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Embedding the Model of Engaging with Communities Collaboratively (MECC) in the Jandu Yani U (For All Families) Project in Aboriginal communities of the Fitzroy Valley, Western Australia

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About the authors

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Emily Carter is a Gooniyandi and Kija Woman and CEO of MWRC. Emily co-led the alcohol restrictions in her community and is an investigator on the first Australian population-based prevalence study of FASD. Emily is an advocate for women's issues, Aboriginal community empowerment and recognition, and a promoter of trauma-informed practices.

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Abstract

This study evaluated the use of the Model of Engaging Communities Collaboratively (MECC) to guide the Jandu Yani U (For All Families) project, in which the Triple P – Positive Parenting Program was collaboratively adapted for use in very remote Aboriginal communities in Western Australia. The communities' responses to the MECC processes were evaluated through interview-style or self-administered surveys, semiformal interviews, focus group discussions and storytelling. The MECC processes were acceptable across all groups (mean score 3.86 on a 5-point acceptability scale). Qualitative data supported and gave context to the quantitative findings, demonstrating the acceptability and utility of the approach. The MECC provided a valuable framework for Aboriginal community engagement, program dissemination and implementation of research.

Keywords

Aboriginal; Indigenous; community engagement, empowerment; evidence-based programs; cultural adaptation; implementation; dissemination; MECC; Triple P

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Randomised controlled trials consistently show that evidence-based family interventions reduce family risk factors associated with poor social, emotional and behavioural outcomes for children (Weisz & Kazdin, 2017). However, it can be difficult to recruit and maintain the involvement of disadvantaged or culturally diverse parents in mainstream parenting programs (Lundahl et al., 2006). Culturally sensitive adaptation can lead to better recruitment and engagement of families (Kumpfer et al., 2002; McCabe et al., 2005), increase retention rates (United Nations Office on Drugs and Crime [UNODC], 2009), increase practitioners' sense of competence and ownership in program implementation (e.g., Self-Brown et al., 2011), and achieve positive family outcomes (e.g., Turner et al., 2007). However, rigorous examination of cultural adaptation and implementation practices is required (Baumann et al., 2015). This evaluation contributes to the limited literature examining the processes of community engagement and adaptation required for successful implementation of evidence-based programs in predominantly Indigenous communities.

This challenge is particularly important when working with disadvantaged Indigenous populations who have experienced significant trauma through colonisation. Particularly, the focus of this article is Australian Aboriginal people[1]. Rates of challenging neurodevelopmental and behavioural problems, early life trauma (ELT), prenatal alcohol exposure (PAE) and fetal alcohol spectrum disorder (FASD) are disproportionately high in Australian Aboriginal children and are well-known contributors to the vulnerability of this population (Fitzpatrick et al., 2017; O'Leary et al., 2012; Zubric et al., 2005). Children with FASD often have learning and behavioural difficulties and may develop health or mental health disorders or substance misuse that impact adult functioning, reduce quality of life, and increase the risk of unemployment and involvement in the criminal justice system (O'Leary et al., 2012). ELT may exacerbate adverse outcomes. In the Fitzroy Valley communities in Western Australia, data from the Australian Early Development Census 2018 indicate that only 49.2% of children are developmentally on track in language and cognitive domains compared to the national figure of 84.4% (Australian Government, 2018).

Even given these challenges, Aboriginal Australians are still very resilient and strong peoples who hold much knowledge that can improve research, researchers and society in general. The challenge then is to ensure research does not perpetuate trauma and further harm when outsiders aim to apply universalist interventions that are culturally misaligned (Tuck, 2009), which is a significant cost on communities and is highly unethical. However, it must be noted that research conducted with remote Indigenous communities often results in problems with scientific rigour and difficulty adhering to research protocols, university policies and funding requirements in the context of limited time and resources. This systemic issue cannot and should not be the reason institutions and researchers perpetuate harm within Indigenous communities.

The Lililwan project (Fitzpatrick et al., 2012), a population-based study of FASD prevalence, identified that 55% of primary school-aged children in the Fitzroy Valley had high levels of PAE, the prevalence of FASD was among the highest in the world (19%), and learning and developmental problems were common (Fitzpatrick et al., 2017). Parents and teachers reported that challenging behaviour was a concern for all children (Tsang et al., 2017). In response, community leaders from Marninwarntikura Women's Resource Centre (MWRC), concerned about the impact of PAE, ELT and FASD on children's behaviour, learning and development, initiated a partnership with researchers from the Universities of Sydney and Queensland to introduce the evidence-based Triple P – Positive Parenting Program (Sanders, 2012). Introduction of Triple P to the Fitzroy Valley involved a collaborative adaptation of the parenting program guided by the Model of Engaging Communities Collaboratively (MECC; McIlduff et al., 2020). The project was called Jandu Yani U (meaning "for all families" in the local Bunuba language).

