry (ACTRN12623000901606). The cultural adaptation of HDHK for Aboriginal fathers and their children living on Darkinjung Country took place over a 17-month period between 1 April 2022 and 31 August 2023. In order to privilege the voices of Aboriginal fathers and to have Aboriginal-led cultural governance, the cultural adaptation process was guided by two distinct groups.

Cultural affirmation panel

The cultural affirmation panel consisted of eight stakeholders representing the local Darkinjung community, the University of Newcastle, and Eleanor Duncan Aboriginal Services. Eleanor Duncan Aboriginal Services, formally known as Yerin Eleanor Duncan Aboriginal Health Services, is the sole Aboriginal community controlled health service provider on the Central Coast region of NSW, Australia. All members of the cultural affirmation panel were Aboriginal, no participant identified as Torres Strait Islander. Some cultural affirmation panel members were Elders, and there was both male and female representation. The cultural affirmation panel provided cultural governance and informed the research process including the codesign of study methods, adaptation, and programme development.

Community panel

The community panel was recruited from the Eleanor Duncan Aboriginal Men's Group, who the cultural

affirmation panel considered the most appropriate group to engage with to develop a culturally relevant programme for local Aboriginal men. In total, 34 men participated across two community panel meetings. All members of the community panel identified as Aboriginal, no participant identified as Torres Strait Islander. All community panel participants were currently living on Darkinjung Country. All participants in the community panel were presented with a AUD \$30 gift voucher per meeting.

Data collection

Prior to community panel meetings, all data gathering methods were codesigned and approved by the cultural affirmation panel. Data were collected using audio recording and field notes by JM and NT, who are both Aboriginal fathers and experienced facilitators. All members of the cultural affirmation panel and the community panel provided written informed consent to participate, consent was also confirmed verbally at the beginning of each meeting. All participants were informed that they could withdraw from

the study at any time without having to give a reason and that this would not affect their relationship with the University of Newcastle, Eleanor Duncan Aboriginal Services, or the Men's Group at Eleanor Duncan Aboriginal Services. It was agreed that data would be shared between the research team and Eleanor Duncan Aboriginal Services and securely managed using REDCap electronic data capture tools hosted by the Hunter Medical Research Institute which is a partner to the University of Newcastle.

Culturally sensitive adaptation

The Ecological Validity Model (EVM) was used to guide the cultural adaptation of HDHK for Aboriginal fathers and their children living on Darkinjung Country. The EVM is a framework used to guide the culturally sensitive adaptation of programmes for new population groups (Bernal & Sáez-Santiago, 2006). Table 1 presents the eight dimensions of the EVM described in a previous adaptation of HDHK for Hispanic fathers and their children in the USA (O'Connor et al., 2020).

Table 1. The ecological validity model as defined by O'Connor et al. (2020).

Culturally centring elements	Definition
Goals	Agreement between the intervention's intended goals and participant's understanding of the goals of the programme. Consideration should be made of participants' values, customs, and traditions
Concepts	How theoretical constructs of the programme are conceptualised and communicated to participants
Methods	The procedures and activities to follow for the achievement of the programme goals
Content	The values, customs, and traditions held by a cultural group to be considered when delivering and assessing a programme
Persons	The cultural understanding of the participant-facilitator relationship in a programme
Metaphors	The cultural understanding of certain symbols, sayings and concepts that could affect recruitment and engagement in the programme
Language	A mechanical translation of the programme with consideration of the dialect and word choice by country of origin and current living environment. The emotional expression of language and mannerisms should also be considered
Context	The overarching socio-economic background of the participant, social support and relationship to their culture of origin

Procedures

The cultural affirmation panel formally met three times, and the community panel formally met twice, resulting in five distinct codesign periods. An additional cultural affirmation panel meeting was scheduled post programme implementation to disseminate findings and debrief the research process. Figure 1 presents a flow-chart providing an overview of the codesign process.

Results

An overview of resulting adaptations are presented in Table 2.

Key adaptations listed in the results table are described with reference to each element of the EVM:

Goals

It was advised that physical goals such as weight loss should not be a focus of the culturally adapted programme, instead social and emotional health, including cultural identity should be prioritised. In the culturally adapted programme, there was no main focus on weight-management goals for fathers and children, however social and emotional health, including cultural identity were emphasised. It was also stated by the cultural affirmation panel it is inappropriate to teach fathers and children about health, rather a conversation on weekly health topics should be held. As a result, the culturally adapted programme included the facilitator hosting a conversation on weekly health topics where key points could be discussed among families.

