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WHAKAPAPA AS A TE AO MĀORI–CENTRED ECONOMIC EPISTO-METHODOLOGY

*Georgia McLellan**
Emma Sharp†
Kiri Dell‡
Nicolas Lewis§
John Reid‖

Abstract

Māori economies have unique foundations, which differ fundamentally from Eurocentric economies, making it difficult to identify appropriate epistemological and methodological approaches to understanding them. Critical Māori economies scholars emphasise the importance of whakapapa-based approaches to understanding Māori economies. In this article, whakapapa is conceptualised as a way of both knowing (epistemology) and coming to know (methodology) Māori economies. It introduces a whakapapa-based episto-methodological framework based on four key tenets—dimensionality, relationality, obligations, and multi-temporality—to understand Māori economies from a te ao Māori perspective. The article then outlines how the use of this whakapapa-based framework can lead to decolonised economic possibilities and add value to Māori livelihoods by enabling inclusive economic decision-making, re-establishing unseen economic dimensions and recognising relations as central to Māori economies.

Keywords

Māori economies, whakapapa, epistemology, methodology, decolonisation

Introduction

The notion of the Māori economy was popularised in the late 20th century following a notable increase in the Māori asset base in Aotearoa New Zealand. Media and policy documents commonly refer to the Māori economy as the asset base of iwi (Tau & Rout, 2018). Today, this asset base is estimated at around NZ$126 billion (Schulze et al., 2024), up from NZ$68.7 billion in 2018 (Nana et al., 2021), and NZ$36.9 billion in 2010

* Whakatōhea, Ngāi Te Rangi. Lecturer, AUT Business School, Auckland University of Technology, Auckland, New Zealand. Email: Georgia.mclellan@aut.ac.nz
† Associate Professor, School of Environment, The University of Auckland, Auckland, New Zealand.
‡ Ngāti Porou. Senior Lecturer, Management and International Business, The University of Auckland, Auckland, New Zealand.
§ Professor, School of Environment, The University of Auckland, Auckland, New Zealand.
‖ Ngāti Pikiao. Professor, Ngāi Tahu Research Centre, Christchurch, New Zealand.

(Nana et al., 2011). Such a measure captures the significance of Māori asset holdings relative to national assets. However, purely financial measures inflict epistemic violence on both financial and non-financial Māori economic activity. Moreover, the notion of a singular Māori economy fails to recognise the diversity of economic practices enacted by Māori historically and today. This article examines these critiques in a reframing of Māori economies.

The critical Māori economies scholarship questions the notion that Māori economies can be understood purely through a Eurocentric lens, making two key related arguments: (a) Māori had their own economies well before European contact (Henare, 2014), thus their own economic understandings based on a te ao Māori worldview; and (b) Māori economies differ fundamentally from Eurocentric economies in terms of their organisation, practices, and motivations. Consequently, Māori scholars have called for policymakers and iwi leaders to approach Māori economies in a way that reflects te ao Māori rather than capitalist practices (Amoamo et al., 2018; Bargh, 2011, 2012; Dell et al., 2018), which are based on private enterprise and property, exploitation, extraction, waged labour, commodity production, and institutional finance (Gibson-Graham & Dombroski, 2020). This article proposes that whakapapa, a foundational concept in te ao Māori, may be used to examine and understand Māori economies from a Māori perspective and create decolonised economic possibilities in Aotearoa. The article borrows from Scobie and Sturman's (2024) definition of decolonisation as "dismantling unjust colonial structures, reimagining and reconstructing Indigenous lifeways (ways of meeting physical, spiritual and social needs), and establishing just relationships among peoples of Aotearoa into the future" (p. 8).

This article is drawn from the lead author's doctoral thesis, which explores whakapapa as a tool for decolonising Māori economies and uses Whakatōhea kuku economies as a case study (McLellan, 2025). The lead author is of Whakatōhea and Ngāi Te Rangi descent; however, she grew up firmly grounded in te ao Pākehā, disconnected from her Māori whakapapa. Her doctoral research was a means of reconnecting with her Whakatōhea whakapapa and learning more about te ao Māori. The lead author holds whakapapa connections to her research participants—people of Whakatōhea descent as well as the kuku, whom Whakatōhea view as one of ngā tamahine a te Whakatōhea, or "the daughters of Whakatōhea". The co-authors of this article are the lead author's doctoral supervisors and have expertise in Māori economies, political economy, geography, and food sovereignty.

Whakatōhea is an iwi comprising six hapū situated in the Bay of Plenty in the North Island of Aotearoa. Whakatōhea have a long-standing relationship with kuku, which provide them with an essential source of protein and are a useful rongoā (Lyall, 1979; McLellan, 2020; R. Walker, 2007). Whakatōhea people consider kuku a taonga because they enhance their intellectual, physical, and spiritual wellbeing (Whakatōhea Iwi, 1993). Kuku have always been an important part of traditional trade relations for Whakatōhea. For example, prior to European contact, Whakatōhea people traded kuku with inland Māori groups, who were unable to access coastal resources (R. Walker, 2007).

The recent engagement of Whakatōhea in commercial aquaculture has led to a change in their relations with the kuku. In the late 20th century, in recognition of the importance of the Aotearoa kuku industry, Whakatōhea kaumātua shared their aspirations for a kuku aquaculture venture to generate a livelihood for their iwi. This aspiration has recently materialised with a fully operational aquaculture farm and kuku processing factory in Ōpōtiki. Te Tāwharau o te Whakatōhea, the mandated iwi organisation of Whakatōhea, owns the aquaculture farm space and 7.38% of Whakatōhea Mussels Ōpōtiki Ltd, the company that operates the farm and processing factory (McLellan, 2025; New Zealand Companies Office, 2024).

This article begins by outlining a whakapapa-based episto-methodological framework that may be used to examine and understand Māori economies from a te ao Māori perspective. This framework is based on four key tenets drawn from the whakapapa literature: dimensionality, relationality, obligations, and multi-temporality. The article then outlines how using the framework to practise Māori economies from a te ao Māori perspective may generate decolonised economic possibilities. Many of the grounded examples in this article are based on the lead author's doctoral research.

A whakapapa framework for understanding and examining Māori economies

Whakapapa is commonly viewed as physical genealogical connections; however, Mikaere (2011) argues that it is better understood in practice as the

lens through which Māori view the world, where all phenomena that have ever existed and ever will exist are connected. Whakapapa can serve as both a methodology or "a theory and analysis of how research does or should proceed" and an epistemology, "a theory of knowledge" (Harding, 1987, p. 3). The use of whakapapa as a methodology, or theory of analysis, is not new (Graham, 2005; Mahuika, 2019; Royal, 1998). Royal (1998) asserts that whakapapa is a methodological tool used by Māori to understand phenomena, including their nature and origin, connections to other phenomena, and their future relations. As an epistemology, whakapapa deals with questions such as "Who can know?", "What can be known?", and "What is knowledge?" (Harding, 1987). Tau (1999) claims that, for Māori, the world is ordered by and understood through whakapapa, which acts as "the skeletal structure to Māori epistemology" (p. 13). In this way, whakapapa is not knowledge itself but provides a structure within which to situate knowledge. Whakapapa is all-encompassing because it connects all things and people that have ever existed and will ever exist (Roberts, 2013; Roberts & Wills, 1998).

A whakapapa episto-methodology is appropriate for acquiring knowledge about Māori economies from a te ao Māori perspective. When applied to the examination of Māori economies, whakapapa asks questions useful for their examination, such as "Who are the economic actors?", "Who has economic agency?", and "How is economic agency enacted?" It also insists on a particular form of place-based relationality grounded in genealogy and Māori worlds. A whakapapa lens is also useful for uncovering, analysing and representing Māori economic worlds that are often hidden when examined using Eurocentric epistemological or methodological frameworks.

The whakapapa-based episto-methodological framework presented in the following section was inspired by the literature on whakapapa, particularly the book chapter by Painting and Burgess (2020), who argue that whakapapa is the basis for Māori ways of being, knowing, doing, and futuring. The following sections present the notions of dimensionality, relationality, obligations, and multi-temporality respectively as the foundational tenets of a te ao Māori-centred economic episto-methodology.

Dimensionality

Viewed through a whakapapa lens, Māori economies comprise multiple dimensions of practices and relations that contribute to Māori livelihoods. The word "whakapapa" consists of the root "papa", which translates to "base", "foundation" or "layer" (Painting & Burgess, 2020), and "whaka", which translates to "becoming" (Yates, 2018). Thus, "whakapapa" can be thought of as "placing in layers" (e.g., generations layered one on top of another). Many scholars have discussed whakapapa as a performative process of layering (Barber, 2020; Edwards, 2009; Forster, 2019; Mahuika, 2019; Mika, 2013, 2014, 2015; Mikaere, 2011; Ngata, 1944; Nicholson, 2020; Roberts, 2013; Roberts et al., 2004; Te Rito, 2007; Yates, 2018). For example, Barber (2020) states that "whakapapa expresses a horizontal interrelation of all things, as well as their intergenerational layering" (p. 47). However, the terms *layering* or *layers* imply a flatness that fails to reflect the multi-dimensional nature of whakapapa, which maps the Māori world over multiple times, places and species. Therefore, rather than working with the idea of layering, this article understands whakapapa as *multi-dimensional*.

Understanding Māori economies as multi-dimensional enables the uncovering and examining of the multiple dimensions that make up these economies. There are synergies between this multi-dimensional view of Māori economies and critical perspectives from the Māori economies literature, which see Māori economies as made up of all the practices and relations involved in stewarding Māori and kin livelihoods (Amoamo et al., 2018; Dell et al., 2018; Scobie & Sturman, 2024). These combined perspectives create a powerful reimagining of Māori economies as made up of multiple dimensions of practices and relations that generate Māori and kin livelihoods. Māori economies as practices and relations materialise in a myriad of different ways, and therefore there are multiple Māori economies (Amoamo et al., 2018; Scobie & Sturman, 2024; W. Walker, 2020).

Kaitiakitanga, defined as "the obligation, arising from the kin relationship to nurture or care for a person or thing" (Forster, 2019, p. 3), is an important dimension of Māori economies. Kaitiakitanga is often misrepresented as the one-way guardianship and stewardship of the environment by humans; however, Hutchings et al. (2020) argue that it involves a reciprocal relationship between Māori and their "more-than-human" kin. The phrase "more-than-human" refers to non-human beings and emphasises their power and capacities (Rogers et al., 2013). Kaitiakitanga rarely generates financial value but contributes significantly to Māori livelihoods in

other ways. Removing invasive predators from a shellfish bed, for example, not only enhances the mauri of the shellfish but also provides current and future whānau with better access to kaimoana.

Kaitiakitanga is a key dimension of Whakatōhea kuku economies. Whakatōhea enact kaitiakitanga to maintain the mauri of kuku; tend to their physical, spiritual and intellectual wellbeing; and ensure that high-quality kuku are passed on to future generations (Whakatōhea Iwi, 1993, p. 9). What makes kaitiakitanga so important for Whakatōhea kuku economies is that the wellbeing of Whakatōhea taonga reflects the wellbeing of Whakatōhea people and vice versa (Whakatōhea Iwi, 1993). If the wellbeing of Whakatōhea kuku is diminished, then the wellbeing of Whakatōhea people will also diminish. Whakatōhea people are obligated to carry out kaitiakitanga to enhance the mauri of the kuku but also themselves and their mokopuna (McLellan, 2025). Māori economies are made up of a number of dimensions of relations and practices that contribute to Māori lifeways.

Relationality

Through a whakapapa lens, Māori economies can be understood as infinitely and inextricably connected and in relation. Painting and Burgess (2020) argue that whakapapa illustrates the relationality between all things and is essentially a theory of everything. Through a whakapapa lens, "isolation is a fallacy" and "everything in existence is infinitely and complexly in relation all the time" (Painting & Burgess, 2020, p. 210). Relationality allows individuals to make sense of the world and their place in it (Painting & Burgess, 2020). Barlow (1994) suggests that this relationality is inclusive of all phenomena, where all past, present, and future human and more-than-human beings relate to each other through whakapapa. We elaborate further on the multi-temporality of whakapapa in a subsequent section. Yates (2021) suggests that whakapapa relationalities are non-hierarchical, and humans are no more or less animate than more-than-human beings. The notion of animacy, defined as the state of being alive and having spirit (Lorimer & Hodgetts, 2024), reflects Indigenous ontologies, including whakapapa, which often paint all human and more-than-human beings as animate (Hoskins & Jones, 2017; Kimmerer, 2013; Painting & Burgess, 2020; Yates, 2021). Understanding Māori economies as interconnected and relational helps reveal the key relations that are foundational to Māori livelihoods and therefore their economies.

There are strong and binding relations between Whakatōhea people and kuku. The people of Whakatōhea have existed in reciprocal relation with kuku for centuries. This connection originates in their relations with Ranginui and Papatūānuku, whose lines of descent pass through Tāwhaki, Wekanui, and Muriwai, eponymous ancestors of Whakatōhea (Whakatōhea Iwi, 1993). Whakatōhea also have long-standing practice-based relations with kuku, having gathered and protected them for centuries. The people of Whakatōhea consider kuku alive and with spirit and aspire to treat them in the same way that they treat people (McLellan, 2025).