The MECC, developed by McIlduff in collaboration with Indigenous communities internationally, combines theories of implementation science, cultural adaptation and engagement, and incorporates feedback from Indigenous communities internationally (McIlduff et al., 2020). The MECC takes account of the *cultural context*, including language, law, poverty and disadvantage, discrimination, educational opportunities, and history (Figure 1—outer circle). It aims to build a relationship between the community and researchers based on mutual respect, trust and benefit, and community empowerment. The model is one of *collaborative cultural adaptation and implementation* and its foundation processes include: (a) identifying community concerns and solutions; (b) community consultation; (c) engagement with locals, leaders and organisations; (d) identification of cultural traditions, values and beliefs; (e) collaborative adaptation; (f) program implementation; (g) assessment of ecological fit; and (h) community approval of the interpretation and dissemination of results. The components of the outer layers of the circle must be addressed if the outcomes in the centre are to be achieved.

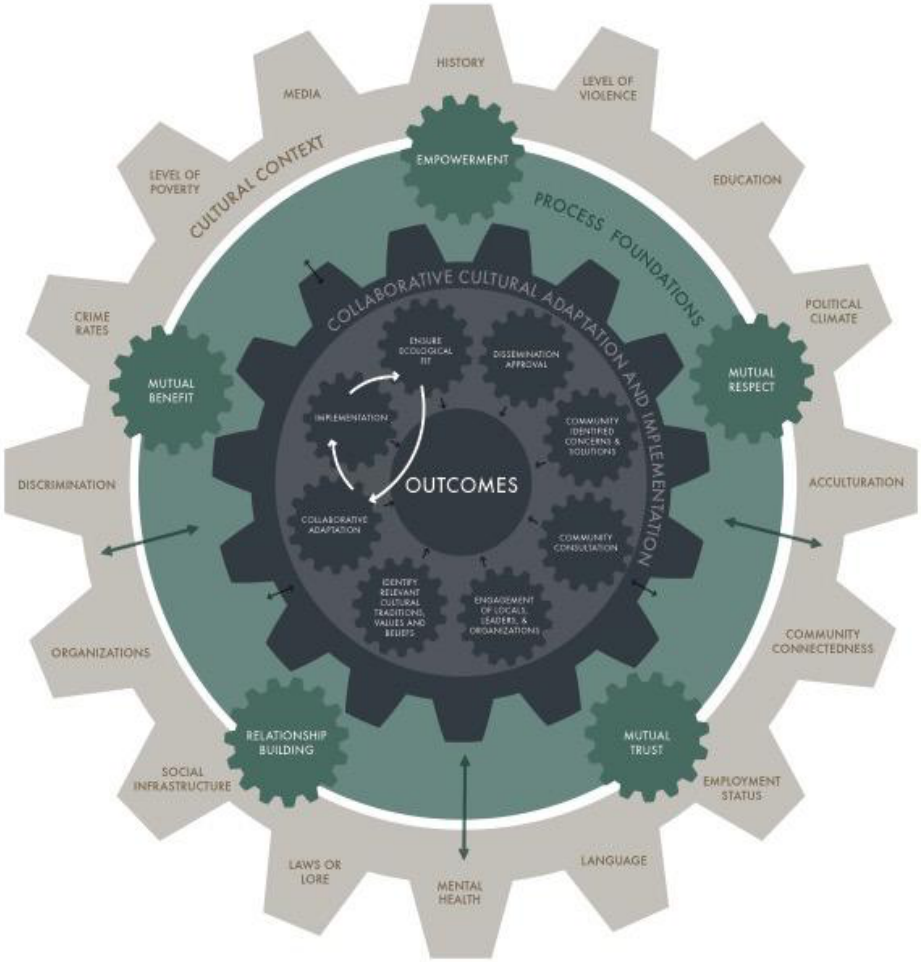

Figure 1. Model of Engaging Communities Collaboratively (MECC).

When new health promotion initiatives are introduced into Indigenous communities, consideration must be given to the psychosocial, biological and historical factors that contribute to physical, emotional and spiritual health. New initiatives often fail to meet their objectives and can exacerbate issues they were intended to address by imposing demands on the limited resources and capacity of remote communities (Montgomery et al., 2006). Implementation of Triple P in the Fitzroy Valley communities provided the first opportunity to evaluate the MECC processes that will inform best practice in delivering an evidence-based intervention to ensure optimal outcomes. Our

study was undertaken by acknowledging that effective implementation of a program is as important as the intervention used. The Jandu Yani U project was guided by the MECC to ensure that the project remained community-led and that local communities were equal partners in project design, content, implementation and evaluation. Consideration of individual Indigenous community context is especially important, as current disadvantages (e.g. domestic violence; drug and alcohol use; financial insecurity; limited access to transport, services and employment) have a significant impact on traditional parenting and personal coping skills (Sanders et al., 2019) and can compound historical and intergenerational trauma (resulting from colonisation and including forced removal of children from Aboriginal families).