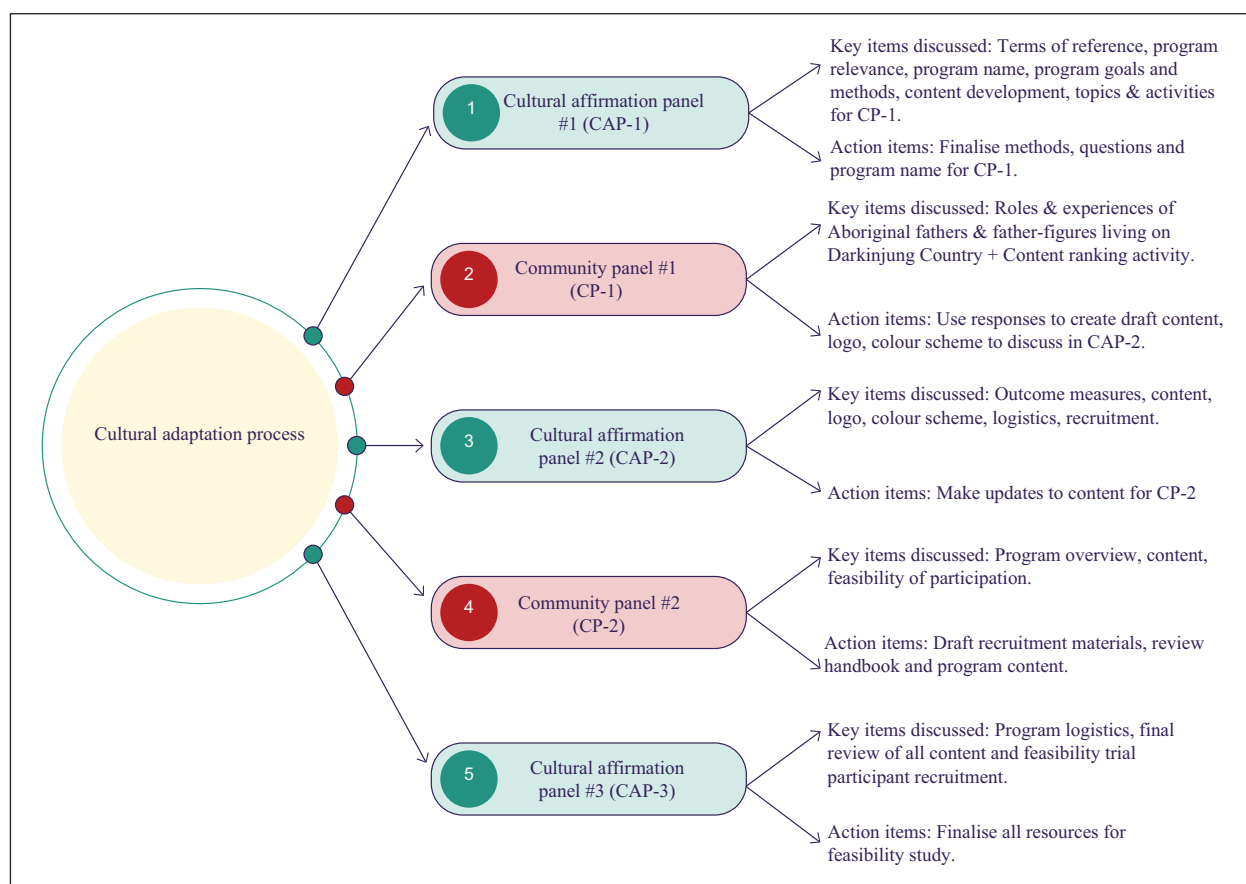


Figure 1. Codesign process flow-chart.

Concepts

In the original HDHK programme, fathers and children are separated for the education component to learn age-specific information. It was recommended that all participants complete all aspects of the programme together. As a result, the separate education components of the programme were combined and adapted to be appropriate for children aged 5–12 years. The original HDHK programme was gender-tailored to engage men, while this concept was supported, it was advised that the unique cultural context of Aboriginal men needs to be considered throughout the programme. The cultural affirmation panel guided the adaptation process to ensure the programme was culturally relevant specifically for Aboriginal men and their children. Furthermore, in the original HDHK programme, mothers were not directly involved in the programme. It was advised that while it is important to maintain the father–child concept, mothers and the broader family should be included in some way. As a result, mothers and the broader family are invited to attend the last session of the programme where all attendees could participate together and celebrate the programme completion.

Methods

The cultural affirmation panel advised that the physical activities in the original HDHK programme were seen as

universal and would apply to the context of local Aboriginal fathers and their children. The elements of rough-and-tumble play, sport-skills, and fitness were retained from the original HDHK programme. The original HDHK programme included take-home handbooks that had supporting information that aligned to information covered in each weekly session. Providing a take-home handbook was supported; however, it was advised that the handbook information needed to be culturally relevant for local Aboriginal fathers and their children. Information such as accessing local Aboriginal health services, Aboriginal specific parenting information, and culturally appropriate activities for fathers and their children to complete at home were designed in partnership with the cultural affirmation panel.

Content

The cultural affirmation panel and the community panel advised that the content included in the programme must be specific to the cultural context of local Aboriginal fathers and their children. Furthermore, it was made clear than an emphasis on reducing screen time was not as relevant in this context. The research team worked with the cultural affirmation panel and the community panel to review programme content and make necessary adaptations to ensure content was culturally appropriate. Furthermore, there were several themes that did not exist in the original HDHK programme that were advised to be included in the

Table 2. Cultural adaptation of biya yadha gudjagang yadha: Healthy Dads Healthy Mob.