The Whakatōhea aquaculture venture has fundamentally changed the relations between the Whakatōhea people and kuku because the former now extract financial value from the latter. In some ways, the venture has improved these relations because Whakatōhea people who are unable to gather wild kuku now have access to farmed kuku. The venture has also meant that some Whakatōhea people have been able to move back to the region and live in closer relation with whānau—both people and kuku. However, the people of Whakatōhea have raised concerns about how to balance their long-term relations with kuku against the infrastructural and environmental changes brought by the aquaculture industry (McLellan, 2025). The development of the new Ōpōtiki Harbour, for example, involved significant changes to both land and sea, including the dredging of a new channel, the construction of two new seawalls, and the closure of the old harbour entrance (Ōpōtiki District Council, 2023), altering spatial relations, access to place, and the sense of connection and history to those places and spaces. The emerging aquaculture industry in Ōpōtiki has the potential to cause environmental damage and adversely affect wild kuku beds because of contamination from the new marina and the increased number of boats (McLellan, 2020, 2025). Therefore, it is of utmost importance that the Whakatōhea people ensure a balance between meeting the financial goals of the aquaculture venture and maintaining healthy relations with both wild and farmed kuku. Extracting financial value from kuku grown and processed in the region remains secondary to Whakatōhea people's desire to maintain healthy reciprocal relations with wild kuku stocks (McLellan, 2025). Through a whakapapa lens, Māori economies are inherently interconnected, and certain relations, such as those between tangata and whenua, are fundamental to Māori lifeways.

Obligations

In Māori economies, whakapapa-based relations incur a particular set of obligations that ultimately change behaviours (Forster, 2019). For example, Māori are obligated to make decisions and take actions that maintain positive relations with kin, including mokopuna and tīpuna (Painting & Burgess, 2020). Scobie et al. (2023) suggest that part of what emphasises whakapapa-based obligations is the collapsing of time that whakapapa infers. Whakapapa-based time collapses "intergenerational obligations into a present accountability" and therefore "contemporary decision-making carries obligations from ancestors to future generations" (Scobie et al., 2023, p. 13). Painting and Burgess (2020) propose that one way that Māori can "collapse time" and learn about their obligations is by seeing through the eyes of their mokopuna and tīpuna, enabling them to see how mokopuna futures are shaped by current actions. This urges Māori to take actions that create healthy relations with past and future generations and fulfil their whakapapa-based obligations to them. In "looking with" their tīpuna, Māori can learn about their aspirations and concerns for mokopuna (Painting & Burgess, 2020). Current generations can look to their past and future generations of human and more-than-human kin for guidance on their obligations.

Liboiron (2021) proposes that when it comes to relations between humans and their more-than-human kin, "different relations make different obligations" and that "some relations matter more than others" (pp. 137–138). Although it is not discussed in the context of te ao Māori, Liboiron's understanding of obligations may be applied to contemporary Māori contexts, where many Māori do not live on their ancestral whenua surrounded by their human and more-than-human relations, to identify relations that matter more than others. The lead author, for example, has connections to Ngāi Te Rangi, and her ancestral maunga in Mount Maunganui is Mauao. Therefore, her relationship with Mauao differs from her relationship with Maungawhau, the maunga nearest to her current home in Tāmaki Makaurau. While she has a responsibility to respect and care for Maungawhau as part of te taiao and her local residential area, she has a whakapapa-based obligation to respect and care for Mauao because it is her tīpuna.

Understanding that all relations entail a specific set of obligations and that some relations matter more than others helps to reveal the key obligations in Māori economies. From a whakapapa perspective, obligations between Whakatōhea people and kuku are fundamental to Whakatōhea kuku economies. Both Whakatōhea people and kuku are obliged to enhance each other's well-being through reciprocal relations grounded in whakapapa. The mauri of kuku depends on the mauri of Whakatōhea people and vice versa. If Whakatōhea people work to uplift the mauri of kuku by carrying out their kaitiakitanga obligations, kuku will uplift the mauri of Whakatōhea, such as by providing them with a healthy source of protein or fertiliser for their gardens. It is of utmost importance to Whakatōhea kuku economies that these obligations and healthy relations are maintained alongside the emerging financial aquaculture venture. The people of Whakatōhea seek to exist in healthy relation with both wild and farmed kuku and balance their obligations to kuku with the financial goals of the aquaculture venture (McLellan, 2025). Through a whakapapa lens, Māori economies are underpinned by healthy obligations between Māori groups and their kin.

Multi-temporality

Through a whakapapa lens, Māori economies are multi-temporal—that is, they exist across multiple times. Te ao Māori conceptualisations of time are based on whakapapa (Lo & Houkamau, 2012; Painting & Burgess, 2020). Whakapapa-based time is circular, relational, and linked to events, their meanings, and their relations to other events (King et al., 2023; Lo & Houkamau, 2012). Mikaere (2011) argues that in whakapapa-based conceptualisations of time, there is no distinction between past, present, and future. King et al. (2023) refer to this converging of the past, present, and future as "pūtahi", meaning "intersection". In contrast to linear conceptualisations of time, which can create a sometimes painful separation between the living and non-living, these circular conceptualisations of time allow Māori to remain intimately connected to past and future relations (King et al., 2023; Painting & Burgess, 2020). Painting and Burgess (2020) suggest that conceptualising time in this way creates a deep connection between past, present, and future generations because ancestors and descendants can be seen, heard, and felt in the present. The multi-temporal nature of whakapapa-based time decentres the present and elevates the importance of past and future relations and phenomena (Lo & Houkamau, 2012; Painting & Burgess, 2020).

Painting and Burgess (2020) propose that by decentring the present, whakapapa can act as a key to seeing and shaping the future. Just as whakapapa holds the knowledge of the origin

of all living things and the relationships between them, it also holds knowledge about the future of all living things and their relations. Whakapapa connects the past to the future by linking tīpuna and mokopuna, which are reflections of tīpuna. This means that the more connected Māori are to their tīpuna, the more connected they are to their living mokopuna and those who have not yet been born (Painting & Burgess, 2020).

Understanding Māori economies as multi-temporal assists in the understanding of important practices and relations within these economies. Obligations, for example, are an important multi-temporal practice in Whakatōhea kuku economies. Whakatōhea people have always held whakapapa-based reciprocal obligations to past, present, and future human and more-than-human kin. Practising kaitiakitanga is vital to how Whakatōhea people have carried out these obligations over time. Whakatōhea tīpuna, for example, practised kaitiakitanga at wild kuku rocks in the Whakatōhea region. This simple act had multiple implications because it fulfilled their obligations not only to kuku but also to their tīpuna and mokopuna, who also carried out (or will hope to carry out) these practices in the same location. In practising kaitiakitanga, Whakatōhea people are inherently decentring the present to exist in positive relation with both their tīpuna and mokopuna and their more-than-human kin (McLellan, 2025). Māori economies consist of a myriad of intersecting, multi-temporal relations and practices that produce livelihoods in important ways.

A whakapapa-based episto-methodological framework

The theorisation or conceptualisation of whakapapa as an episto-methodology may be seen as somewhat divorced from the common practice of whakapapa, which for centuries has been practised as an oral tradition, kept alive through socialisation among whānau. One such example is whānau events where people discuss their genealogical ancestry. This article does not attempt to take away from the common understandings and (re)invigoration of whakapapa. Rather, it attempts to apply whakapapa concepts to contemporary scholarly and political pursuits to enhance Māori self-determination and the application of mātauranga Māori. It is critical that whakapapa, as a vital Māori lens, continues

TABLE 1 Whakapapa-based episto-methodological framework for Māori economies

Tenet	Epistemology	Methodology	Grounded Example from Whakatōhea Kuku Economies
Dimensionality	Māori economies comprise multiple dimensions of practices and relations that contribute to Māori livelihoods.	Exploration of the multiple practices and relations that contribute to Māori lifeways.	Kaitiakitanga is an important and often overlooked dimension of Whakatōhea kuku economies, which produces high livelihood value.
Relationality	Māori economies are interconnected and relational.	Exploration of the key relations involved in generating Māori lifeways.	Healthy relations between Whakatōhea people and kuku are paramount to Whakatōhea lifeways. Whakatōhea people seek to balance these relations alongside the emerging kuku industry.
Obligations	There are obligations associated with the relations involved in Māori economies.	Examination of the key obligations involved in Māori economies.	Healthy reciprocal obligations between Whakatōhea people and kuku are fundamental to Whakatōhea kuku economies.
Multi-temporality	Māori economies are multi-temporal—they exist across multiple times at any given moment.	Identification of past, present, and future practices and relations that are important to Māori economies.	Obligations are an important multi-temporal practice in Whakatōhea kuku economies. Practising kaitiakitanga fulfils obligations across multiple temporalities.

to be conceptually applied in ways that enhance Māori self-determination, including towards decolonising Māori economies.

Whakapapa serves as an effective episto-methodological framework for understanding and examining Māori economies in a te ao Māori way. Table 1 summarises the four key tenets of the whakapapa-based episto-methodological framework, showing how each may be applied both epistemologically to understand Māori economies and methodologically to acquire knowledge of Māori economies. Importantly, these delineations should be viewed as interrelating and mutually reinforcing rather than exclusive. The table also provides grounded examples from Whakatōhea kuku economies.

Decolonising economic possibilities through whakapapa

Understanding and practising Māori economies in a way that is guided by the whakapapa-based framework discussed above can generate decolonised economic possibilities. This section outlines three key ways in which the whakapapa-based framework may work to dismantle unjust colonial structures and reconstruct Indigenous lifeways (Scobie & Sturman, 2024) through three key mechanisms: (a) enabling inclusive economic decision-making, (b) re-establishing unseen economic dimensions, and (c) recognising relations as central to Māori economies.

Enabling inclusive economic decision-making

Understanding and practising Māori economies through the lens of the whakapapa-based framework enables inclusive economic decision-making that can lead to decolonised economic possibilities. Through a whakapapa lens, Māori economies are inherently multi-temporal, where practices, value flows, relationships, and obligations intersect across multiple temporalities. The circularity of time implied by whakapapa means that tīpuna and mokopuna are animate stakeholders in current economies. Whakapapa-based thinking enables current Māori generations to understand Māori economies, alongside our tīpuna and mokopuna. This economic agency extends to more-than-human kin, who are no more or less animate than humans and therefore also key stakeholders in Māori economies. Through a whakapapa lens, the lives, aspirations, practices, and relations of past, present, and future human and more-than-human kin are relevant to contemporary economies. Whakapapa positions tīpuna, mokopuna, and more-than-human kin as key stakeholders in contemporary economies, and thus in economic decision-making.

Including mokopuna, tīpuna, and more-than-human kin as key stakeholders and decision-makers in contemporary Māori economies contributes variously to Māori lifeways. It directly adds value to the livelihoods of mokopuna, tīpuna, and more-than-human beings because their wants, needs, aspirations, practices, and relations are centred in current economic decision-making. It also adds value to current Māori livelihoods because, through whakapapa, current generations live in symbiotic relation with past and future ones. Uplifting the wellbeing of Whakatōhea tīpuna and mokopuna, for example, inherently uplifts the wellbeing of currently living Whakatōhea people (McLellan, 2025). Crucially, this means that economic decisions are informed by collective, intergenerational, and interspecies knowledge. When Māori include the knowledge and aspirations of more-than-human kin, tamariki, mokopuna, and tīpuna within their contemporary economic decision-making, they can draw from a wide knowledge base, leading to just decision-making for all. Grounding economies in the whakapapa-based framework outlined above has the potential to enhance Māori lifeways because it includes past, present, and future relations in economic decision-making processes.

Re-establishing unseen economic dimensions

Understanding and practising economies in a way that is guided by the whakapapa-based framework can enable Māori to re-establish unseen economic dimensions and produce decolonised economic possibilities. The whakapapa framework understands Māori economies as made up of various dimensions of practices and relations that produce Māori livelihoods and enables the uncovering of these dimensions. This framework can be used to identify and resource specific economic dimensions that might otherwise remain unseen through a Eurocentric lens, such as the non-financial dimensions of Māori economies.

Much of the livelihood value within Whakatōhea kuku economies is generated from non-financial practices. The acts of stewarding and eating wild kuku abundantly enhances Whakatōhea livelihoods in ways that purchasing kuku from capitalist markets does not. Gathering wild kuku enhances the physical, spiritual, and intellectual wellbeing of Whakatōhea people. This kind of wealth is immeasurable, reconnecting the people of Whakatōhea with one another, kuku, and

Tangaroa (McLellan, 2025). From a Eurocentric perspective, wild kuku stocks are located outside of Whakatōhea kuku economies, but from a whakapapa perspective, they are central to these economies. Through making visible the various practices and relations that contribute to Māori lifeways, the whakapapa framework can also enable inclusive and generative resource allocation for enhancing Māori livelihoods. For example, investing in Whakatōhea kuku economies might mean enabling more Whakatōhea whānau to gather and protect wild kuku in the region. Investing in livelihoods within Whakatōhea kuku economies in a way that is guided by the whakapapa framework laid out above means resourcing all financial and non-financial practices that contribute to the lifeways of kuku and the people of Whakatōhea.