Research aims

The Jandu Yani U project was a place-based evaluation of Indigenous Triple P (Turner et al., 2006), delivered in group or individual format, with the addition of Stepping Stones Triple P strategies for carers of children with complex needs (Sanders et al., 2003). The aim of this study was to provide a case example of application of the MECC to guide project implementation, using a mixed-methods approach to evaluate the process. We hypothesised that advisory group members, trained Triple P practitioners (locally named "parent coaches") and families receiving Triple P would report high rates of satisfaction with and share cultural insights on the MECC processes.

Method

The project was conducted between October 2014 and June 2019 in four stages, described in detail elsewhere (Andersson et al., 2019). Briefly, Stage 1 (2014–2016) involved establishment of a local advisory group and community consultation. Stage 2 (2016–2017) involved training local parent coaches to deliver Triple P, commencing the program with families, and tailoring program delivery following community input (semiformal collaborative focus groups and interviews with the advisory group and parent coaches). Stage 3 (2017–2018) comprised ongoing roll-out of Triple P across communities and peer networking for parent coaches. Also, parent coaches were mentored by a Triple P practitioner with Indigenous community experience and living in community, to support them to integrate their new skills in their workplace context. Stage 4 (2019) involved community input into the interpretation of results and joint planning of dissemination of the results of both the MECC process and the Triple P intervention, including to local communities.

Design

The study used a mixed-methods approach (quantitative surveys, qualitative interviews and focus groups) to evaluate community acceptance of the MECC processes.

Participants

Advisory group members (n = 5) were appointed by the lead Aboriginal organisation, MWRC. Parent coaches (n = 38) were nominated for training by leaders of their organisations or workplaces or by local community members because they were identified as strong leaders in the areas of family and child support. They were then invited in person to attend training by project-employed "community navigators" (respected leaders fluent in local language/s), who also sought consent from the parent coaches to participate. Family members (n = 34) who participated in the program were carers of children born between 1 January 2002 and 31 December 2010 (aged 5 to 15) and living in the Fitzroy Valley. In Aboriginal communities, carers may include the extended

family (e.g. parents, grandparents, aunts, uncles, and older siblings), and henceforth in this article, carers will be referred to as “families”. Families were recruited by parent coaches through nine local organisations (e.g. school, Child and Family Centre) and 19 community services (e.g. Nindilingarri Cultural Health Services, Women’s Shelter, Marninwarntikura Legal Unit). Some families were recommended to participate in the program by their supporting social worker or lawyer from the Marninwarntikura Legal Unit and Shelter. Detailed demographic data on parent coaches and family members is available in McIlduff et al. (2022) and Andersson et al. (2022 respectively.

Measures

MECC process surveys. A survey (see Table 1) was developed to assess participants’ satisfaction with the MECC processes. Each item was rated on a 5-point Likert-type scale (from 1 = *Strongly disagree to* 5 = *Strongly agree*). Higher scores indicated higher satisfaction, except for three items (e.g “I feel the data collection is too much”) where lower scores indicated higher satisfaction. The survey included questions on the cultural fit of the program and satisfaction with the research team, research processes, training, data collection, and the level of community consultation, input and leadership. The parent coach version included 15 items and Cronbach’s alpha revealed a high level of reliability in this population (α = .89). The carer version included 13 items and had a low level of reliability (α = .24). Given that most of the community considers English as their second, third or even fourth language, the three reverse loaded questions were removed, resulting in a 10-point scale with improved reliability (α = .78).

In-depth interviews and focus group discussions. All co-researchers (advisory group members, parent coaches and families) were invited to participate in interviews or focus groups by email and in person one year after their engagement with the project or the program. Some advisory group members and parent coaches were unable to participate due to time restraints; however, the majority did participate. Fewer families (*n* = 6) chose to participate in the interviews and focus groups. In-depth interviews were conducted with advisory group members (*n* = 3), parent coaches (*n* = 28) and families (*n* = 6) in relation to community context, program applicability, and acceptability of the MECC process.

Interviews with Aboriginal parent coaches (*n* = 21) and families were conducted with the support of a local community navigator using a deep listening–story-telling method considered most acceptable for these participants. Individual interviews with advisory group members and parent coaches (30–60 minutes duration) included semistructured questioning on each person’s involvement in program implementation, knowledge of and experiences with Triple P in the community, the “fit” of the program with local populations and service delivery contexts; and appropriateness and approval of the research approach. Perceived empowerment as a parent coach and community member was also explored, as reported in McIlduff et al. (2022). Semistructured interviews with individual families (approximately 30 minutes duration) explored community context, program fit and effectiveness. The program’s effect on participants’ perceived empowerment as a carer or community member is reported in Andersson et al. (2022).