Ecological validity model element			
Goals	Key components from original programme: Healthy Dads Healthy Kids	Instructions from cultural affirmation panel (CAP) and community panel (CP)	ID of codesign session
	Encourage fathers to be healthy, positive role models for their family	The goal of fathers being role models was supported with the addition of improving father and child cultural identity	CAP-1 CP-1
	Teach fathers how their attitudes towards eating and physical activity influence the whole family	Do not teach fathers, rather facilitate a conversation about healthy eating and physical activity	CAP-1
	Help fathers achieve a healthy weight	There should not be a focus on weight management	CAP-1
	Assist to prevent or manage obesity in children	Do not solely focus on physical health, there should be emphasis on social and emotional well-being	CAP-1 CP-1
	Improve the relationship between fathers and their children through physical activity and healthy eating	This goal was supported with the addition of creating more opportunities for fathers and children to spend quality time together	CAP-1 CP-1
Concepts	Key components from original programme: Healthy Dads Healthy Kids	Instructions from cultural affirmation panel (CAP) and community panel (CP)	ID of codesign session
	Fathers and children are separated where different content is taught in the education session each week	Fathers and children should do all components of the programme together	CAP-2 CP-2
	Fathers and children participate in the programme without the direct involvement of mothers or other family members	Mothers and broader family should be involved in some way in the programme, however the father-child element of the programme is important	CAP-1 CP-1
	The programme is tailored to engage men and children	This concept was supported with the addition that cultural safety for Aboriginal families should exist in all elements of the programme	CAP-1 CP-1
	Fathers and children participate in practical sessions together including; rough-and-tumble play, sport skills, and fitness	Practical session concepts were supported	CAP-2 CP-2
	Reciprocal reinforcement where both fathers and their children support each other in achieving health goals	The concept of reciprocal reinforcement was supported	CAP-2 CP-2

(Continued)

Table 2. (Continued)

Methods	Key components from original programme: Healthy Dads Healthy Kids	Instructions from cultural affirmation panel (CAP) and community panel (CP)	ID of codesign session	Key adaptations of biya yadha gudjagang yadha: Healthy Dads Healthy Mob
	Programme length of one session per week over a 9-week period Each session has a 30-min education component followed by 60-min practical activities	One session per week over a 9-week period was supported Session length and structure was supported	CAP-2 CP-2 CAP-2 CP-2	No change needed No change needed
	The three components of the physical activity portion; Rough and Tumble Play, Sports Skills (Fundamental Movement Skills) and Fun Fitness Fathers and children were provided with pedometers, asked to track their steps and encouraged to set challenges for each other to increase steps Fathers were asked to weigh-in every week and track their weight	The practical components were supported Fathers and children should not be required to use pedometers, fathers should be trusted to self-report their physical activity measures Fathers and children should not need to weigh in each week, it is appropriate to do a pre and post programme weight assessment without weekly check-ins	CAP-2 CP-2 CAP-2 CP-2	No change needed An emphasis on self-report physical activity methods without the use of pedometers Weight only recorded at pre and post programme
Content	Key components from original programme: Healthy Dads Healthy Kids	Instructions from cultural affirmation panel (CAP) and community panel (CP)	ID of codesign session	Key adaptations of biya yadha gudjagang yadha: Healthy Dads Healthy Mob
	Fathers advised to decrease dietary intake by 500 calories per day if they desire healthy weight loss Provide take-home support handbooks to fathers and children	Asking fathers to set calorie-related goals for weight loss is not appropriate Providing take-home handbooks was supported, with the addition that all information and images in the handbook was culturally relevant	CAP-2 CAP-2	Fathers were not asked to set calorie-related goals Culturally relevant take-home handbooks were designed in partnership with the cultural affirmation panel and were provided to fathers and their children
	Fathers were asked to select and complete weekly home tasks	Weekly tasks were supported with the addition that all activities should be engaging for fathers and children to complete together at home	CAP-2	Fun and engaging weekly activities were provided for fathers and their children to choose to complete together at home
	Fathers were asked to set monthly SMART goals Improving healthy eating habits Increasing vegetable and fruit intake	Asking fathers to complete monthly SMART goals was not appropriate Content on healthy eating habits was supported Content on vegetable and fruit intake was supported	CAP-2 CAP-2 CP-1 CAP-2 CP-1	Fathers were not asked to set monthly SMART goals No change required No change required

(Continued)

Table 2. (Continued)

Improving physical and sports skills	Content on physical activity and sports skills was supported	CAP-2 CP-1	No change required
Education content was designed for Australian fathers in general	Education content must be culturally relevant for Aboriginal fathers and their children living on Darkinjung Country	CAP-2 CP-2	All education content was adapted in partnership with the cultural affirmation panel to be culturally relevant for Aboriginal fathers living on Darkinjung Country. From superficial elements (images, art, colours etc.) through to deep impact elements (values, stories, language etc.)
N/A	Introduce new content on parenting support	CAP-2 CP-1	Parenting support included in programme content
N/A	Introduce new content on well-being	CAP-2 CP-1	Well-being included in programme content
N/A	Introduce new content on cultural identity	CAP-2 CP-1	Cultural identity included in programme content
N/A	Introduce new content on drugs and alcohol	CAP-2 CP-1	Protective strategies on dealing with drugs and alcohol included in programme content
N/A	Introduce new content on accessing local Aboriginal health services	CAP-2	Information on accessing local Aboriginal health services included in programme content
N/A	Include information on culturally appropriate mental health services available within the region	CAP-2	Information on culturally appropriate mental health services included in programme content
N/A	Sensitive topics need to be addressed in an age-appropriate manner for child participants in the 5–12 age range	CAP-2	Programme designed to be age appropriate for children in 5–12 age range
N/A	Content needs to consider Aboriginal parenting styles	CAP-2	Programme content was tailored to Aboriginal parenting styles
N/A	Content should be strengths-based that draws upon the cultural values of local community	CAP-2	Programme content was strengths-based that draws on the cultural values of local community
Persons	Key components from original programme: Healthy Dads Healthy Kids	ID of codesign session	Key adaptations of biya yadha gudjiagang yadha: Healthy Dads Healthy Mob
No preference of facilitator gender	Facilitator needs to be an Aboriginal or Torres Strait Islander man from the Darkinjung community	CAP-1	Facilitator must be an Aboriginal or Torres Strait Islander man from the Darkinjung community
Participation was not targeted to any cultural background of fathers	Participating fathers need to be Aboriginal or Torres Strait Islander and living on Darkinjung Country	CAP-2	Participating fathers need to be Aboriginal or Torres Strait Islander men living on Darkinjung Country