Using the whakapapa framework to guide economies may help to re-establish Māori lifeways by revealing the diversity of practices and relations that enhance Māori livelihoods and shifting away from the predominantly Eurocentric perspective that economies are purely financial. Economic activities that bring only financial benefits to Māori ignore the diversity of practices and relations that contribute to Māori livelihoods, while whakapapa-based thinking enables te ao Māori–informed resourcing and investments.

Recognising relations as central to Māori economies

Practising economies in a way that is guided by the whakapapa-based framework enhances Māori lifeways through recognising relations as central to Māori economies. In whakapapa-based thinking, relationships are fundamental to Māori reality and economies; therefore, if Māori apply the whakapapa framework to their economies, they can acknowledge and protect these foundational relations. Further, whakapapa-based thinking can be used to decipher the relations that matter more than others in specific contexts. Whakatōhea kuku economies, for example, are dependent on the reciprocal relations between Whakatōhea people and kuku as well as other relations within the moana, such as those between Tangaroa and kuku (McLellan, 2025). Relations that are significant to Māori economies can include those between different groups of tangata whenua, between tangata whenua and their more-than-human kin, and between different groups of more-than-human beings.

Nurturing healthy people-to-people, nature-to-nature, and people-to-nature relations through economic activities will have compounding effects on the livelihoods of generations of human and more-than-human beings. For example, the more Whakatōhea people uplift the lifeways of kuku through kaitiakitanga, the more capacity kuku will have to uplift the livelihoods of Whakatōhea. As the livelihoods of both Whakatōhea people and kuku improve, they are able to pass additional benefits of this reciprocal relationship on to others. For example, Whakatōhea people will be able to share any surplus kuku they have gathered with elders. If kuku populations in the region are more abundant, there will be more available as food for fish. Further, as Whakatōhea people uplift the livelihoods of kuku, they are also inherently enhancing the livelihoods of their mokopuna by granting them greater access to wild kuku. Multi-temporal people-to nature, nature-to-nature, and people-to-people transactions exist in a relational state of compounding returns within Whakatōhea kuku economies because enhancing one set of relations will enhance the wellbeing of all (McLellan, 2020; Scobie et al., 2025).

Practising economies in a way that is guided by the whakapapa framework also means shifting away from practices that might harm whakapapa-based relations, such as forcing whānau off their whenua or generating pollution that hinders long-standing food-gathering practices. Through a whakapapa lens, practices that harm relations between tangata whenua and their kin are detrimental to the very foundation of Māori economies and therefore have no place within them.

Using the whakapapa framework to guide economic activities means recognising and upholding the whakapapa-based relations that are foundational to Māori economies. Whakapapa not only enables Māori to see economies as relational but uncovers the relations on which economies depend and teaches us how to decipher which relations matter more than others in specific contexts. Practising Māori economies in a way that acknowledges and protects these relations will enhance Māori livelihoods because it means prioritising healthy and reciprocal people-to-people, nature-to-nature, and people-to-nature relations.

Conclusion

A whakapapa lens incorporates time and relationality at multiple scales and anchors economic analysis in human and more-than-human genealogy, intergenerationality, and reciprocity. Whakapapa may be used to not only examine and understand grounded Māori economies from a te ao Māori perspective but also create decolonised economic possibilities.

This article introduced a whakapapa-based episto-methodological framework to examine and understand Māori economies and outlined how this framework can be used to enable decolonised economic futures. The framework is based on four tenets drawn from the academic literature: dimensionality, relationality, obligations, and multi-temporality. It has the potential to inform an Indigenous political project to decolonise Māori economies through three key mechanisms: enabling inclusive economic decision-making, re-establishing unseen economic dimensions, and recognising relations as central to Māori economies.

This article makes three key contributions. The first is the introduction of whakapapa as both a way of knowing (epistemology) and a way of coming to know (a methodology), or as an episto-methodology for examining and understanding Māori economies. The second is the introduction of a whakapapa-based episto-methodological framework as a novel approach for examining and understanding Māori economies from a whakapapa perspective, changing the way these economies are understood in a world dominated by Eurocentric economic ideas, which do not acknowledge economic practices or relations beyond the capitalist market. The development of this particular framework provides critical Māori economies scholars with a new tool for understanding Māori economies from a te ao Māori perspective. The final contribution is the introduction of a whakapapa-based framework to dismantle unjust colonial structures and re-establish Māori economies by enabling inclusive decision-making, re-establishing unseen economic dimensions, and recognising relationships as central to Māori economies.

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Glossary

Aotearoa	New Zealand
hapū	subtribe
iwi	tribe
kaimoana	seafood
kaitiakitanga	guardianship or stewardship
kaumātua	Māori elder/s
kuku	green-lipped mussel, *Perna canaliculus*
Māori	Indigenous peoples of Aotearoa
mātauranga Māori	Māori knowledge
Mauao	mountain in the Bay of Plenty
maunga	mountain
Maungawhau	mountain in Auckland
mauri	life force
moana	the ocean
mokopuna	descendant
Mount Maunganui	suburb of the city of Tauranga in the Bay of Plenty
Muriwai	eponymous ancestor of Whakatōhea
ngā tamahine a te Whakatōhea	the daughters of Whakatōhea
Ngāi Te Rangi	iwi based in Tauranga
Ōpōtiki	region in the Bay of Plenty
Papatūānuku	Earth Mother
pūtahi	intersection
Ranginui	Sky Father
rongoā	Māori medicine
Tāmaki Makaurau	Māori name for Auckland, the biggest city in Aotearoa
tamariki	children
Tangaroa	god of the ocean
tangata	people
tangata whenua	people of the land, Māori
taonga	treasured tangible or intangible phenomena
Tāwhaki	eponymous ancestor of Whakatōhea
te ao Māori	the Māori world or worldview
te ao Pākehā	the European world
te taiao	the natural environment
Te Tāwharau o te Whakatōhea	the mandated iwi organisation of Whakatōhea

tīpuna	ancestor
Wekanui	eponymous ancestor of Whakatōhea
whakapapa	genealogy; the Māori epistemology, which sees all as beings interconnected
Whakatōhea	iwi based in the eastern Bay of Plenty, centred around Ōpōtiki
whānau	family
whenua	land

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TE WAKA RANGAHAU

Navigating ethics in Indigenous research

*Joyce Manahi**

Abstract

Whakataukī are metaphors that provide us with ethical guidelines, and tikanga and kawa are the wisdom, knowledge and history handed down from the past to future generations to help people navigate their lives and support aspirations for today and the future. Using a twin-hulled waka ama as a metaphor for the relationship between participants and researchers in Indigenous research, this article explores Māori and Indigenous ethics as having equal status to Western research ethics. In relation to research, ethics can be a complicated domain when working alongside Māori and Indigenous peoples. There is much more at stake, such as whanaungatanga, mātauranga Māori, reciprocity and an equal exchange of power—all of which can be somewhat political. Researchers conducting Indigenous research must take the time to learn the epistemological understandings of Indigenous peoples and have a genuine desire to be culturally competent and grounded in cultural humility. Additionally, they need to be mindful of the inherent power imbalances that exist, and therefore tikanga and cross-cultural or multicultural considerations are a must.

Keywords

waka ama, ethics, Māori, Indigenous knowledge, mātauranga Māori

Introduction

> E kore au e ngaro, he kākano i ruiruia mai i Rangiātea.
>
> *I will never be lost; I am from the seed sown in Rangiātea.*

Whakataukī and pūrākau support the reader to understand the basis of tika and pono, the foundations of Māori ethics. This article highlights the importance of research ethics in all sectors when undertaking research with Māori and Indigenous peoples. Together we navigate the living taonga that is Indigenous knowledge—the strength and resilience that carry our stories, our whakapapa and our wairua into the research space.

Kovach (2009) defines "transformational practice" as a process where the researcher is not just a neutral observer—they are actively engaged in a reciprocal relationship with the data collected and the participants. I refer to this as "transflective

* Ngāti Porou. Professional Clinician, Institute of Education, College of Humanities and Social Sciences | Te Kura Pūkenga Tangata, Massey University, Palmerston North, New Zealand. Email: j.manahi@massey.ac.nz

practice" a combination of actions: being transformative, reflective, putting theory into action (praxis), and crystallising our actions in relation to Te Tiriti o Waitangi and any code of ethics we may work under. Additionally, being transflective is about altering a state of being, through a combination of conscientisation (G. H. Smith, 2000) and critical reflection, to make meaningful change for oneself and others. This article aims to show the parallel relationship between decision-making and ethical considerations when planning research involving Māori, Indigenous peoples and researchers, whilst taking into consideration Māori ethical values and practices. Moreover, it defines the nature of each of the ethical issues involved.

As Mead (2003) observes, "All [Māori] tikanga are underpinned by the high value placed upon manaakitanga and whanaungatanga — nurturing relationships" (p. 29). The Code of Ethics of Waka Ama New Zealand (2018) includes a set of values—whanaungatanga, manaakitanga, hauora and tū tangata—that are necessary for participants and spectators to demonstrate. Whilst hauora focuses on our holistic wellbeing, tū tangata emphasises standing tall and being proud of who we are, who we come with, how we are accountable for our actions. Participants should have respect for their waka and environment both on and off the water—mirroring the actions of all those involved with Indigenous research.

Methodology

Māori research capacity has enabled Māori researchers to lead research that is by, for and with Māori. This article has been developed using Kaupapa Māori theory (G. H. Smith, 1997; L. T. Smith, 2012), drawing on pūrākau as pedagogy and emphasising the processes that are necessary for researchers to follow when participating in research with Māori.

Incorporating personal reflections throughout the article, I first discuss ethics from a Māori ontology point of view. Secondly, the past, present and future of Indigenous research is pulled together through the use of pūrākau and whakataukī. The article develops an ethical framework using the metaphor of a waka ama, where two 6-seater waka—te waka whānau and te waka rangahau—are lashed together and move in unison. Particular attention is given to issues regarding permissions, informed consent, risk, harm and confidentiality, including intellectual property rights. Thirdly, the findings are discussed in relation to navigating the waters of Indigenous research ethics. Finally, concluding remarks are made, pulling together the key discussion points.

Results

Māori live by the concept of tuakana-teina; regardless of your age, you are both teacher and learner, elder and student. I am an Indigenous wahine in Aotearoa New Zealand and a descendant of the Ngāti Porou iwi situated on the East Coast of the North Island. The epistemology, axiology, ecology of iwi differ across Aotearoa—all iwi have their own ways of living, storytelling, symbols, and ways of healing and strengthening to restore balance. At the same time, we all understand the importance of mokopuna and are all focused on future generations and their place within a forever changing world.

Indigenous ontology is lived experience where one is immersed in the culture, land and environment. Pere, an elder, Māori leader, tohunga and teacher has said, "He atua he tangata; we are both divine and beautifully human. All of us is an eternal spirit having a physical journey" (Idec 2015, 2015). Archibald (2008) states that "elders have various knowledges or 'gifts' to pass on to others. These include knowledge about spirituality … history, storytelling, and language" (p. 372). She goes on to emphasise that the importance of becoming an elder is not about age; rather it is being respected by others and taking responsibility in the sharing of or teaching the knowledge. The teaching, learning and healing techniques, in my eyes, are simple, and they enable people to live in harmony and to have a relationship with the physical and spiritual world around them.

As noted above, for Indigenous peoples, life is about future generations: mokopuna. They are what we live for. To be a mokopuna of an iwi or hapū is to know the stories, the histories; to be immersed in the tribal ways of being that build capacity to make decisions in light of one's knowledge. Bowers (2010) notes that Indigenous epistemology is the ways of knowing, ontology is the way of being, and cosmology is the way of mapping complex realities, such as wairua. With understanding comes knowledge, and for this reason mokopuna are placed between the seats of the waka to start learning the tikanga of their environment. From there they watch, learn, listen, and, when the time is right, take action. When navigating the oceans rips, currents and tides that are our communities, research teams apply their transflective practice and sit alongside the mokopuna.

The lashed waka ama encompasses all those involved in the research project and their ethical

responsibilities. The waka on the right side represents the research team (te waka rangahau) and the one on the left side represents the participants (te waka whānau). Together they perform what a whakataukī of Ngāti Kahungunu calls "mahi tūhono"—the work that brings people together (Elkington et al., 2020, p. 142).

Each seat in the waka represents a specific ethical element. In Seat 1 of te waka whānau sits the kaumātua, also known as the pacemaker, corresponding to the research leader in the te waka rangahau. Seat 1 is the "wisdom keeper", experienced in navigating the waters of tribal epistemology, axiology and cosmology—ways of knowing, being and living. The attributes of an elder are qualities expected to be seen in a research leader tasked with overseeing Indigenous research and that of informed consent.

Seat 2 aligns with Te Tiriti o Waitangi, the founding document of Aotearoa, ensuring collaboration and a duty of care. Seats 3 and 4 are the "powerhouse team" and responsible for reducing risk, harm and any perceived conflicts of interest. Seat 5 enhances the empowerment and integrity of all involved in the research project, including whānau, hapū, iwi and the organisations being represented. Finally, Seat 6 is the steerer, ensuring the waka remains on course and represents the needs of the community. Each kaihoe has a hoe that moves and steers the waka. In this article, the hoe metaphorically represent tribal epistemology, axiology and cosmology (explained in more detail below).