Parent coach training (6 days including 4 days Triple P training, 1 day preaccreditation and 1 day Stepping Stones training) and competency-based accreditation (1 day) were conducted with two cohorts by a non-Aboriginal trainer and an Aboriginal Implementation Consultant accredited by Triple P International (McIlduff et al., 2022). Focus groups (FGs) with parent coaches and advisory group members were held 3 months after each training round. FG1 in 2016 included seven parent coaches and two advisory group members; FG2 in 2017 included 11 parent coaches, one

community navigator and one advisory group member. Questions related to training, need for program adaptations, family engagement and community context, to inform any further adaptations of the training and delivery of the parenting program.

Data analysis

Parent coach and family satisfaction with the MECC processes were explored using quantitative and qualitative methods. Descriptive analyses of quantitative data were conducted using SPSS software. Qualitative data were subjected to thematic analysis guided by an essentialist epistemology (Braun & Clark, 2006) using NVivo 12 software. A semantic level of coding the data allowed for an explicit or surface level approach. Patterns in the data were identified using a bottom-up, inductive approach.

Procedure

Embedding the MECC in research requires consideration of the community context, the eight primary foundational processes, and use of the underlying methodology of community-based participatory research (CBPR; Nicolas et al., 2009). Implementation of each process within this project is described in detail below. Processes are not linear and many occur concurrently. The CBPR methods underpinning the MECC include a focus on community partnership and engaging an advisory group, stakeholders and community members to participate and provide feedback as co-researchers. Extensive community consultation and collaboration occurred before and throughout the project until the results were fully disseminated. Through engagement, consultation and collaboration with leaders, Aboriginal organisations and community members, the research team actively sought and incorporated feedback into the program adaptation, implementation, evaluation and dissemination of results. This ensured program fidelity while improving program and research fit, acceptability and sustainability and building community capacity, buy-in and community-driven processes.

Cultural context

Understanding cultural context is imperative to the MECC process as it provides perspective, which enables successful, collaborative adaptation and implementation of the intervention. This understanding was built on prior experience and trusting relationships formed between a chief investigator (EJE) and community leaders during the Lililwan project; repeated visits of the team for project establishment, training, accreditation and dissemination of results; and by CM living in community for 5–7 months each year.

Process foundations

The five foundation processes of the MECC are: relationship building, mutual respect, mutual trust, mutual benefit and empowerment. Existing relationships, mutual respect and trust built through previous work were strengthened over time through the engagement, consultation and collaboration processes. The need for transparency and equality of all parties was established from the outset. This included developing a memorandum of understanding to make explicit the roles of each party, discuss the mutual benefits and acknowledge the risks, and ensure that the project was community-led and that community capacity building and sustainability were the focus. The advisory group, community navigators and parent coaches were co-researchers throughout the process, learning from and teaching the research team (“two-way learning”), and their feedback informed decision making throughout. The building of trust, respect and relationships

with community organisations, elders and families was a continual process during the 17 months (over 3 years) that CM lived in the community and provided support to the training, accreditation, skills development, confidence and empowerment of parent coaches. Building on these foundations, the specific MECC processes are detailed below.

Processes

Community identified concerns and solutions. In response to concerns about child behaviour and ELT identified by the Lililwan project, MWRC initiated a partnership with researchers from the University of Sydney and the University of Queensland. Researchers were invited by the community to consult with them regarding parenting and family support requirements, and the community decided to bring Triple P to the Fitzroy Valley. Consultation ensured community understanding of the types of Triple P interventions available and allowed them to choose the most appropriate program for the community. It allowed them to understand the flexibility to tailor program delivery to fit their context. The advisory group decided to proceed with the project and identified community partners.

Community consultation. An advisory group was established by the community, comprised of community leaders, educators and family support workers. A week-long intensive workshop was held in Fitzroy Crossing with the advisory group, chief investigators (EE, SE), a Triple P author (KT), and the MECC developer (CM) to understand the unique needs of the community. Engagement, implementation, evaluation and dissemination strategies were established and modified over time with community and advisory group input.

Engagement of locals, leaders and organisations. Community partnerships are essential for community-wide engagement and sustainability of effective intervention initiatives. As such, time was taken to develop relationships with community agencies and schools in the area before beginning the intervention. Extensive consultation, collaboration and engagement with the advisory group, community leaders, agency directors, school staff, service providers, parent coaches, Indigenous health networks and academic institutions was ongoing through community meetings, organisation meetings, fortnightly project teleconferences and interviews. While most cultural adaptation and implementation approaches rely on an advisory group or one organisation, the consultation for this project, in alignment with the MECC, was broad and spanned many community sectors.