(Continued)

Table 2. (Continued)

Participating fathers are the primary male carer of their child Facilitator should have relevant training and skills	Participating fathers can also be father-figures	CAP-2	Participating men can be fathers or father-figures
Facilitator should have relevant training and skills	Facilitator having relevant training and skills was supported	CAP-1	No change needed
Key components from original programme: Healthy Dads Healthy Kids	Instructions from cultural affirmation panel (CAP) and community panel (CP)	ID of codesign session	Key adaptations of biya yadha gudjagang yadha: Healthy Dads Healthy Mob
Use of Australian sportspeople as role models	Role models should be Aboriginal or Torres Strait Islander	CAP-2	Aboriginal and Torres Strait Islander role models used as examples in the programme (e.g. Cathy Freeman, Adam Goodes, Charlie Perkins etc.) Local community leaders were also highlighted as role models
Use dad-jokes to engage men	Dad-jokes supported with the provision of the cultural context of participants is considered	CAP-2	Dad-jokes used in programme by facilitator informed by the cultural context of participants
Use of stories to relate to fathers	Stories should be localised to be relevant to the Darkinjung community	CAP-2 CP-2	Stories localised to increase relevance for Darkinjung community
General Healthy Dads Healthy Kids logo used	Create a culturally relevant logo	CAP-2	New programme logo and powerpoint slides designed in partnership with Elenor Duncan Aboriginal Services
No preference of the cultural background of people used in images throughout the programme	Importance of pictures used in the programme being representative of Aboriginal people	CAP-2	Photos used in the programme were taken of local Aboriginal people with their permission who were compensated financially
Programme graphics and artwork was designed to engage to Australian fathers	Programme graphics, artwork, design must be culturally relevant to engage Aboriginal fathers and their children	CAP-2	New artwork and graphics were designed in partnership with Elenor Duncan Aboriginal Services and used throughout all elements of the programme
Key components from original programme: Healthy Dads Healthy Kids	Instructions from cultural affirmation panel (CAP) and community panel (CP)		Key adaptations of biya yadha gudjagang yadha: Healthy Dads Healthy Mob
English language used for programme title healthy dads healthy kids	Programme should be dual titled with Darkinjung language and be relevant to the Darkinjung community	CAP-2	Programme dual titled in Darkinjung and English; biya yadha gudjagang yadha: Healthy Dads Healthy Mob
English used in all text throughout programme	English was appropriate for all text throughout the programme, with the addition of dual naming the programme with a local Darkinjung word that represents the programme	CAP-2	English language used for text throughout the programme other than programme title which was dual named in Darkinjung and English language

(Continued)

Table 2. (Continued)

	Gender-tailored language to engage men	Gender-tailoring language to engage men was supported with the addition of ensuring language considers the context of Aboriginal men	CAP-1 CP-1	Programme language was gender-tailored to engage Aboriginal men
N/A		Language should be accessible for all ages of programme participants	CAP-1 CP-1	Programme used accessible language at a level for primary-school aged children (5-12 years of age)
N/A		Aboriginal and Torres Strait Islander was the preferred term to be used in the programme over others such as First Nations etc.	CAP-1	Aboriginal and Torres Strait Islander used as throughout the programme where applicable
N/A		All language should be strengths-based and avoid deficit language	CAP-1	Strengths-based language used throughout programme
Context	Key components from original programme: Healthy Dads Healthy Kids	Instructions from cultural affirmation panel (CAP) and community panel (CP)	ID of codesign session	Key adaptations of biya yadha gudjagang yadha: Healthy Dads Healthy Mob
	Programme to be delivered of an afternoon outside of work hours	Programme delivered outside of work hours was supported	CAP-2 CP-2	No change required
	A reminder text message sent to programme participants the day before each session	SMS reminder to be sent day before each session was supported	CAP-2	No change required
	Programme participation open to all children of the enrolled father or father-figure that fit into the 5- to 12-year-old age range	Open attendance to more than one child per father/father-figure regardless of child cultural background, the father has to be Aboriginal or Torres Strait Islander, the child does not, this acknowledges blended families	CAP-2 CP-2	Programme participation open to all children in the 5- to 12-year-old age range of the enrolled Aboriginal or Torres Strait Islander father or father-figure
N/A		After each session make follow-up contact to each participant family to boost rapport and to encourage attendance	CAP-2	A follow-up phone call made by the programme facilitator after each session
N/A		Programme should be delivered in summer months to increase daylight hours and for warmer weather (CAP, CP)	CAP-2 CP-2	Programme delivery to occur in summer months
N/A		Programme should be facilitated at a culturally relevant location. Elenor Duncan Aboriginal Services grounds recommended as location for the programme (CAP)	CAP-2	Programme delivered at Elenor Duncan Aboriginal Services
N/A		Acknowledgement of Country to occur at the beginning of each session (CAP, CP)	CAP-2 CP-2	Each session begins with an Acknowledgement of Country
N/A		A healthy post-programme meal should be provided each week (CAP, CP)	CAP-2 CP-2	A healthy post-session meal provided and shared between programme participants each week

ID = identification; CAP = cultural affirmation panel; CP = community panel; N/A = not applicable; SMS = short message service.

culturally adapted programme. Such themes included content on cultural identity, Aboriginal role models, managing the risks of drugs and alcohol, well-being, and specific parenting support for Aboriginal families. Furthermore, it was advised that the cultural values and experiences of local Aboriginal fathers and their children should be reflected in the culturally adapted programme content. As a result, the research team worked with the cultural affirmation panel and the community panel to codesign all content included in the culturally adapted programme.