Seat 1: The Pacemaker

> Let us build a canoe of the spirit and sail it with courage high into the ocean waters. May it so slice through the waves of injustice, hate, pride and apathy. That all the world will say, yes. This is how a canoe can be sailed. This is how all men, women and children can live together.
> — Canon Wi Huata, International Va'a Federation World Sprints, Samoa, 1994

There is a saying that "all good leaders lead from the back", and this is a view I share. However, when it comes to ocean journeys, the kaumātua sits at the front of the waka, reading the water to see what lies ahead. In the world of research, they ensure researchers institutionalised in Western research do not claim ownership over our ways of knowing and then regurgitate our narratives back to us.

The trepidation Indigenous peoples have about research stems from a history of investigative researchers who neglected the interconnected ways in which Indigenous peoples view the world, essentially destroying what matters to them. Tāme Iti, Tūhoe leader and elder, emphasises whanaungatanga, where participants develop a shared understanding through being "kanohi ki te kanohi, eye-to-eye; coming together in a common space for open dialogue around any issue" (TEDx Talks, 2015). When deciding on participating in Indigenous research, it is ideal for the research lead to first wānanga with the iwi, kaumātua and community to find common ground and lay the ground rules. "The shared-decision making approach rejects the traditional, 'paternalistic' model of health care — where the professional knows best" (The Health Foundation, 2014, p. 28).

Being kanohi ki te kanohi also enables informed choices to be made about what happens to our bodies, our minds, our spiritual wellbeing, our families and our communities. It is also "about checking out an individual's credentials, not just their political or professional credentials but their personalities and spirit" (L. T. Smith, 2012, p. 158). Therefore, total transparency and the rights of the individual are a must for informed consent to be obtained in deeply valuing and respectful ways. Without this, participation cannot go forth.

Sitting in Seat 1, the kaumātua is the brains of the outfit and bears responsibility for the community, ensuring cultural values are maintained and that all potentially benefit. Kaumātua, as Archibald (2008) reminds us, possess wisdom and insight gained from their traditional, ecological and cultural knowledges, and lived experience. The kaumātua is the "overseer" and makes executive decisions like setting the direction of travel. They also take on accountability when disputes may arise.

Kaumātua guide karakia at the beginning and end of the journey and have knowledge of wind direction to navigate through the waters. They are experienced in reading the signs of nature, the environmental landscape, and knowing when to push on or cut through the waves. This is a spiritual journey as well as a physical one. These lived experiences contrast with the Pākehā worldview, which comes from a European imperialistic approach to scientific research and education.

Sitting opposite the pacemaker/kaumātua is the research leader. Their role is to ensure open and honest dialogue with kaumātua prior to engaging in Indigenous research. Transparency in all areas, such as methodology, is a must. Not gaining informed consent could "result in unethical research practices" (Hudson et al., 2010). Kovach

(2010) notes "the importance of protocol within Indigenous communities to recognize that how activities (specifically methods) are carried out matter . . . that they are carried out in a manner that reflects the community teachings" (pp. 40–41). Therefore, it is important for those undertaking research with Māori or Indigenous peoples that it be consistent with their values. Moreover, to ensure ethical responsibilities are upheld, the role of the lead researcher is to regularly consult or check in with the kaumātua when they notice common themes appearing in the research. Mokopuna learn from their interactions, environment and their lived experiences—hence the importance of those in Seat 2 who give whispers of encouragement and motivation to the pacemaker.

Seat 2: Upholding Te Tiriti o Waitangi: Duty of care

When working with whānau, following tikanga is important to ensure practitioners work with integrity and compassion, and are open and honest. Duty of care in relation to Indigenous research must also take into account the unique rituals and practices of Indigenous peoples. In discussing the seminal work of Linda Tuhiwai Smith, Pihama et al. (2015) note that "Western research has been instrumental in the marginalisation of indigenous peoples' knowledge and as such has contributed in key ways to the maintenance and perpetuation of colonisation" (p. 8). This has been a common thread throughout history, where research performed by the dominant culture (Pākehā in Aotearoa) on Indigenous peoples has been used to further support the coloniser's agenda to control, oppress and assimilate Indigenous people, their land, culture and ways of being and living.

Research ethics for Māori is understood through tikanga and kawa, which should be followed throughout the research programme. It is the responsibility of all involved to ensure ethics and cultural differences are respected. This ensures everyone on the waka is paddling in the same direction. Without tikanga and kawa we are only human, and humans have a tendency of going wīwī wāwā—here, there and everywhere. Equally, tikanga and kawa could be considered a life jacket for each paddler—no life jacket, no paddle. For Māori, this means Te Tiriti o Waitangi is being seen, heard, validated, and that the research methodology is compatible with it, maximising the relationship building and finding of common ground.

Te Tiriti o Waitangi is about Māori and Pākehā having equal opportunities in Aotearoa, including equal access to resources and knowledge. In signing Te Tiriti, Māori expected their reo and ways of learning to continue in collaboration with their new friends and allies. Article II of Te Tiriti contains two key statements:

- Māori authority is recognised and guaranteed.
- Māori treasures are guaranteed protection.

Unfortunately, before the ink was dry on Te Tiriti o Waitangi, these important statements were disregarded, and the opposite behaviour was exhibited (Wilson, 2008). Hence the importance of ensuring Te Tiriti o Waitangi has a voice in all Māori research interests. Research is a Māori interest, and therefore the four articles of Te Tiriti o Waitangi act as a guide for research and the principles of protection, participation, and partnership:

- Article I—Kawanatanga: Governance
- Article II—Tino Rangatiratanga: Self-determination
- Article III—Mana Motuhake: Autonomy
- Article IV—Wairuatanga: Religion or Spirituality

Seat 2 supports the pacemaker in Seat 1 with motivation and words of encouragement, mirroring stroke for stroke to keep the timing. They put their trust in kaumātua/iwi leaders and thus the researchers, whilst holding strong to ensure the health and wellbeing of all. Seat 2 is Te Tiriti-led, upholding the mana and confidentiality of the whānau, protecting their knowledge and identity, recognising contributions, and engaging in collaborative partnerships. Māori ethical issues should be identified in terms of the rights, roles and responsibilities of researchers and Māori communities (Hudson et al., 2010). In the world of research, this seat protects the integrity of the organisation they represent at the same time, conducting research to the highest of their ability. This will have a ripple effect and shape how everyone works in collaboration as kaitiaki over how research stories are translated and retold in a way that is respectful to Indigenous peoples.

Many pūrākau from tīpuna and atua tell of how the demigod Māui was gifted the jawbone of his grandmother, Mahuika, where her wisdom was said to dwell. Māui used the jawbone to make a hook and proceeded to chant a karakia to fish up Te-Ika-a-Māui. Through this pūrākau, the researcher can be seen as Māui, seeking wisdom by transforming the conducting of Indigenous

research as kaitiaki of whānau stories, reflecting the integrity of Kaupapa Māori research. We, like Māui, are changing the natural world that is part of the diversity of people's lives and experiences. As I am both a whānau member and a researcher, colonised and "coloniser", insider and outsider, I am placed in a unique position of being a kaitiaki over whānau pūrākau and ensuring the articles of Te Tiriti o Waitangi remain strong in both waka. If tikanga is not followed, then the research may have a lasting negative effect emotionally, cognitively and spiritually.

Seats 3 and 4: The powerhouse team and conflicts of interest

The powerhouse team sits in Seats 3 and 4. Along with the rest of the waka, they provide the strength to power the waka forward, make the necessary calls to change sides to hoe, take responsibility if the waka starts to take on water, and, should someone fall overboard, be there to scoop them up. In the research world, Seats 3 and 4 manage conflicts of interest. As a researcher, I sit in a position of power as a counsellor and wahine Māori; people know me in these roles and may participate because of the relationship we have. However, I must ensure whānau themselves have the power, and that I don't come in as the expert who knows best, putting my agenda above the interests of te waka whānau, thereby not respecting the rights, dignity and worth of others. If these potential issues are not dealt with early, the powerhouse team will end up operating without direction and coordination.

There are many reasons conflicts of interest can occur in research. For example, Kovach (2009) refers to an "insider" as someone who is part of the iwi community, whilst an "outsider" is not—both positions bring unique challenges. Methodology and ethical decisions may create challenges for the research team and whānau; perhaps the research objectives do not meet whānau needs of delivery. What if the research already has pre-designed focus questions, but the whānau are wanting to go down another line of enquiry? Keeping in mind nothing is set in stone, and the ground can always move, the whanaungatanga process is where the guidelines are set, and a common ground is found.

Wilson (2008) acknowledges that finding common ground is one of the major struggles of cross-cultural communication. To mitigate these struggles, the establishment of respectful, relevant and reciprocal relationships between the researcher and the research is required. The powerhouse team ensures that everyone remains in the waka and we stay in our lane, moving forward together in the same direction. In the research world, researchers have a dual responsibility to work alongside whānau to uphold their Indigenous knowledge and negotiate Western ethical principles. These may come into conflict in matters of tikanga and kawa, and the research relationship needs to remain true to an Indigenous research paradigm, with all actual or perceived conflicts of interest identified and declared (L. T. Smith, 2012).

Indigenous ontology and epistemology are relational, and axiology should follow what Wilson (2008) calls "relational accountability" (p. 99), where respect, reciprocity and responsibility in telling the research story brings relationships together. This is true of research conducted with the Plains Cree tribe in North America, where Kovach (2010) and Jones-Smith (2016) demonstrate how the interplay of method and paradigm can be harmonious with an Indigenous worldview. Trust is hard to obtain and even harder to maintain. Just as it takes an iwi to raise a child, maintaining relationships is just as important in the research domain. The role of the powerhouse team is therefore one of huge responsibility, where staying in one's lane is not as smooth sailing as it may seem.

Seat 5: Mana and empowerment

Seat 5 also has a key role in uplifting and empowering the whānau in the waka, supporting the steerer in Seat 6 if an injury occurs. If the waka needs to take a sharp turn, Seat 5 will literally hang out on a limb to help the steerer power the waka into position. Going out on a limb to ensure tribal and cultural safety, integrity and uniqueness is held in high esteem because such actions emerge from ancestral interrelationships (Kovach, 2009). Seat 5's role is about mana, integrity and respect in promoting the goals and aspirations of Indigenous peoples.

A "by Māori, for Māori" approach is consistent with Kovach's (2009) theory in addressing the commitment to learn, encourage and facilitate research and protocols that respect the waka and promote Māori language, aspirations and goals. This is inferred in the lyrics of "Mā Wai Ra", a waiata written by Ngāti Porou leader Henare Te Owai upon hearing of the loss of his friend Pine Tamahori:

> Mā wai ra, e taurima
> Te marae i waho nei?
> Mā te tika, mā te pono
> Me te aroha e.

Who will tend
To the marae here?
Truth, honesty
And love will.

These sentiments are mirrored by Hudson et al. (2010) in *Te Ara Tika: Guidelines for Māori Research Ethics*.

While Seat 5 needs to remain loyal to care for the values and beliefs of all things sacred to Indigenous peoples, strong communication skills and knowledge are necessary for the waka to maintain a safe and smooth journey, where both sides reach mutual understanding. Seat 5 is a comprehensive role where the intrinsic pull of home is an example of the strong emotional, spiritual and physical connection to whenua, consistent with an Indigenous worldview.

I personally feel a strong emotional and spiritual connection to my tribal land in Te Tairāwhiti, although I was not born and raised there. The pull to return home grows stronger as I get older, and the peace that physically overcomes my whole being is like nothing I can describe. Axiology and epistemology are of upmost importance to Māori and First Nations people, and indeed all Indigenous peoples, enabling them to live harmoniously and with a strong emotional, spiritual and physical connection with an Indigenous worldview. According to Bowers (2010),

> There is a sense of culturally based responsibility, humility and mortality that are central cultural and spiritual values within an Indigenous aesthetics. These ground the work that is undertaken via scholarship in all its forms, and as such, the work of teaching, research and service requires consideration of culturally based protocols that honour Traditional practice (which can best be understood as a wide spectrum of concerns from ethics to values, to procedures in social interaction, as well as to honouring spiritual laws and practices that govern notions of respect, interconnection and relationships among animate and non-animate entities). (p. 112)

These views are shared by Kovach (2010), Duran (2006), Tau (2001), Jones-Smith (2016) and Wilson (2008). In research, strong perception skills and intuition are needed to identify risks and eliminate them as soon as possible. Therefore, as embodied under the principle of protection in Te Tiriti o Waitangi, it is of the highest importance for the research team to work and walk alongside whānau, acting "with care and respect for individual and cultural differences and the diversity of human experience" and avoiding doing harm (New Zealand Association of Counsellors, 2020, ss. 4.1–4.2).

Rangatiratanga is located in Seats 5 and 6, who work in unison to ensure partnership, tikanga and protocols are maintained. If these are being neglected because of a change in methodology, racism, privilege of Western research paradigms or conflicts of interest, then the research is destined to stall or fail completely.

Seat 6: Finding the common ground

Ko tau hikoi i runga i oku whariki
Ko tau noho i toku whare
E huakina ai toku tatau toku matapihi.

Your steps on my treasured mats,
Your respect for my home,
Open my doors and windows.