Identify relevant cultural traditions, values and beliefs. Ongoing consultation and feedback supported the integration of relevant cultural traditions, beliefs and values throughout this process. It has been most apparent in the understanding of community context regarding various aspects of implementation, such as how to engage and support families in a parenting program, and how to support parent coaches as they deliver the program.

Collaborative adaptation. Although Triple P programs have previously been adapted and evaluated for Indigenous populations (Keown et al., 2018; Turner et al., 2007), given the heterogeneity of Indigenous cultures globally, the MECC collaborative adaptation process seeks to ensure the fit of culturally adapted materials in diverse Indigenous communities with the acknowledgement that there is no pan-Indigenous way of approaching any population's concerns.

Implementation. Programs were delivered by local health, education and community service professionals and community members. After the first cohort of parent coaches was trained and began program delivery, a need was recognised for more parent coaches. The second cohort of

parent coaches was recommended by community organisations, the first cohort of parent coaches, and families in the community who had heard of or accessed the program. The second parent coach training was adapted to include feedback from the first cohort. Feedback from families led to further adaptations to enhance engagement and program fit.

Ensure ecological fit. The ecological fit and outcomes of the locally adapted program and implementation process were assessed using locally adapted measures of parent and child outcomes (reported in Andersson et al., 2022). There was consensus that assessment measures should be delivered in an interview format by local community navigators to aid interpretation and explain the questions to families. Semiformal interviews were also conducted with the advisory group, parent coaches and families to explore the cultural congruency of the adapted model of Triple P delivery.

Dissemination approval. Dissemination of results occurred at multiple levels. Locally, personal results were shared with families as they worked with parent coaches and received feedback through a visual Goal Attainment Scale (see Andersson et al., 2022). The advisory group vetted the interpretation of key findings and recommended the results be shared with the community through the Fitzroy Valley Futures Forum and in other verbal and written ways. This process involved presentations given to local organisations, parent coaches and the communities involved. Community members are active co-authors on all published materials about the project and the written and visual results of the Jandu Yani U project will be kept at MWRC as the host organisation for this project.

Ethics

Ethics approval was granted by the University of Queensland Human Ethics Unit and the Sydney Human Ethics Committee. The University of Queensland approved the exploratory and beginning stages of the theoretical research (approval number 2015001332) and the University of Sydney Human Ethics Committee approved the integration of this research into the larger Jandu Yani U project as a modification to the *Behaviour Support Training for Parents and Carers of Aboriginal Children with Fetal Alcohol Spectrum Disorder* project (project number 2014/818). Ethics approval was also granted by the Western Australian Country Health Ethics Committee (No. 2015/21), The Western Australian Aboriginal Health Ethics Committee (No. 638) and the Kimberley Aboriginal Health Planning Forum (No. 2015/012). This study conforms to the NHMRC Ethical Guidelines for Research with Aboriginal and Torres Strait Islander Peoples (Harfield et al., 2020). Written informed consent was obtained from all parent coaches before data collection, and participants could withdraw at any time.

Results

MECC processes

Results of this mixed-methods evaluation of the MECC include surveys of parent coach and carer of satisfaction with the MECC processes (Table 1) and qualitative data that pertains to each process of the MECC. In general, the surveys showed satisfaction with MECC processes, (a mean score above 4 out of 5 on all but one positively anchored question and below three on each reverse loaded question), although many declined to answer reverse loaded questions. Only a few families (n = 6) chose to participate in the interviews and focus groups. One possible reason is that they were much less engaged in how the research was done and potentially not as receptive to the invitation to interviews and focus groups.

Table 1. Parent Coach and Carer Ratings of MECC Processes (Rating 1–5 with 1 = *Strongly disagree* and 5 = *Strongly agree*)

#	Question	Parent coaches (*n* = 23) Mean (*SD*)	Families (*n* = 68) Mean (*SD*)
1	Overall, I am satisfied with how the research team has brought the program to our community.	4.39 (0.58)	4.81 (0.40)
2	I felt our community's concerns were heard by the researchers.	4.22 (0.60)	NA
3	I think the program fits with our culture well.	4.43 (0.51)	4.75 (0.44)
4	I feel that the community had enough involvement in the decision making.	4.13 (0.76)	NA
5	I think this program is a good fit for our community.	4.57 (0.51)	4.84 (0.37)
6	I think the people trained to teach the program were a good choice.	4.39 (0.99)	4.59 (0.80)
7	I think the people in the advisory group were a good choice.	3.87 (1.06)	4.25 (0.88)
8*	I feel the data collection is too much.	2.74 (1.10)	2.38 (1.26)
9	I think our cultural stories make the program better for us.	4.26 (0.92)	4.63 (0.61)
10*	I felt that the researchers are just here for another "tick and flick".	1.91 (0.90)	2.13 (1.41)
11	I felt the program was more community led than researcher led.	4.22 (0.60)	4.31 (0.69)
12	I think the location was good for the program.	4.39 (0.72)	4.59 (0.62)
13	I think the way data is collected is good.	4.30 (0.70)	4.53 (0.57)
14*	I did not like the way the program was presented/taught.	1.73 (0.77)	1.88 (1.16)
15	I think the program is effective in our community.	4.32 (0.89)	4.34 (0.90)

Note: *Item is reverse loaded so that lower scores relate to higher satisfaction.