Persons

In the original HDHK programme, there was no preference on the gender or cultural background of the facilitator provided they had relevant skills to facilitate the programme. It was advised that the programme facilitator had to be an Aboriginal or Torres Strait Islander man from the Darkinjung community. It was made clear that the facilitator had to be able to relate to participants, understand the lived experiences of local Aboriginal people, and able to navigate cultural nuances. As a result, it was decided that the programme facilitator must be an Aboriginal or Torres Strait Islander man from the local community. It was advised that participation should be open to both fathers and father-figures, as doing so acknowledges the communal constructs of child-rearing in Aboriginal and Torres Strait Islander communities which can include grandfathers, uncles, brothers, and Elders, among other kinship relationships. As a result, the culturally adapted programme was open to Aboriginal and Torres Strait Islander fathers and father-figures.

Metaphors

In the original HDHK programme, there was no preference of the cultural background of the people used as role models. It was advised that in order to increase relevance for programme participants, Aboriginal and Torres Strait Islander role models should be used. The research team worked in partnership with the cultural affirmation panel to identify appropriate Aboriginal and Torres Strait Islander role models to be used as examples in the culturally adapted programme. Furthermore, it was identified that local Aboriginal community leaders should be highlighted as role models as well. In the original HDHK programme, there was no preference of the cultural background of people used in programme images, it was advised that all photos in the programme need to be representative of Aboriginal people. As a result, new images were taken with the permission of local Aboriginal families that were nominated by the cultural affirmation panel who were compensated financially for their involvement. Furthermore, it was advised that the culturally adapted programme should have a new culturally relevant logo, design, and colour scheme. As a result, the research team worked with Elenor Duncan Aboriginal Services to create a new programme design, including a logo which was approved by the cultural affirmation panel.

Language

In the original HDHK programme, English was used in all text throughout the programme. It was advised that English language was appropriate to be used; however, the programme should be dual named in Darkinjung language. The cultural affirmation panel advised that the Darkinjung Language Group should be consulted to get advice and permission to use the provided terms. The Darkinjung Language Group consists of local Aboriginal knowledge holders who meet to discuss language-related matters drawing on previous work by (Jones, 2008). The Darkinjung Language Group was supportive of the research and advised that the programme should be titled *biya yadha gudjagang yadha: Healthy Dads Healthy Mob*. The proposed programme title was approved by the cultural affirmation panel. The original HDHK programme used gender-tailored language to engage men, while gender-tailoring language was supported, it was advised that the culturally adapted programme should use language that is tailored specifically for local Aboriginal men. In addition, it was made clear that all language should be strengths-based and avoid using deficit language throughout the programme. The language adaptation process occurred in partnership with the cultural affirmation panel.

Context

The original HDHK programme was conducted outside of regular working hours to increase participation of fathers who may have employment responsibilities. It was agreed that the culturally adapted programme should also be conducted outside of work hours; however, it was advised that the programme should occur in summer months to increase daylight and warmer weather. In the original HDHK programme, a reminder short message service (SMS) text message was sent to participants to inform them of the upcoming session each week. This process was supported; however, it was advised that an additional follow-up phone call should be made by the programme facilitator after each session to build rapport with participating men. Furthermore, it was advised that the programme location had to be culturally appropriate for Aboriginal fathers and their children, Elenor Duncan Aboriginal Services was recommended as the preferred location as it had appropriate facilities. It was also advised that at the conclusion of each weekly session, participating families should be provided with a healthy meal to eat together to build relationships between families involved in the programme. As a result, a healthy meal was provided each week in partnership with Elenor Duncan Aboriginal Services.

Discussion

The aim of this article was to describe the process and outcomes of a systematic approach used to culturally adapt HDHK for Aboriginal fathers and their children living on Darkinjung Country. This study combined the use of

dimensions of the EVM, Aboriginal-led cultural governance, and local Aboriginal community codesign, resulting in the development of *biya yadha gudjagang yadha: Healthy Dads Healthy Mob*. Key adaptations in the new programme included themes such as cultural identity, well-being, and Aboriginal role models that did not exist in the original HDHK programme. The inclusion of new themes did reduce the focus on some of the original HDHK themes, and in some cases, original themes were omitted if considered inappropriate and replaced by culturally relevant themes as decided by the Darkinjung community. Programme goals and measures were also adapted to be culturally relevant to the Darkinjung community with father and child social and emotional outcomes being prioritised ahead of physical outcomes.