If the purpose of research is to enhance knowledge and skills for human and environmental development, then it is important the research being done is beneficial to the wider community. As mentioned earlier, I believe great leaders lead from the back, and sitting in Seat 6 is the rangatira who guides, supports and acts on behalf of the whānau to lead, organise activities and make decisions that uphold the integrity of the whānau, hapū and iwi. Whilst guided by the kaumātua in Seat 1, the rangatira is the conduit between all participants, keeping the paddlers, the research team and the wider community connected and informed.

Working with Māori communities, such as my own, has both risks and benefits. As the whakataukī above suggests, nothing should be taken for granted, and for a community to "open its doors and windows" as participants in research, there must be respect, trust, honesty and transparency.

As G. H. Smith (2000) argues, we should not just sit back and wait for relationships to develop and change to happen—we must be committed to being transformational. When the research team can integrate with the community to share the community's sense of humour and change their language to suit the audience, then stronger connections and trust will be formed. Participation in Kaupapa Māori research leads to greater and more meaningful outcomes for Māori. Moreover, by encouraging researchers of all origins to reflect upon their own positions within the colonial academic and social structures in which they work,

Kaupapa Māori research is responsible to the community.

Navigating the waters of Indigenous research

Māori and other Indigenous peoples have navigated the research landscape creating their own research standards for some time. In conjunction with kaumātua, researchers will negotiate the appropriate methodology whilst ensuring smooth navigation of the complexities of cross-cultural research methodologies, to engage with and examine different perspectives in a spirit of genuine curiosity and enquiry whilst understanding the relationship between environmental, human and spiritual relationships (Reweti & Severinson, 2022). Together they make certain all participants are in the same waka and not going out on their own accord. Figure 1 identifies how working in unison establishes relationships that Hudson et al. (2010) understand as the process of ethical review.

Likewise, Waimarie-Nikora (2001) draws on the strengths of both the Māori and Pākehā paradigms, focusing attention on relationships to "explicitly acknowledge the expertise of each contribution" (p. 31).

Nga hoe

All forms of vehicle need a mechanism to propel them forward. For waka, this mechanism is the kaihoe and their hoe. There are no set rules or ways of being for Indigenous peoples, as each culture has their own ways of living and being depending on their worldview and how they place themselves within it. Below, six hoe provide a summary of Māori cultural ways of living, breathing, working and playing that govern how some conduct their lives. In this article, the hoe represent the dimensions of Māori culture, and are presented in no particular order:

- hoe of ecology—actively engaging in their world, relating to people, places, time and environment
- hoe of axiology—emotional connection and expression
- hoe of epistemology—ideas or cognitive development and preferred ways of learning and knowing about their world
- hoe of ontology—cultural views and the nature of reality, looking beyond the material world
- hoe of cosmology—ways of describing complex realities that are higher than us (e.g., wairua, mauri, maunga, awa, whenua, Atua); being in harmony with nature
- hoe of ethos—social interactions or norms we interact with or by, we are part of the greater collective: whānau, iwi, hapū, hapori

Living without these cultural values and shared stories can render disconnection from one's turangawaewae and can have multiple negative impacts on one's holistic health and wellbeing.

Kiato and ama: Cultural stability

Kaua e rangiruatia te hapai o te hoe, e kore to tatou waka e u ki uta.

Do not lift the paddle out of unison or our canoe will never reach the shore.

Seats 5 and 6 must ensure that everyone is on the same wavelength, moving in unison. Should there be a breach in tikanga or kawa, the kiato will come undone and no longer will the two waka be connected. For the research team, this means they will be stranded in the water, unbalanced and tipping overboard—they will be unable to move forward without respecting the epistemology, axiology, ecology of the whānau, hapū and iwi. Māori and Indigenous peoples in such cases will hold true to their hoe and continue moving forward as one, leaving behind that which no longer serves them. To avoid the waka coming apart, the kaihoe must work together to navigate towards equality, integrity and shared responsibility for information and dialogue.

The kiato connect the waka to each other and the ama, providing stability. For the purposes of this article, the kiato represent tikanga and the ama represent kawa. It is important to remember that Indigenous peoples each have their own rules

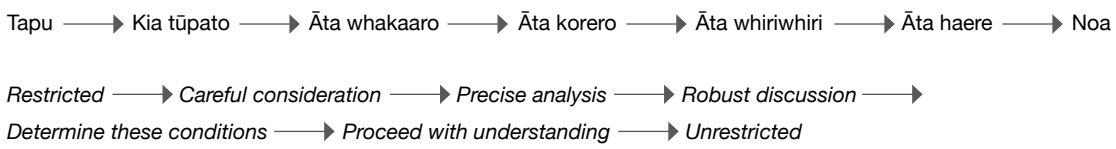

FIGURE 1 The process of ethical review (Hudson et al., 2010, p. 5)

and ways of being. In Aotearoa, these may differ from one iwi to another, but are understood by all iwi. What I present here is just one way that Māori autonomy and control over resources, such as rangatiratanga around ideas, is organised. It is one example of a common meeting ground between Māori and a research team, where issues are confronted, discussed and resolved, and also where relationships are formed and developed.

Conclusion

This article has provided a foundational platform for Indigenous research where philosophical traditions do not offer fixed guidelines for conducting research. It has shown how and why Māori ethics are good for everyone. "Ethics is about values, and ethical behaviour reflects values held by people at large" (Te Puni Kokiri, 1994, as cited in Hudson et al., 2010, p. 3). Matters of tikanga should not be regarded as a recipe or formula for participating in or conducting research. Working in unison with an equal distribution of power and stability to retell the unique stories of Indigenous peoples that is acceptable to both parties ensures a safe journey for all involved in the research. Each participant in research projects has a commitment to the environment, navigating with trust, transparency and humility in what can be choppy waters. Focusing energies on needs and relationships, and explicitly acknowledging the expertise in the waka, ensures the voices of all are heard and validated in a cultural context, with much to offer to future generations.

Ngā mihi

Kanui te mihi atu ki āku hoa, ko Teina Piripi rātou ko Tipene Pickett, ko Pania Te Maro—thank you all for your inspirational kōrero. Ki taku hoa rangatira ko Rangi Manahi, my daughters, and my mokopuna, for your patience and support whilst I researched and wrote this kaupapa for our whānau, hapū and iwi. Tihei mauri ora.

Glossary

ama	outrigger attached to a waka
Aotearoa	Māori name for New Zealand; lit. "land of the long white cloud"
Atua, atua	God, deities
awa	river
hapori	section of a kinship group
hapū	sub-tribe
hauora	health
hoe	paddle
iwi	tribe
kaihoe	paddlers
kaitiaki	guardians
kanohi ki te kanohi	face to face
karakia	prayer
kaumātua	elder
kaupapa	topic, policy, matter for discussion
Kaupapa Māori	research approach that is informed by Māori philosophy and principles and is by Māori for Māori
kawa	rules, protocols, procedures
kiato	crossbeams/cross-arms that connected the waka to the ama
kōrero	discussion
Mahuika	fire deity, grandmother of Māui
mana	integrity
manaakitanga	process of showing respect, generosity and care
Māori	Indigenous peoples of New Zealand
mātauranga	knowledge
Māui	demigod and trickster, famous for his exploits and cleverness
maunga	mountain
mauri	life force, life energy
mokopuna	grandchildren
Ngāti Kahungunu	tribe from the East Coast of the North Island
Ngāti Porou	tribe from the East Coast of the North Island
Pākehā	New Zealander of European descent
pono	be true, valid, honest
pūrākau	legends, stories
rangahau	research
rangatira	chief
rangatiratanga	chiefly authority
Rangiātea	place in the ancient Polynesian homeland; departure point of migration waka
reo	language
taonga	treasure
Te-Ika-a-Māui	the North Island of New Zealand
teina	junior relative; less experienced
Te Tairāwhiti	Gisborne District, East Coast of the North Island

Te Tiriti o Waitangi	the Treaty of Waitangi (1840), founding document of New Zealand
tika	correct, right
tikanga	customs, rules
tīpuna	ancestors
tohunga	skilled person, chosen expert
tuakana	older relative; more experienced
Tūhoe	tribal group of the Bay of Plenty, including the Kutarere-Ruātoki-Waimana-Waikaremoana areas
turangawaewae	place where one has rights of residence and belonging through whakapapa
tū tangata	concept promoting self-worth and community strength
wahine	woman
waiata	song
wairua	spirit, spirituality
waka	canoe
waka ama	outrigger canoe
wānanga	meet and discuss
whakapapa	genealogy
whakataukī	metaphor, proverb, saying
whānau	family
whanaungatanga	relationships
whenua	land
wīwī wāwā	here, there and everywhere

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TE KŌPUTU O TE WHAKATŌHEA

A tikanga of gathering and sharing to guide future kai sovereignty

*Shannon Davis**
Richard Morris†
Te Kahautu Maxwell‡
Isobel Happy§

Abstract

The story of Te Whakatōhea is indistinguishable from its relationship with kai. Starting with the iwi's migration narratives from Hawaiki to Aotearoa New Zealand, through an economic flourishing that followed initial contact with European settlers, then as a matter of survival following raupatu, kai has been an integral component of Te Whakatōhea culture and tikanga. Today this relationship with kai is manifest in the industry-leading aquaculture enterprises of the iwi; however, there are also serious challenges present in terms of its people's nutritional wellbeing, with access to fresh kai in the Ōpōtiki rohe limited for a high portion of the population. The research reported in this article investigated how spaces for growing kai in Te Whakatōhea's past could give direction to future urban planning for increasing kai security and sovereignty. Through interviews with kaumātua, three urban planning models for integrating spaces to grow and access kai within future urban land use planning are developed in relation to the concept of whakakitenga-nui, which frames how kai planning can connect ancestral mātauranga to future land use planning and wellbeing strategies.

Keywords

Te Whakatōhea, kaumātua, kai security, māra kai, whakakitenga-nui, future landscape planning, kai sovereignty

* Head of the School of Landscape Architecture and Senior Lecturer in Landscape Planning, Te Whare Wānaka o Aoraki Lincoln University, Lincoln, New Zealand. Email: Shannon.Davis@lincoln.ac.nz

† Postdoctoral Fellow, Department of Agricultural Sciences, Te Whare Wānaka o Aoraki Lincoln University, Lincoln, New Zealand.

‡ Te Whakatōhea, Te Whānau-ā-Apanui, Ngāi Tai ki Tōrere, Ngāi Tai ki Tāmaki, Ngāti Awa, Tūhoe, Ngāti Maniapoto, Ngāti Porou. Professor, Te Pua Wānanga ki te Ao Māori and Indigenous Studies, Te Wānanga o Waikato | University of Waikato, Hamilton, New Zealand.

§ Te Whakatōhea, Whānau-ā-Apanui, Tūhoe, Ngāti Kahu. Researcher and Master's Student, School of Landscape Architecture, Te Whare Wānaka o Aoraki Lincoln University, Lincoln, New Zealand.

… Me aha he kai māu ki reira?
He kai nui tonu māhau, ko te rau o Hūnā.
Ka kapi ngā pūtahi kai
I a Pahi-poto, i a Te Rangi-ka-wehea,
Hoki kē mai koe ki Ō-hiwa,
Ki te tamāhine a te Whakatōhea, …

… What was to be your food there?
Your big meal, of course, would have been the leaves of Hūnā.
A bounteous feast was to come
From Pahi-poto, and from Rangi-ka-wehea,
But you returned instead to Ō-hiwa
To the daughter of Whakatōhea …
(pātere of Te Whakatōhea)

Introduction

On 27 May 2023, the then Justice Minister Andrew Little signed a Deed of Settlement and delivered a formal apology from the Crown to Te Whakatōhea for breaches of Te Tiriti o Waitangi | the Treaty of Waitangi, including the invasion of its eastern Bay of Plenty rohe in the 1860s and the confiscation of more than 140,000 acres of its land (New Zealand Government, 2023). The Waitangi Tribunal (2021) described the Crown's actions around Ōpōtiki as "among the worst Treaty breaches in this country's history". (p. xii) Raupatu, the confiscation by Crown forces of practically all of the iwi's highly productive coastal plains in the late 1860s, was at the core of the Treaty claim. In parallel with land confiscation, nearly all of Te Whakatōhea were moved onto the Ōpape Native Reserve—22,000 acres of mainly unproductive land with a thin coastal strip between Omarumutu and Ōpape (Figure 1).