Community context and process foundations. Community relationships and trust built through the Lililwan project allowed the Jandu Yani U project team to connect with community members in initiating this process. This is supported by an advisory group member (AG 3): "I've learned about Triple P since 2013 … you know we had that relationship with her [EJE, chief investigator on Lililwan and Jandu Yani U projects] … so I think that it brought something to this community that

they [community leaders with trusted CI] thought could work or they could work with." Further trust, respect and relationships were built during the Jandu Yani U project as the community led the process and first author CM lived in community for lengthy periods of time. On various occasions, CM was asked to not misuse what was being shared, as the community had often been taken advantage of and misrepresented in the media. The trust behind this conversation and the request to help defend the community's right to be consulted was earned over years of the researchers being embedded in the communities. This engendered trust enabled many co-researchers to share personal stories of historical, current and intergenerational trauma in the community, and provided the research team with significant contextual insight. This knowledge was sensitively integrated within each part of the consultation, engagement, adaptation, implementation, evaluation and dissemination processes.

Community-identified concerns and solutions. The high mean scores on survey Q2 and Q11 indicate that parent coaches and families felt satisfied that the project and intervention were community led and informed. One parent coach explained, "I expected a researcher to find out what the people want and deliver it. You've done that.… But I'm only speaking for your program" (PC4). Another stated, "Yeah, and we do it in our way, you know" (PC1). When speaking about the process being community led, one Elder confirmed, "Yeah. Absolutely, a local solution to a local problem" (PC16).

Community consultation. The advisory group was crucial to oversee culturally appropriate implementation of the project, and provide guidance on: (a) the most appropriate Triple P variants and delivery formats (Indigenous Triple P was selected with the addition of Stepping Stones Triple P strategies families of children with complex needs; see Andersson et al. (2022) for detail on program delivery); (b) professional training processes to accommodate community-preferred ways of learning; (c) which local community members should be trained as parent coaches; (d) content and layout of program resources for families; (e) consent and recruitment processes and objectives (e.g. making the program universally available to all families so as to normalise and de-stigmatize the seeking of parenting support; (f) assessment measures of the effectiveness of the program and research process; (g) localisation of the assessment measures (e.g. language, visual analogue); (h) community values about the research process, needs and interests; and (i) procedures for distributing findings back to the community.

Survey Q4 indicated satisfaction with community involvement in decision making around the project. Survey Q7 spoke to the composition of the advisory group. While families had high satisfaction, the slightly lower mean score for parent coaches may have been linked to the expressed desire for more gender and organisational diversity in the membership. In response to the question about whether community had a voice in how the research would be done, comments included: "Yeah, it was definitely an environment of mutual respect and support" (PC23); "I feel like it was really collaborative and really easy to communicate my opinion" (PC20); and "I think everyone treated everyone the same. It was more equal because we're all here for the same reason" (PC14).

Engagement of locals, leaders and organisations. Based on community-wide consultations, the intervention was adapted to acknowledge cultural, social and language complexities, supporting engagement, culturally sensitive implementation, community buy-in and long-term sustainability. It was also established that MWRC would receive an adequate amount of the grant funding in order to train and employ local community navigators and co-researchers as well as determine where funding was required during the initiative.

Survey Q6 indicated satisfaction with the community members chosen to be trained as parent coaches. When speaking of the value of CM being in the community for long periods of time, engaging with the wider community and available for questions or concerns, one respondent said, “Well, we value the one that’s here, we can see, on the ground” (AG4). Several respondents said the time CM spent living in the community was key to building trust and relationships; for example:

> People really like you. They seem like they really care about you too and you’re part of the family now … you’re not just here to do your job, you’re here to actually make a change.… I guess that’s where Fitzroy has got stepped over a lot of the time. People came in, yeah, “we are here to help you” but they’re actually here to help themselves … that’s where you really worked to get everyone’s trust. (PC14)

While this statement was directed at the first author, it reflects the extensive time spent by the entire team engaging the community and building on the foundations of the MECC to support development of close relationships with community members. This effort was clearly appreciated by those involved in the research process: “Sometimes trainers just come and go, and everyone is left wondering with a question mark, you know? But you’ve been there right through unhappiness” (PC16); “You got a lot more embedded in community … I think that you’ve made, as a researcher, a lot more effort because being a small town to genuinely get to know the community and build those relationships. So that’s been really nice” (PC20); and “No, you [al]right, you was [al]right. You didn’t … you know, going and taking off, but you still be coming back you know?” (PC7). Embedding oneself as a researcher in the community created opportunities for open conversations about community context, research experiences past and present, ensuring sensitivity to the community dynamics.