Aboriginal people have the right to self-determination and the right to participate in decision-making in matters that impact their health and well-being. It is important that the cultural affirmation panel was able to shape the research process, including having the autonomy to influence all elements of study design. Cultural governance ensured that community cultural protocols were followed and that all stakeholders involved had the ability to inform the programme. The cultural affirmation panel held the research team accountable to expectations of the Darkinjung community, and were able to mitigate risks that may have been unseen by the research team. Having the guidance and support of the cultural affirmation panel gave researchers permission to codesign with community while having the ability to consult at all stages of the adaptation process. Importantly, Darkinjung community members were partners in the research.

The knowledge and experiences of the community panel ensured that the perspectives of local Aboriginal fathers and father-figures were centralised in the cultural adaptation process. A communal approach to programme development ensures that individuals or small groups do not shape the research based off their own biases. It is important to honour and respect the time it takes to develop relationships with Aboriginal communities, and for local communities to inform the research based off their own values and lived experiences. Codesigning parenting research with local Aboriginal community members mitigates the risk that the programme is irrelevant or potentially harmful, as the community have been involved in the programme design. Furthermore, a codesign approach to Aboriginal parenting research strengthens programme legitimacy, participants of both the cultural affirmation panel and the community panel stated they were excited to share the programme with family and friends when the recruitment phase began.

Given the unique characteristics of this research process, direct comparison with other studies employing the EVM within Aboriginal community contexts in Australia is limited. However, the EVM was previously employed to culturally adapt the original HDHK programme for Hispanic fathers and their children titled *Papás Saludables, Niños Saludables* (Healthy Parents, Healthy Kids) in Texas, USA (O'Connor et al., 2020). While the same framework for adaptation was used for both studies, the programme

development methods are considerably different. It is important to note the cultural context of Aboriginal fathers in Australia, and Hispanic fathers in the USA are dissimilar and require adaptation suiting their unique context, subsequently resulting in different methods and outcomes.

Both projects included a community panel of Aboriginal and Hispanic community members respectively, and a research team, this study also established a cultural affirmation panel to provide cultural governance and support the research team implement the recommendations of the community panel which did not occur in the USA. Research leadership between both studies were also different. In this study the lead author was an Aboriginal father from the Darkinjung community, whereas in the study conducted by O'Connor et al. (2020) in the USA, the lead author was a non-Hispanic woman who was not part of the Hispanic community. Both studies engaged a health service as the location for meeting, in this study, Elenor Duncan Aboriginal Services was utilised, in the USA two Texas Children's Health Plan locations were used.

There were some unique differences in the adaptation outcomes when comparing *biya yadha gudjagang yadha: Healthy Dads Healthy Mob* in Australia, and *Papás Saludables, Niños, Saludables*, in the USA. In this study, themes such as cultural identity, well-being, and Aboriginal role models were included that did not exist in the original HDHK programme. In the USA, there was an emphasis on engaging fathers through *machismo* which is a type of male masculinity that did not appear in the original HDHK programme. There were also differences in programme goals and measurements, in this study, there was an emphasis on social and emotional health with the father-child relationship being prioritised, in the USA, there was an emphasis on weight-management and weight loss as an outcome, which was retained from the original HDHK programme. There are some core components of the original HDHK programme that are included in both studies which appear to be fundamental elements of the HDHK programme. These elements include gender-tailoring to engage fathers, father-child co-physical activity, practical activities such as rough-and-tumble play, sport-skills, and fitness, and take-home workbooks with supporting information. These core components may contribute to the success of the HDHK programme globally.

While the study methods described in this article have been designed to be culturally relevant for Aboriginal fathers living on Darkinjung Country, it is important to note that this exact process should not necessarily be replicated in any other Aboriginal community, instead this could be used as an example to inform future development of parenting support. Each Aboriginal community is different and while there may be some similarities across communities, there are also significant differences such as cultural protocols, knowledges, peoples, and experiences of colonisation. To develop parenting support that is responsive to the needs of local Aboriginal communities, it is important that meaningful relationships are formed, Aboriginal-led cultural governance structures are established, comprehensive community codesign takes place, and Aboriginal people lead the research.

This study had both strengths and limitations. Study strengths include Aboriginal-led cultural governance, a comprehensive codesign process facilitated by local Aboriginal community members, and Aboriginal leadership within our research team. Ensuring that the study was facilitated by local Aboriginal community members strengthened the research, facilitators were able to relate to the experiences of panel members and could understand and navigate cultural nuances that non-Aboriginal researchers may have been unaware of. Furthermore, as described by Vincze et al. (2021), sociocultural adaptation strategies are considered to have a deep sensitivity level, the use of local stories, values, and knowledges were important elements in culturally tailoring the programme to be relevant for Aboriginal fathers and their children living on Darkinjung Country. This study also had potential limitations. A behaviour change theory was not employed. Not using a behaviour change theory was a decision made based on the advice from the cultural affirmation panel who did not wish to predetermine a behaviour change process, instead opting for processes and outcomes to be entirely local Aboriginal community led. Furthermore, this study took place at only one location; therefore, this cohort may not have been representative of all Aboriginal fathers living on Darkinjung Country.