Raupatu essentially destroyed the physical connection hapū had to their whenua, denied them the right to practise traditional mahinga kai, and severely limited their ability to feed themselves. In the decades following raupatu, mātauranga relating to cultivating and storing of kai and tikanga relating to its distribution, were called upon to secure the survival of hapū living on the Ōpape Native Reserve. The research reported here drew on the memories of kaumātua who grew up on the reserve to cast light on this mātauranga and tikanga, as a way to guide kai growing within the present-day and future urban environments of the rohe. This future orientation explores Maxwell's (2025) concept of whakakitenga-nui, which frames how kai planning can connect ancestral

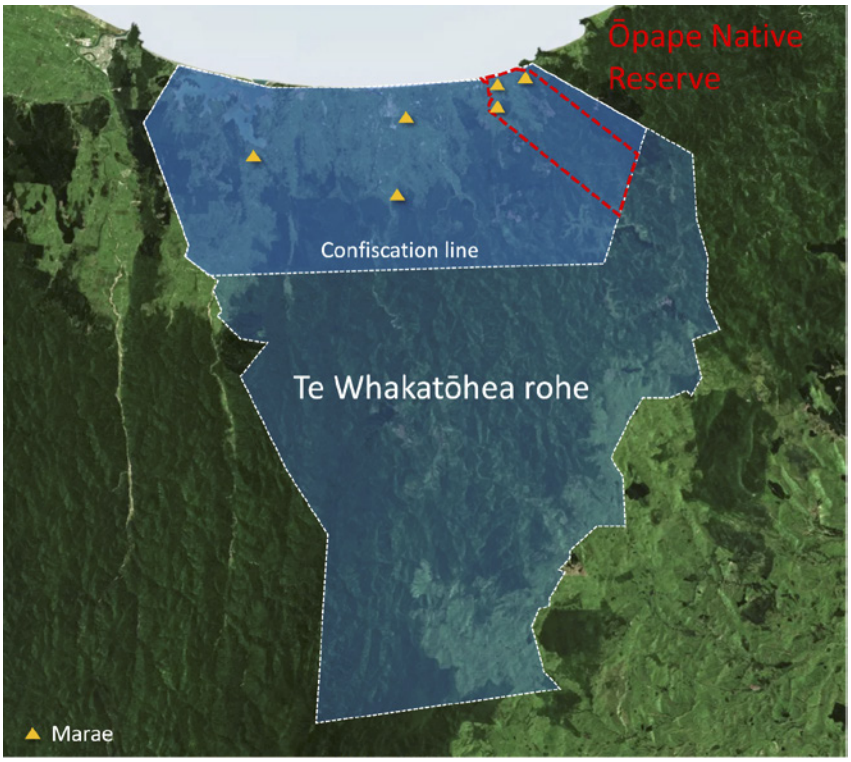

FIGURE 1 Map showing the rohe of Te Whakatōhea, the confiscation line and the Ōpape Native Reserve (Whakatōhea Pre-Settlement Claims Trust, 2022)

mātauranga to future land use and wellbeing strategies. While kaumātua experiences of growing up and surviving on the Ōpape Native Reserve featured throughout the research, ultimately it is Te Whakatōhea's kai traditions that define them, not raupatu.

Te Whakatōhea have had a strong relationship with their ancestral lands since the arrival of their tīpuna from Hawaiki. Te Whakatōhea genealogy dates back to Māui, who fished up Aotearoa New Zealand, through his grandson Tīwakawaka, who arrived on the waka *Te Aratauwhāiti*. Te Whakatōhea can also trace their lineage to Toi-te-huatahi, to whom all iwi whose ancestors arrived on the *Mātaatua* waka around 1350 have whakapapa. Continuing on, their whakapapa connects to the *Nukutere* waka, 13 generations prior to the "Great Migration". Te Whakatōhea's whakapapa includes the *Te Araumauma* waka and Tarawa, from whom the name of Ōpōtiki originates, as well as the *Horouta*, *Ōtūrereao* and *Rangimātoru* waka, which all landed at Ōhiwa Harbour, and the *Pākihikura* waka, from which the confluence of the Waioweka and Ōtara Rivers is named. Then the *Tūwhenua* waka, captained by Tamatea, the husband of Te Whakatōhea's founding ancestress, Muriwai, navigated the Waioweka River, the original name being Te Awa o Tamatea. The *Mātaatua* waka was followed finally by the *Tauira Mai Tawhiti* waka, which landed at Ōpape.

Kai is of central importance in the relationship between Te Whakatōhea and their whenua. As expressed in a whakataukī of Tapui-kākahau, "Te kai hoki i Wai-aua! [Ah, the food of Wai-aua!]" Te Whakatōhea rohe was famed as a food basket in pre-European times—and central to this prosperity was the kūmara. Tradition says that a return to Hawaiki to fetch the kūmara had been requested by Toi-te-huatahi, which resulted in the building of the waka *Te Ara Tāwhao* to procure the kūmara. Subsequently, the *Mātaatua* waka brought the kūmara to Aotearoa. The first kūmara garden was in Whakatāne (40 km west along the coast from Ōpōtiki) and named Matirerau, a māratautāne dedicated to Rongomātāne, the god of kūmara (Maxwell, 1998).

Before the first contact with Europeans in 1769, Te Whakatōhea's rohe supported an abundance of food resources. Ōhiwa Harbour, Te Ahiaua or Te Karihi-Pōtae (Waiotahe inlet), Pākihikura, and the Waiaua River and its catchment supplied many resources. Tapui-kākahu's whakataukī originates from the Waiaua area. The forests of the Raukūmara (Kahikatea, Waioweka, Urutawa, Pākihi, Ōtara, Toatoa and Whitikau) were hunted for native bird species including weka, kākā, kererū and tītī, and harvested for aruhe, pikopiko and kiekie (te ure and te tāwhara) (Walker, 2007). The rivers, harbours, estuaries, mountains and forests which fed the ancestors of Te Whakatōhea became places of strong cultural importance, carrying the names and stories of their tīpuna (Whakatōhea Pre-Settlement Claims Trust, 2021). The settlements they built consisted of māra, pā, kāinga and urupā. Kāinga were located along the coastline, utilising and protecting the resources obtained from the ocean. Inland areas were used for seasonal encampments, which allowed for hunting and gathering (Walker, 2007). There were many fortified pā in the Waiaua, Ōtara, Waioweka and Waiotahe Valleys to protect the hinterlands and to also procure and protect kai, ensuring supply in the winter months.

In the decades following contact with Pākehā, Te Whakatōhea demonstrated considerable entrepreneurship, transforming their food basket into a significant agro-economy. The following excerpt from the 2023 Deed of Settlement demonstrates this:

> Beginning in the early 1840s, [the iwi] acquired their own fleet of small schooners and cutters. At least 22 ships were registered to Whakatōhea owners, comprising a significant proportion of the New Zealand registered vessels over that period. Given that the majority of Māori owned ships were not registered, it is likely Whakatōhea owned many more vessels than officially recorded. So many Whakatōhea men sailed on trading vessels that by 1849 most of the male population of Ōpōtiki were reported to have visited Auckland and/or the Bay of Islands. (New Zealand Government, 2023, p. 27)

Up until 1865, Te Whakatōhea maintained a thriving economic base for their people through agricultural enterprise, combining Te Whakatōhea practices of farming and trade with European ones. Large, cultivated areas of maize, wheat, corn, kūmara and potatoes extended along the plains of the Ōtara and Waioweka Rivers. The excess from these cultivations was used to farm thousands of pigs (Whakatōhea Pre-Settlement Claims Trust, 2021). Te Whakatōhea's rohe was rich in food resources by the 1860s, making them a target for the New Zealand Settlements Act 1863, which facilitated the confiscation of iwi land around the country.

When the lands of Te Whakatōhea were confiscated by the Crown in 1866, it had a profound

impact on the relationship between the mana whenua of the Ōpōtiki rohe, and on their whenua, their identity, their ability to feed their whānau and their connection to the metaphysical world. As shown in Figure 1, the confiscation boundaries did not consider hapū affiliations and included the confiscation of most of the arable land in the region (Whakatōhea Pre-Settlement Claims Trust, 2021). Some 22,000 acres of Ngāti Rua ancestral land, which was unproductive, was set aside by the Crown for a reserve at Ōpape to resettle all the hapū of Te Whakatōhea (Ngāti Patu, Ngāti Murīwai, Ngāti Rua, Ngāi Tama, Ngāti Ngahere, Ngāti Ira and Te Upokorehe). This land was chosen for its geographical features which segregated the reserve area from the high-quality confiscated land (Walker, 2007).

In 1880, the Ōpape Native Reserve was subdivided into six coastal blocks and six inland blocks to be divided between the six Te Whakatōhea hapū (Figure 2). This was intended to provide each hapū with access to resources from the coast, such as seafood, and kai and timber harvested from forests inland. Ngāti Ira chose to stay on land appointed to their rangatira, Hira Te Popo. Ngāti Ngahere stayed on reserves in Te Rere (Walker, 2007). Only the six coastal blocks were ever developed.

The alienation of hapū from ancestral lands and forced resettlement onto Ngāti Rua lands created many challenges for Te Whakatōhea. Each hapū now had a limited supply of land available to support their people, the majority of which was not suitable for cultivation. Raupatu immediately isolated Te Whakatōhea from their ancestral lands, restricting their ability to sustain their people and destroying the strong economic base Te Whakatōhea had developed over the preceding decades through agricultural enterprise.

The Whakatōhea Māori Trust Board was formed in 1952 out of a need to manage iwi-owned assets. Today, Te Tāwharau o Te Whakatōhea (the post-settlement entity) manages several land

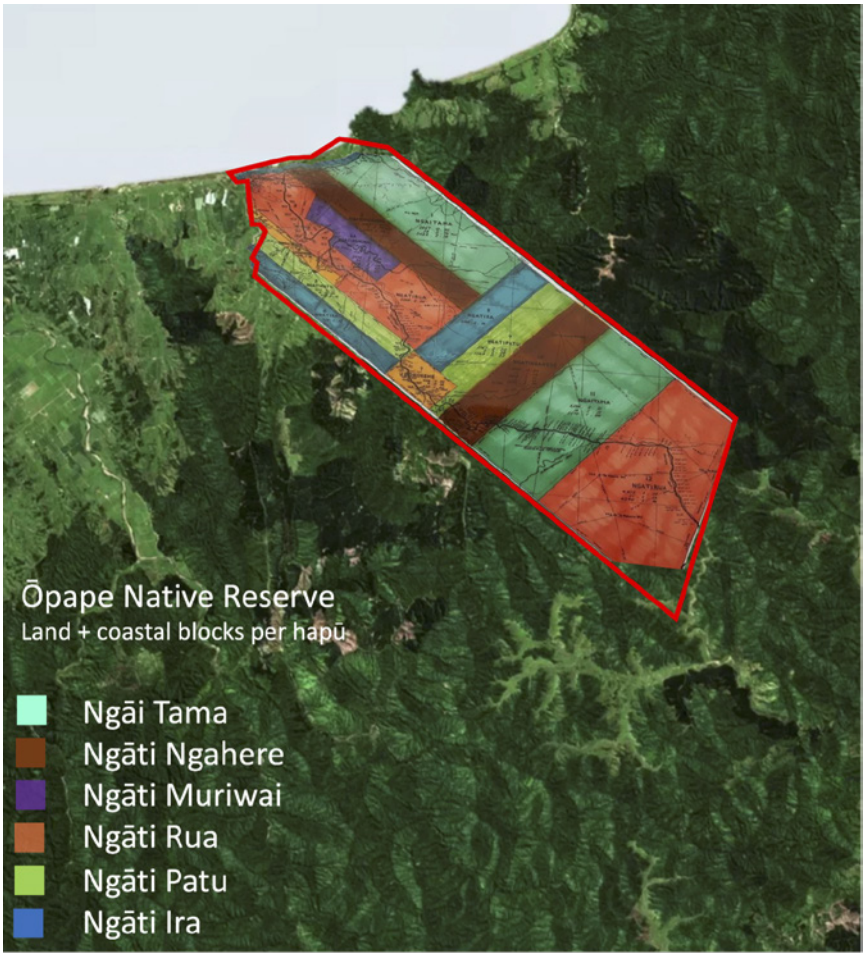

FIGURE 2 Reconstructed historical cadastral map of the Ōpape Native Reserve and subdivision of coastal and inland blocks between the six hapū (Morris, 2023; adapted from Tole, 1880)

investments (alongside its aquaculture enterprises), including dairy and beef farms, kiwifruit orchards, and a forestry block. Yet while development of aquaculture and dairying are positive macroeconomic signs for Te Whakatōhea, today the iwi faces significant nutritional challenges at grassroots level. There are significant challenges in the health and wellbeing of iwi members living in Ōpōtiki and in smaller settlements within the rohe. Te Whakatōhea are gradually rebuilding their food sovereignty after their disconnection from their traditional food practices and the predominance of Western food systems (McLellan, 2020).

This article seeks to record the memories and mātauranga related to growing and distributing kai held by Te Whakatōhea kaumātua, and considers how this knowledge and experience could be applied to modern urban planning that integrates kai production to reassert the relationship between Te Whakatōhea and kai for the 21st century. It explores how spaces and practices for growing kai in the past might inform future decisions and planning for kai security for Te Whakatōhea. This research, initiated and guided by kaumātua and the Whakatōhea Māori Trust Board, was founded with the intention to support Te Whakatōhea's kai vision: "Ko te kai hoki i Waiaua: To be the food bowl that feeds the world". The research was undertaken through a longstanding partnership between Te Whakatōhea and Lincoln University anchored in personal relationships extending more than three decades and including a team composed of both Indigenous and non-Indigenous researchers. This article documents an iwi-led process for urban land use planning that is grounded in tikanga Te Whakatōhea, supporting aspirations for kai security and sovereignty, wellbeing, and the connection of mātauranga with contemporary urban planning practice.