Identify relevant cultural traditions, values and beliefs. Survey Q9 addressed the importance of including cultural stories in the intervention. The high mean scores indicate that both parent coaches and families found these efforts to address cultural aspects were effective and added to the strength of the intervention within their communities. When speaking about what community strengths and traditions were relevant and valuable to add to the intervention to make it more appropriate for families, one carer (C2) agreed with the need for culture to be integrated into the program and the implementation process, stating: “I agree with [including] the community’s knowledge, yeah, would make a better program.” The sensitivity required to address the impact of traumatic histories on parenting today, and the necessity of having local Indigenous parent coaches was acknowledged: “We are actually getting trained up to run the course itself, then we know what to say and what not to say” (PC14).

Collaborative adaptation. Key adaptations resulting from community consultation and engagement made collaboratively by the program developers, trainers, researchers and parent coaches are detailed in Andersson et al. (2019). These adaptations included: (a) “two ways of knowing” training, with one non-Indigenous trainer and an Indigenous implementation consultant; (b) program delivery with a local parent coach present at all times; (c) additional, ongoing parent coach support for program implementation by an experienced Triple P practitioner that also allowed for feedback to refine adaptations; (d) additional support to understand the effects of trauma on parent and child behaviour and deliver programs in a trauma-focused way; (e) family engagement conducted in community-led, culturally appropriate ways; (f) parent resources collaboratively developed with an adjusted reading level and pictorial prompts; (g) inclusion of intuitive practice, cultural stories and traditional ways in parent coaches’ discussions, modelling or role playing; (h) provision of an additional parent resource package (i.e. stationery and stickers) to support families unable to afford these to follow through on strategies learned; (i) adapted evaluation measures for contextual fit; (j) evaluation using a culturally appropriate “yarning” or

story-telling method to increase validity and decrease the disengagement that can occur when similar questions are asked in different ways (as in many standardised survey instruments).

The high mean scores on survey Q1 indicate overall satisfaction with the way the parenting program and evaluation research were developed and introduced in collaborative partnership with the community. This is also supported by the low mean scores on Q10, which indicate that both parent coaches and families felt the project was mutually beneficial, rather than simply to allow researchers to get what they needed for the sake of a research project.

Reflections on training and peer support affirm the adaptations were effective. PC16 said, “We help each other. We are good support for each other”; and PC22 said, “It was good to have the peer groups to solidify that time to practice and support each other because it’s not just me, it’s supporting everyone that was in the group.” When speaking about the way in which family engagement was adapted, AG1 stated: “Well, you can only plant the seed and they can run with it from there, you know”; and PC6 said: “Don’t talk about it as a program. Don’t talk about it as we are going to come into your house and change everything, because you just gotta start planting the seeds in the parents’ heads.” Jandu Yani U branded shirts were well recognised as part of family support throughout the Fitzroy Valley. One interaction between a researcher and a small child in community affirmed the impact of the shirts when she answered a question with: “It’s your shirt miss, it’s a safe space.”

Implementation. High scores on survey Q12 indicated satisfaction with the locations where the programs were offered (e.g. child and family centres, communal kitchen areas, family homes); and low scores on survey Q14 indicated satisfaction with the way the program was delivered. The high scores on survey Q13 indicated satisfaction with the outcome assessments and how data were collected; however, the mid-range mean score on survey Q8 indicated some ambivalence about whether there was too much data collection, as most answered “disagree” or “don’t know”. The adapted parenting program itself and the tailored training process for parent coaches were well received:

> I highly valued the training … it was all broken down really well and just, yeah, a lot of really good, simple tools that anybody at any stage could use, whether it’s praising your child, using quiet time appropriately.… You guys did a really good job of making sure there was a platform for everyone to have. I suppose a whole training isn’t about telling people what to do, it’s giving them an opportunity to come up with their own ideas and even training itself was like that, it was very invitational. (PC17)

Ecological fit. Surveys Q3 and Q5 spoke to the fit of Triple P within the culture and community. The high scores indicate that the adapted program content and implementation methods were culturally acceptable to both the parent coaches and families. Survey Q15 also showed high ratings of the effectiveness of the intervention for the community. The ecological fit of the locally adapted program and group implementation process was supported by many in qualitative interviews; for example, “Being with people and talking about it. Not talking over the phone or through the email. Sitting down with people and talking” (PC16).