Conclusion

This article reports the systematic cultural adaptation of the HDHK programme for Aboriginal fathers and their children living on Darkinjung Country. Privileging the voices of Aboriginal fathers, Aboriginal-led cultural governance, and a culturally sensitive framework for adaptation resulted in the development of *biya yadha gudjagang yadha: Healthy Dads Healthy Mob*. This study highlights the need for parenting research involving Aboriginal participants to include Aboriginal-led cultural governance, comprehensive codesign with local Aboriginal community, and for the knowledges, experiences, and values of local communities to be centralised in the development of culturally responsive parenting support. Key themes such as cultural identity, well-being, and Aboriginal role models were included that did not exist in the original HDHK programme. Programme goals and measures were adapted to be relevant to the Darkinjung community valuing father and child social and emotional health ahead of physical measures such as weight loss. Future research is needed to evaluate the feasibility, acceptability, and preliminary efficacy of the culturally adapted programme *biya yadha gudjagang yadha: Healthy Dads Healthy Mob*. The next phase of this research is testing *biya yadha gudjagang yadha: Healthy Dads Healthy Mob* in a feasibility trial.

Authors' note

Jake C MacDonald (Ngarabal) (BPhysEd(SecTchg)) is a Ngarabal man with family ties to Emmaville and Deepwater, New South Wales (NSW), Australia. He has lived on Darkinjung Country, the Central Coast of NSW his entire life, and is part of the Darkinjung community. Jake is a father, educator, and PhD student at the University of Newcastle. He has a background in teaching, previously working as an Aboriginal Education consultant.

Nathan Towney (Wiradjuri) (BPhysEd(SecTchg)) is a Wiradjuri man from Wellington, NSW. He is a father to Archie and Charlotte. Nathan also has a background in teaching, spending over 20 years with the NSW Department of Education in a variety of roles. He is currently the Pro Vice-Chancellor Indigenous Strategy and Leadership and the Head of the Wollotuka Institute at the University of Newcastle.

Kathleen J Butler (Worimi & Bunjalung) (PhD) belongs to the Worimi and Bunjalung peoples of coastal NSW. Living on Darkinjung Country, she is a mother of three. Kath is currently the Director, Indigenous Research Strategy and Leadership in the Research and Innovation Division of the University of Newcastle. She has held numerous academic roles in the past 25 years at the University of Newcastle and passionately believes in the power of education.

Myles D Young (PhD) is a non-Indigenous man, father, and academic in clinical and health psychology at the University of Newcastle. He has a particular interest in working with research end-users to design and test new ways of improving men's physical and mental health.

Briana L Barclay (BNutr&Diet) is a non-Indigenous woman who lives on Darkinjung Country, the Central Coast of NSW. She has professional experience in the field of nutrition and dietetics and family-based health programmes at the University of Newcastle.


Lee M Ashton (PhD) is a non-Indigenous man and a father to two children. He has a background in men's health and family-based health programmes at the University of Newcastle.

Philip J Morgan (PhD) is a non-Indigenous man and a father to three girls. He has a background in physical education and expertise in the design and evaluation of programmes for fathers and men.

Acknowledgements

The authors acknowledge Darkinjung Country where this research took place. The authors acknowledge the cultural affirmation panel for their support and enriching perspective. Members of the cultural affirmation panel include Professor Uncle Bob Morgan, Belinda Field, Madelene Davy, Vicki Field, Lindsay Hardy, Kristy O'Sullivan, Ryan Field, and Kjyla Johnson. They also acknowledge the members of the community panel for their time, wisdom, and support of this research. They also acknowledge the Darkinjung Language Group for their support and permission to use Darkinjung language in the '*biya yadha gudjagang yadha*': Healthy Dads Healthy Mob programme.

ORCID iDs

Jake C MacDonald (Ngarabal)  <https://orcid.org/0009-0002-0416-3184>

Briana L Barclay  <https://orcid.org/0000-0002-2325-6928>

Funding

The authors disclosed receipt of the following financial support for the research, authorship and publication of this article: This study was supported by the National Heart Foundation of Australia Vanguard Grant (award ID—106031).

Declaration of conflicting interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and publication of this article.