The article contributes to the growing body of kai sovereignty and Indigenous planning literature (McLellan, 2020; Oldham et al., 2024; Smith & Hutchings, 2024; Thompson-Fawcett, 2025), extending this scholarship through a Te Whakatōhea lens. Central to this framing is whakakitenga-nui—an iwi-specific articulation of future visioning that integrates mātauranga, whakapapa and ecological design to guide collective urban land use planning to support increased kai security and sovereignty through the spatial inclusion of māra kai.

Method

The researchers conducted semi-structured interviews with six kaumātua from Te Whakatōhea. Interviews were recorded and then transcribed, before a thematic analysis was carried out to identify key themes and sub-themes from the kōrero. The identified key themes were then translated into three urban māra planning models focused on reintegrating places for growing and accessing local kai within urban spaces, which are developed and presented in the Discussion section.

Semi-structured interviews are commonly used as a data collection technique in qualitative research studies. In this study, interviews were used to record the mātauranga and memories of Te Whakatōhea kaumātua, illustrating their experiences and knowledge of growing kai within the Ōpōtiki rohe in the past. Kaumātua kōrero were then translated into spatial models for creating places to grow and access kai within urban areas, informing current and future urban land use planning approaches.

Semi-structured interviews also allowed the researchers the opportunity to further explore important ideas that might come up in the course of an interview, which could enhance the understanding and enrich the contribution of the interviewee's mātauranga and memories to the research. As noted by Adeoye-Olatunde and Olenik (2021), "Semi-structured interviews are the preferred data collection method when the researcher's goal is to better understand the participant's unique perspective rather than a generalized understanding of a phenomenon" (p. 1360).

While the researchers developed a general question framework and structure, interview direction ultimately evolved as the discussion unfolded. Interviews were overseen by Te Whakatōhea leadership to guide the interview process in iwi tikanga. Relational research approaches were integrated within the semi-structured interviews, with focus placed on the collaborative nature of the research intent in support of the iwi's kai vision of "Ko te kai hoki i Waiaua"; on the longstanding relationship between university-based researchers and iwi-based researchers and kaumātua; and on flexible data collection and analysis. Kaumātua were free to talk about aspects of kai production, storage and tikanga important to them and were given flexibility in how they wanted to express their mātauranga and memories. Various approaches were undertaken and led by kaumātua, including the use of maps, drawing, waiata, mōteatea and stories. The semi-structured approach allowed the researchers to follow participants' lead, listen to their narratives and ask further questions, while applying their kōrero to ideation for the development of spatial models focused on māra kai.

The interview transcripts and subsequently developed spatial models were given to kaumātua for their review, response and discussion. Researchers attended a Taumata Kaumātua (a council of Te Whakatōhea elders) hui to discuss the work, receive feedback and ensure kaumātua mātauranga had been included correctly. A hui with the Whakatōhea Māori Trust Board leadership was also conducted to ensure the alignment of the research outcomes with iwi kaupapa and its kai vision.

Human ethics approval was granted by the Te Whare Wānaka o Aoraki Lincoln University Human Ethics Committee (No. HEC2023-41). Iwi approval for this project was also provided by the Te Whakatōhea Māori Trust Board. Participants were all over the age of 18 and provided written consent after reviewing the Research Information Sheet.

Findings

Raupatu and the importance of whenua to Te Whakatōhea

As described above, in the late 1860s, the six hapū of Te Whakatōhea were physically moved from their homes, their marae and their land, and put on the Ōpape Native Reserve. The loss of land and the subsequent loss of physical connection to their whenua had a profound impact on the identity of hapū by removing their physical connection to their ancestral lands. Kaumātua Te Riaki Amoamo explained:

> By seeing it [the whenua] like ancient Māori saw it, it's by looking at the landmarks. So, each generation must do the same, by looking at the landmarks. To have the technology to have this on paper is great. But also, it's great to see it, walk on it, tramp on it. Ko wai koe? No hea koe? Who are you? Where do you come from? We were born on [the] reservation, classified as the Ōpape Native Reserve.

Te Whakatōhea whānau were deprived of physical connection to their whenua, with tamariki born disconnected from their ancestral land. The six coastal blocks that made up the Ōpape Native Reserve were cleared of vegetation to allow for more intensive kai growing to feed the now significantly higher population of whānau living there. Te Riaki recalled:

> Well, there's six coastal blocks to work to develop, for farming and to keep us alive. So, before my time being on the reservation, the land was developed, whatever trees that were growing there were cut for development. And the contour of the land is not so bad. They weren't big trees. They were mānuka, when you get to the coast, the vegetation is not as big as the hinterland … You'll have some big ones, but the majority is mānuka, kānuka that hugs the coastline.

Raupatu had a profound impact on the relationship between mana whenua and growing kai. Kaumātua Robert Edwards recalled:

> My father was on Omarumutu right at the start. They were there before the raupatu, and when the raupatu happened, everybody was forced on to Omarumutu around there, and my tīpuna applied for some land. And then we got 650 hectares to grow kai on.

Kaumātua Graeme Riesterer recollected:

> Kai to Te Whakatōhea has always been part of us. After raupatu we lost everything, and our people starved when they were pushed out onto the reservation. There was no waste, everything was used … That is something that has always been true, that we have been starving.

Kaumātua Julie Lux commented: "It was all about survival. And you know, if you didn't work, if you were lazy, you starved." Kaumātua Danie Poihipi further explained how whānau worked the land to sustain their families: "[We had] families with huge numbers of children."

Julie recalled that "there were some whānau who didn't have enough land, didn't even put [in] a vege garden. So, you know, those days you did a lot of sharing." Robert explained further: "We didn't only grow for ourselves. We grew for the other part of the family as well. There was no such thing as 'town' to us out there—we had to live off what we grew."

Robert explained what happened when someone was in need:

> We … and the kuia communicate between themselves, and then we'll fill up a couple of kits [bags] or something. So the community looked after each other. There was no one really falling through the cracks. No, no, you looked after everybody. Yeah, no matter who it was … You could call it bartering, but we never call it bartering. You just say, "Kei te hiakai tēnā?"

For Kaumātua Te Kahautu Maxwell, "Being the entrepreneurs that we are, the entrepreneurial

skills that we, I think we were blessed and born with, [we have a] tenacity to exist." These are traits that have ensured the survival of Te Whakatōhea.

The confiscation of Te Whakatōhea land had far-reaching impacts for generations of whānau. Connection to the whenua is a critical lifeforce for mana whenua. Graeme explained the iwi's commitment to the return of their ancestral land:

> They held no resentment against the Pākehā people that had come … That was where it was … We [Te Whakatōhea] would buy back every acre that we lost one acre at a time. If it took us a thousand years, it took us a thousand years … But we will buy back everything that we lost.

Māra and growing kai

Ensuring that there was enough kai was always a top priority. As Te Riaki recalled, whānau had large māra and orchards associated with their homes:

> We were brought up on a dairy farm, had 50–60 cows. The main product would be just cream, and skim the milk off for the pigs … [The] cream [was] collected by the Ōpōtiki Dairy Factory, and so the truck could come all the way up and collect the cream from beyond Rāhui; the truck went right up to Toatoa. [This was] the main income, the source of income coming. The cream, it changed to milk. Not in our time, later … We grew all our kai on the farm [in] a quarter acre or something like that … That's enough to sustain your four kids. We had a smaller garden at the house … for everyday food and the store, the rest stored away … Everything is made use of for the animals and for us. We had fowls, we had pigs, and we had dogs, you know, the muster, and for hunting, because we were next to the forest. In the bush block that's what you're going to do, your hunting, yes, and timber right as well.
>
> [We had] a big māra kai—potatoes—to keep us going for the year, and kūmara to keep us going for the year… we also had kamokamo and pumpkin, the watermelon … We had a big orchard, part of the farm … plum trees and apple trees, pear trees. The orchard was closer to the house.

Robert shared:

> We grew everything from rīwai, kūmara, maize, popcorn, all those sorts of things. Watermelon, kākāriki, sugar cane … The merikaurau was the main maize crop, we used to use that for kānga pirau and for kānga pungarehu. We would plant pumpkin in the maize. We're combining the two together, pumpkin and then kamokamo for the pigs, and all those things all combined in one … We were milking about 100 cows then … Right next to the house [we] had our smaller [māra] for lettuce and all these sorts of things, carrots and what have you. And we all had orchards … three or four different types of plums … and we had about three or four different types of apples as well, and pears and cherries. Cherries, figs … right up near around the house ... That's where the citrus fruits were grown. The marmalade, the lemons … A couple of the orchards were around about four or five acres, and that was fenced off. The only animals in there were sheep.

Danie recollected:

> Vegetables, carrots, climbing beans, broad beans … We ate what the cows ate … swedes, turnips … [Some] fruit was supplied by the health system that sent each family apples every now and again … Everybody had fowls… we had Muscovy ducks. Our main chooks were the grey ones—Orpington. The *tuna*, another delicacy for us, is the blind eel (*tuna* kāpō) … that was our food during the winter … Kūmara on any hill country … maize on coastal flats … dairy everywhere else—dairy cows were free range … So, we have been living on seafood, wild pork, bacon, mutton, and no order from the shop.

Graeme recalled, "As kids, we didn't have to go to McDonald's … There was no McDonald's anyway. But we didn't have to go to any of those places because we always had fruit."

Māra cultivation and harvesting

Te Kahautu remembered that "we didn't have to [improve the soil] because it's just being developed, it was fertile … first time to be used. Everything was there because of the fertility of the ground … the landscape was still in its fertile habitat." Robert explained further:

> We didn't just plant in the same place all the time, or the same crop. It might be maize here, and then you know, the rīwai over here. Next time it might be two years and then change … We left it fallow. There was a lot of maize crop … You're cropping for pigs, and even in my time, when I was a young fulla, I [worked] behind the plough, ploughing for about five to six days nearly a week. When it was time to harvest, they would come and do the rīwai … We would heap the rīwai up … they would be as long as this room … Leave them there for a couple

> of days just to let them sweat, and then the kuia would come out and they start sorting the little ones out—the purapura me pakupaku. They were sorting the seeds, sowing the seeds. That and the little ones and the bigger ones … then from there, put them on the cart and go back, and we had to store them.

Graeme recollected:

> The nannies would just go through, they'd have their bag and you would store them in those heaps for up to a week. The big heaps they would heat up and any that had been poked with a fork … would be eaten first. They were sorting the seeds out there and then… you normally kept the smaller rīwai for your seed … not the bigger ones, because the bigger ones, it was a waste … and you know, that was a meal for somebody … So, they've been piled just to sweat, to cure … So, once they'd cured, in later years, when we had sugar sacks… we would put them into an area that was dark and rodent-proof, dark and so mice and rats couldn't get into them, always covered … covered with fern … put the bracken down and then you layer them with fern.

Māra storage and preserving

Along with kai production, the storing and preserving of kai was also critical. Te Riaki explained:

> We had a shed for the kūmara… [It is important to] keep it away from the walls … and so you put the fern in there to keep the kai dry and warm … just the kūmara … you put the rīwai in an ordinary shed, and they had their own compartments. Yep, there's the big ones, and you get the purapura, the seed ones, and you get the paku, the small ones … the small ones you eat first.

Julie remembered having separate storage pits:

> You put the kūmara separate, you put the potatoes separate, you put the corn separate. You know you never mix them up because they started to integrate with each other, so you have some hybrids … Whenever Dad killed a pig, [or] we had a couple of sheep, we'd get the fat off the meat. You'd light a fire outside, and you put the fat inside and let it, what we call, render … turn into oil … and then what we do is part-cook the meat. So, every time you wanted a "boil up" or something, you just dig it up [out of the set render] and put in the pot … the meat. We always kept it in the kitchen in the cold part, you know, just in the fat and scoop it out when you need … It would last us through the winter.

Danie recalled "cooking apples, pears … We did quite a lot of bottling. We had heaps of fermented food—kina, kōura, nihoniho, pikopiko, kōuka, kūmara … cooked in the hāngī, then dried. Heaps of preparation." Graeme explained further:

> The stuff that was bottled, they didn't have to be frozen … My grandparents had a rua, and it was big, but it was full of jars and depending on the year, so we put up a vintage. [The rua] that I'm talking about was on the stand, so it had four legs and was about the width of this table and the same depth and made out of timber and slats on the side with a screen inside. Rua is a general name for a store above ground; the ones in the ground are kōpiha. So, there was a kōpiha that my grandparents had dug into pumice … They realised where the pumice was and dug down and then out … They had a tin lid on, and a ladder seven- or eight-feet deep. Well, you could fit three or four people in there working. You'd stack right around and there would be two or three kūmara deep and then a layer of fern … and another layer of aruhe. And then it moved to hay. And then I think it moved to cardboard. Preserving time was a family time. So, we as a family would do the preserving.

Danie described the art of storing kūmara, a taonga for Te Whakatōhea:

> [We] selected kūmara, scrape[d] the skin off, dried [them] in the sun. We used bracken fern to cure the kahawai, turns it red. When cooked, you break it up, then you put them out in the sun, let the dew get on it. The art of storing the kūmara … get all the different size kūmara. You pick the ones that you're gonna build your wall with, you build your wall like laying bricks. That front wall got to be firm and steady, so it won't tip over, [so] it won't fall out when the kūmara get rotten. You can take it out without that wall collapsing. And each kūmara you look and size up, and you place each one like that you build in your wall, and if you ever stack bales of hay, you will know how to tie that wall in, so you'll have one like this cooler in it. When you do that, you just tip the rest behind. All your big kūmaras like this, they're the last to go in the pit with your rock, they're the first ones to rot, the big ones. So, you set those at the side. Karamū—that's the name of a tree—the branches, the leaves … you add a bit … just gives it a pungent … mix it with pūriri to cure the kūmara. They give it the cure

> and the pungent when you smell it … It gives you the beautiful taste [of] pūriri leaves. You can't eat the kererū when it's eating that. Other than that, we had a lot of fermented food, with the main ones being kānga pirau, kahawai, pikopiko [and] kōtero.