Results dissemination approval. The process of disseminating results was not included in the initial MECC model. However, due to the strength of community feedback on this process (and additional feedback through consultation with American and Canadian Indigenous peoples), it was added later, reflecting the importance of ongoing circular feedback from the community in shaping both the model of engagement and this project. Due to this initial omission, questions about dissemination practices were not included in the present survey. However, qualitative data from

the interviews and focus groups captured the importance of this construct. For example, PC14 spoke passionately about disseminating the results to community appropriately:

> You can go and trap animals and tag them and let them go and so be it. You'll never see that animal again, but it needs to be different. You've got to come back every year and face these people. If you're just ticking boxes and punching out numbers, people feel that too and they won't be so receptive and open to what you're trying to do as well.

Community responses to using the MECC approach to research were very positive. PC8 effectively summed up what many others were saying:

> Well, I think that it's just so magic that you've done it this way, getting all of the local people trained and getting them on board.… What I've loved most about this research is the transparency.… You have been so upfront about every little step of the way. There's no guessing on what they're doing or why they're doing this.

The positive response to the research approach guided by the MECC was reiterated by many in the community and led to the development of a Partnership Agreement document template for future use by MWRC based on the principles and checklists of the MECC. Community members have also been involved as authors in all scientific publications and presentations to disseminate the findings and implications of this work.

Discussion

Overall, the engagement, consultative and collaborative research process we utilised in accordance with the MECC was positively received by parent coaches, families and project advisors, and ensured that power dynamics remained equal throughout the project. We confirmed the hypothesis that advisory group members and parent coaches involved in the research process, and families receiving the parenting program, would report high rates of satisfaction with the MECC processes. Nevertheless, research in a remote community has particular challenges.

One key challenge is the cost and time involved in initial partnership development, consultation, collaboration, engagement and adaptation process, which is not accounted for by funding bodies. However, it can be argued that failure to make these connections and adaptations has perpetuated health disparities and costs more in the long run. Particularly, the harm of damage-centred research on communities or perpetuation of trauma when outsiders aim to apply universalist interventions that are culturally misaligned (Tuck, 2009) is a significant cost on communities and unethical. It should be noted that upon receipt of project funds, the community organisation (MWRC) chose to spend a large amount of their share of the funding to ensure thorough consultation and documentation of the process. This commitment of the community partner to the documentation of the process led to the above-mentioned co-development of the Partnership Agreement based on the MECC principles for future use with researchers, demonstrating the importance of research and its embedded processes to be done in a good and responsive way to what is appropriate in each community. This also exposes the need for ethical research with Indigenous communities to ensure appropriate resources are devoted to engagement, collaboration, recruitment, implementation support and sustainability of new interventions, so that the needs of vulnerable families are met.

Another key concern about research with Indigenous communities is that it must meet the needs and priorities of communities rather than those of funders and academics. The ultimate aim is to build both research and service delivery capacity within community. Research studies led by

academic institutions in collaboration with community partners can provide evidence of practical approaches to increase the effectiveness of both community engagement and implementation. However, our support of efforts led by community organisations are much more informative for our understanding of what works in particular settings. Even using a process of extensive consultation, engagement and collaboration in line with the MECC, our survey's reverse loaded questions were poorly received by most families and community navigators, for whom English is their third, fourth or fifth language. This may have affected the ways in which these three questions were answered. Also, we observed that the level of English literacy for families was generally much lower than that of the parent coaches. It has been reported that negatively worded or reverse anchored questions can greatly affect the results of any surveys for people with low English literacy. The nuances of item wording should be taken into account when developing surveys for these populations.

Moreover, research conducted with remote Indigenous communities often results in problems with scientific rigour and difficulty adhering to research protocols, university policies and funding requirements in the context of limited time and resources. The key strength of this research is that it stemmed from a local community initiative and followed the MECC processes, allowing the community-researcher partnership to balance the partners' different needs and perspectives while focusing on the common agenda of serving the community. The MECC processes should be used to guide adherence to the NHMRC guidelines for research with Aboriginal and Torres Strait Islander Peoples (Harfield et al., 2020).

Overall, our evaluation suggests that implementation of this community-led parenting program will provide short- and long-term benefits to the community, through the delivery of culturally appropriate positive parenting skills and behaviour management strategies, capacity building of local community health and family support workers, and positive experiences of this research approach. Beyond the potential benefits to parents and families in the Fitzroy Valley, the community-led evaluation has built capacity within the community members who were co-researchers, increasing their knowledge of positive ways of working with researchers or outside service providers to conduct research and implement programs, and to evaluate their own community initiatives. This work also supported the community to advocate for and secure further funding to maintain programming for families throughout the Fitzroy Valley. The Partnership Agreement that was developed for MWRC will make this positive way of working much more visible and practical for the project host organisation in future endeavours.

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[1] 'Aboriginal' is the community's preferred terminology when referring to Australian First Nations People in the Fitzroy Valley in the very remote Kimberley region of Western Australia where this study was conducted. When acknowledging First Nations people globally, the term Indigenous will be used.