Glossary

Papás Saludables, Niños Saludables Healthy Parents, Healthy Kids

References

- Ashton, L. M., Rayward, A. T., Pollock, E. R., Kennedy, S. L., Young, M. D., Eather, N., . . . Morgan, P. J. (2024). Twelve-month outcomes of a community-based, father-daughter physical activity program delivered by trained facilitators. *International Journal of Behavioral Nutrition and Physical Activity*, 21(1), 101.
- Australian Bureau of Statistics. (2022). *Aboriginal and Torres Strait Islander life expectancy (2020-2022)*. <https://www.abs.gov.au/statistics/people/aboriginal-and-torres-strait-islander-peoples/aboriginal-and-torres-strait-islander-life-expectancy/latest-release>
- Australian Institute of Health and Welfare. (2023). *Heart, stroke and vascular disease: Australian facts*. <https://www.aihw.gov.au/reports/heart-stroke-vascular-disease/hsvd-facts>
- Australian Institute of Health and Welfare. (2024). *Health and wellbeing of First Nations people*. <https://www.aihw.gov.au/reports/australias-health/indigenous-health-and-wellbeing>
- Bernal, G., & Sáez-Santiago, E. (2006). Culturally centered psychosocial interventions. *Journal of Community Psychology*, 34(2), 121–132.
- Canuto, K., Brown, A., Wittert, G., & Harfield, S. (2018). Understanding the utilization of primary health care services by Indigenous men: A systematic review. *BMC Public Health*, 18(1), Article 1198.
- Duke, D. L., Pricor, M., Ekinci, E., Hachem, M., & Burchill, L. J. (2021). Culturally adaptive governance—building a new framework for equity in Aboriginal and Torres Strait Islander health research: Theoretical basis, ethics, attributes and evaluation. *International Journal of Environmental Research and Public Health*, 18(15), Article 7943.
- English, M., Wallace, L., Evans, J., Diamond, S., & Caperchione, C. M. (2022). The impact of sport and physical activity programs on the mental health and social and emotional wellbeing of young Aboriginal and Torres Strait Islander Australians: A systematic review. *Preventative Medicine Reports*, 25, Article 101676. <https://doi.org/10.1016/j.pmedr.2021.101676>
- Jones, C. (2008). *Darkinyung grammar and dictionary: Revitalising a language from historical sources*. Muurrbay Aboriginal Language and Culture Co-operative.
- Kreuter, M. W., Lukwago, S. N., Bucholtz, D. C., Clark, E. M., & Sanders-Thompson, V. (2003). Achieving cultural appropriateness in health promotion programs: Targeted and tailored approaches. *Health Education & Behavior*, 30(2), 133–146.
- Lamb, M. E., & Lewis, C. (2013). Father-child relationships. In N. Cabrera & C. S. Tamis-LeMonda (Eds.), *Handbook of father involvement: Multidisiplinary perspectives* (pp. 119–134). Routledge.
- MacDonald, J., Young, M., Morgan, P., Barclay, B., McMullen, S., & Knox, J. (2024). The participation of Aboriginal and Torres Strait Islander parents in Australian trials of parenting programs for improving children's health: A scoping review. *Medical Journal of Australia*, 220(6), 331–335.
- MacDonald, J. C., Towney, N., Butler, K. J., Young, M. D., Barclay, B. L., Ashton, L. M., & Morgan, P. J. (2025). What does it mean to be an Aboriginal father living on Darkinjung Country? Yarning with Aboriginal fathers and father figures on the Central Coast of New South Wales Australia. *AlterNative: An International Journal of Indigenous Peoples*, 21(2), 195–203.
- Moreton-Robinson, A. (2017). Relationality: A key presupposition of an Indigenous social research paradigm. In C. Andersen & J. M. O'Brien (Eds.), *Sources and methods in Indigenous studies* (pp. 69–77). Routledge.
- Morgan, P. J., Collins, C. E., Plotnikoff, R. C., Callister, R., Burrows, T., Fletcher, R., & Lubans, D. R. (2014). The “Healthy Dads, Healthy Kids” community randomized controlled trial: A community-based healthy lifestyle program for fathers and their children. *Preventive Medicine*, 61, 90–99.
- Morgan, P. J., Lubans, D. R., Callister, R., Okely, A. D., Burrows, T. L., Fletcher, R., & Collins, C. E. (2011). The “Healthy Dads, Healthy Kids” randomized controlled trial: Efficacy of a healthy lifestyle program for overweight fathers and their children. *International Journal of Obesity*, 35(3), 436–447.
- Morgan, P. J., Young, M. D., Lloyd, A. B., Wang, M. L., Eather, N., Miller, A., Murtagh, E. M., Barnes, A. T., & Pagoto, S. L. (2017). Involvement of fathers in pediatric obesity treatment and prevention trials: A systematic review. *Pediatrics*, 139(2), Article e20162635.
- National Indigenous Australians Agency. (2017). *Aboriginal and Torres Strait Islander health performance framework report*. <https://www.niaa.gov.au/sites/default/files/publications/indigenous/hpf-2017/tier2/218.html>
- O'Connor, T. M., Perez, O., Beltran, A., Colón García, I., Arredondo, E., Parra Cardona, R., Cabrera, N., Thompson, D., Baranowski, T., & Morgan, P. J. (2020). Cultural adaptation of “Healthy Dads, Healthy Kids” for Hispanic families: Applying the ecological validity model. *International Journal of Behavioral Nutrition and Physical Activity*, 17(1), Article 52.
- Pollock, E. R., Young, M. D., Lubans, D. R., Barnes, A. T., Eather, N., Coffey, J. E., Hansen, V., & Morgan, P. J. (2020). Impact of a father-daughter physical activity intervention: An exploration of fathers' experiences. *Journal of Child and Family Studies*, 29(12), 3609–3620.
- Salmon, M., Doery, K., Dance, P., Chapman, J., Gilbert, R., Williams, R., & Lovett, R. (2018). *Links between Aboriginal and Torres Strait Islander culture and wellbeing: What the evidence says*. Lowitja Institute.
- Smith, K., Fatima, Y., & Knight, S. (2017). Are primary healthcare services culturally appropriate for Aboriginal people? Findings from a remote community. *Australian Journal of Primary Health*, 23(3), 236–242.
- Stevens, J., Binns, A., Morgan, B., & Egger, G. (2017). Meaninglessness, alienation, and loss of culture/identity (MAL) as determinants of chronic disease. In G. Egger, R. Binns, S. R. Rössner, & M. Sagner (Eds.), *Lifestyle medicine* (pp. 317–325). Academic Press.
- United Nations. (2008). *United Nations declaration on the rights of Indigenous peoples*. http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf
- Vincze, L., Barnes, K., Somerville, M., Littlewood, R., Atkins, H., Rogany, A., & Williams, L. T. (2021). Cultural adaptation of health interventions including a nutrition component in Indigenous peoples: A systematic scoping review. *International Journal for Equity in Health*, 20(1), Article 125.
- Young, M. D., & Morgan, P. J. (2017). Paternal physical activity: An important target to improve the health of fathers and their children. *American Journal of Lifestyle Medicine*, 11(3), 212–215.