Community and sharing kai

The marae and marae activities relied on kai from the community. Te Riaki explained: "Most farmers had big plantations of potatoes and kūmara to last them 12 months … It's just really for their own whānau to store it and see them through the winter. For the whānau use, and the marae and tangihanga." Julie recalled that "as soon as you hear there's a tangi, my father, if he could afford it, he'd give a pig". Graeme recollected:

> I remember uncles going out to get the kererū and bringing them home and they would be heaped up, heaped up … and for each family, depending on how many in your family, there might be five, it might be six, and you would all come, and you would get your share … You took what you needed and nothing more… to feed your family and your extended family.

The concept of ohu—the act of sharing as need required—was explained further by Danie:

> People used to come to partake in the ohu … This one has four, that's his catch. This one might have 12. Another one might have 40 … You've got to put it into the ohu for all of us … [With kererū] you eat everything. You cook it with the stomach, and you know you don't waste anything, and the feathers go to the weaving.

Te Kahautu recalled that sharing with women and children was also important when it came to hunting:

> The fat parts (the bum) were set aside for women, being bearers of children (as well as keepers of the home and the teachers and disseminators of mātauranga) … Puamanu is the term for the collection of birds. The hunters have a feed of kererū in the bush, but when they come out, they don't. It's for the ladies and the kids and old people … Ladies have the bums because it's fat, the kids had the claws and the beaks and the necks. Yeah, but the ladies always had the best part.

Danie recalled that kererū "was our supplement for winter food". Land was also shared, as Julie recalled: "They weren't using their land, so, they said to Dad, you know, use that as a runoff, you know, to give your paddocks a break."

Having petitioned the government five times for compensation for the raupatu, in 1954 the Whakatōhea Māori Trust Board was able to buy the dairy farm. Graeme explained:

> [The Trust Board] bought our initial farm. They bought it because it was cheap. The Trust Board people had looked at other farms, but they were withdrawn because we were Māori. But this farm was considered suitable for us to buy because it flooded all the time. However, in 1964 there was a big flood in Ōpōtiki and after that they built the stock banks and, all of a sudden, their farm became a very valuable farm, and with the success of the farm, we were able to buy one and then another, and then a third and then a fourth piece of land. So, we've been able to extend our farming platform as we have moved along.

Discussion and conclusion

In 2022, the Te Whakatōhea's kai vision of "Ko te kai hoki i Waiaua" was developed to "exercise tino Rangatiratanga in our pursuit to define our local food systems through the traditional knowledge and practice of growing kai that will inspire and transform the health and well-being of all Whakatōhea, Whānau, Hapū, Iwi" (Hata, 2022). Urban planning has the ability to support the health of whānau through providing space to grow kai at a range of scales. Coupled with support for learning, healthy kai can once again be a part of the places where New Zealanders live—which for most, is in urban and peri-urban settlements. This notion was supported by kaumātua Graeme Riesterer:

> When I was a kid, I was a little fulla. It was my Nan who showed me. She didn't teach me. She showed me. So, I followed. I followed what she did, and so I think that's the answer … that we've got to get people who can lead by example like this role model.

The interviews with kaumātua elucidated important themes for consideration for growing kai within the rohe today. Themes relating to the importance of whānau and whenua connection, māra location in relation to kāinga, kai type, techniques for cultivation and harvesting, storage and preservation, and kai sharing were all strong narratives communicated by kaumātua. Coupled with these narratives are the existing māra of the

Ringatū, a Māori Christian faith founded by the prophet Te Kooti in the 1860s with adherents mainly from the Bay of Plenty and East Coast tribes. The concept of a māra takiwā originates from the Ringatū rituals of planting (Te Huamata, on 1 June) and harvesting (Te Pure, on 1 November) (Maxwell, 1998).

The Ringatū have three sets of māra: māra takiwā refers to the forest, land, rivers and sea, which are classified as gardens; māra tapu is the sacred garden set aside for Ihowa o Ngā Mano (Jehovah of the Multitudes); and māra kāinga is the vegetable garden at home (Maxwell, 1998).

Integrating spaces for kai growing and access for whānau has always been integral to Te Whakatōhea. The reintegration of māra back into the urban environment of Ōpōtiki and its surrounding towns for whānau is one way to support the kai security and sovereignty vision of Te Whakatōhea. To maintain the sanctity of the three māra of the Ringatū Church, especially the māra tapu and māra takiwā, we propose two additional māra to serve the purpose of communal gardens, alongside the māra kāinga:

- māra-ā-papakāinga—a communal garden shared between several whānau or in a papakāinga
- māra-ā-iwi—a large community-scale garden that serves a key educational role, as well as producing food at larger scale.

Based on the strategy expressed through the iwi's kai vision, and taking direction from the kōrero with kaumātua, we illustrate below the three scales at which space for kai production and kai education can be integrated into urban environments, and thus support kai whakakitenga-nui—an extensive future vision for urban planning to increase kai security and sovereignty, connecting ancestral mātauranga with future urban planning and wellbeing strategies.

Māra kāinga—place to connect

Māra kāinga is a small-scale māra kai located alongside whānau homes to support kai self-determination, connection to Papatūānuku, a place to practise Te Whakatōhea and Ringatū tikanga, and learning together as whānau (see Figure 3).

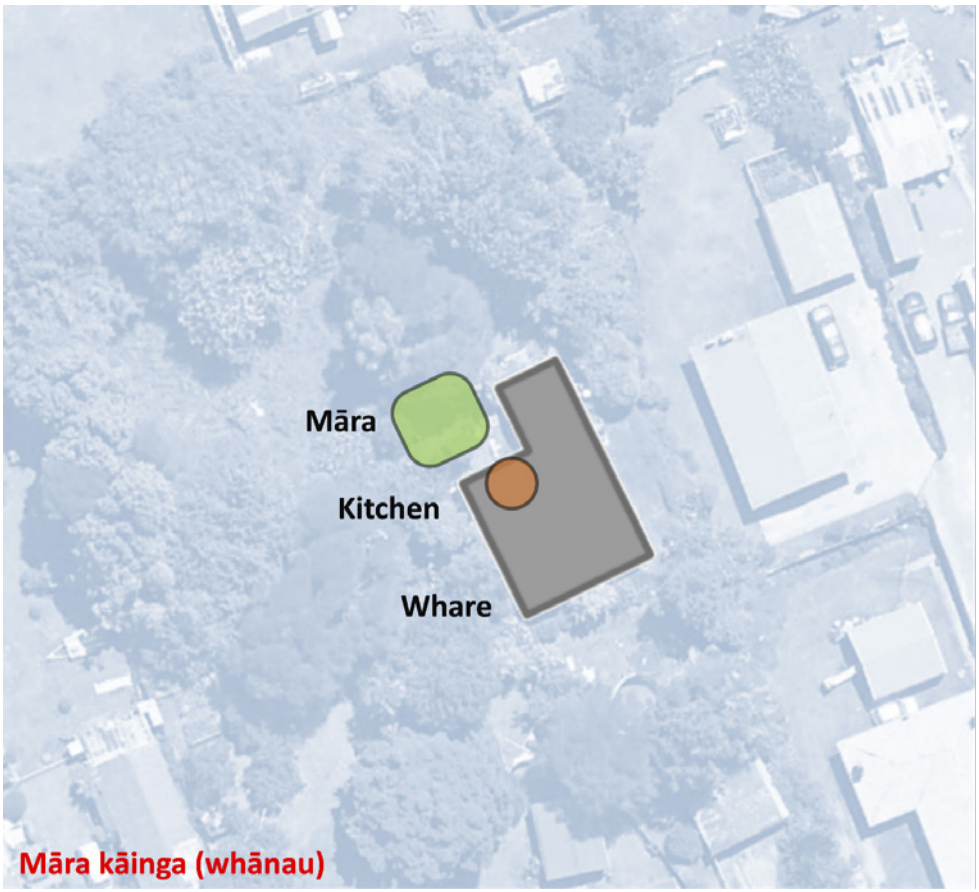

FIGURE 3 Māra kāinga

Māra-ā-papakāinga—place to share

Māra-ā-papakāinga is a medium-scale māra kai located within papakāinga/marae/neighbourhood with strong hapū governance to support kai security and community hauora—social collectiveness and sense of belonging, mātauranga sharing and transfer across generations (see Figure 4). This is also a place to practise Te Whakatōhea and Ringatū tikanga.

Māra-ā-iwi—place to learn

Māra-ā-iwi is a large-scale māra kai located along the edges of Ōpōtiki to support iwi kai sovereignty (see Figure 5). Providing choice to whānau over what they eat, where they access it and how it is grown, this māra has iwi governance.

This research has attempted to gather the memories and mātauranga held by Te Whakatōhea kaumātua and translate this knowledge and experience into a modern urban planning strategy. By integrating kai production with the physical fabric of contemporary Te Whakatōhea communities, it has aimed to practically address issues of nutritional security affecting whānau through the spatial integration of māra at various scales and locations. This research may contribute to decision-making as Te Whakatōhea embark on the post-settlement era, resonating with the iwi's kai vision of "Ko te kai hoki i Waiaua"—under the leadership of Te Tāwharau o Te Whakatōhea.

There is significant potential for urban design and planning to provide for and enhance spaces within cities and settlements to better support kai security. Having been left off the urban agenda in Aotearoa for decades, urban food planning is now resurfacing as an essential component of urban planning (Smith & Hutchings, 2024; Thompson-Fawcett, 2025; Viriaere & Miller, 2018). As the world grapples with increased environmental vulnerabilities brought to the fore by a changing climate; international conflict; and the far-reaching environmental, social and economic impacts of long food supply chains, local kai production for local consumption is once again being deemed essential for the holistic resilience of communities in Aotearoa.

This Te Whakatōhea case study has illustrated the powerful nature of kaumātua mātauranga as

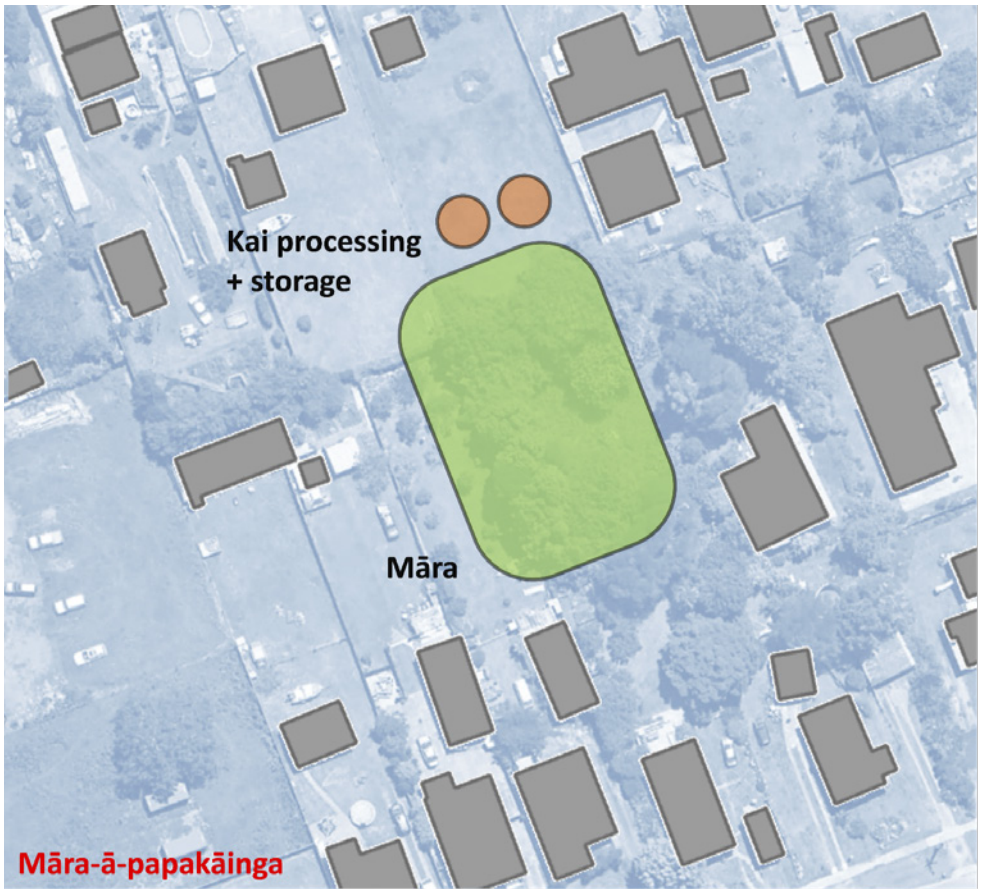

FIGURE 4 Māra-ā-papakāinga

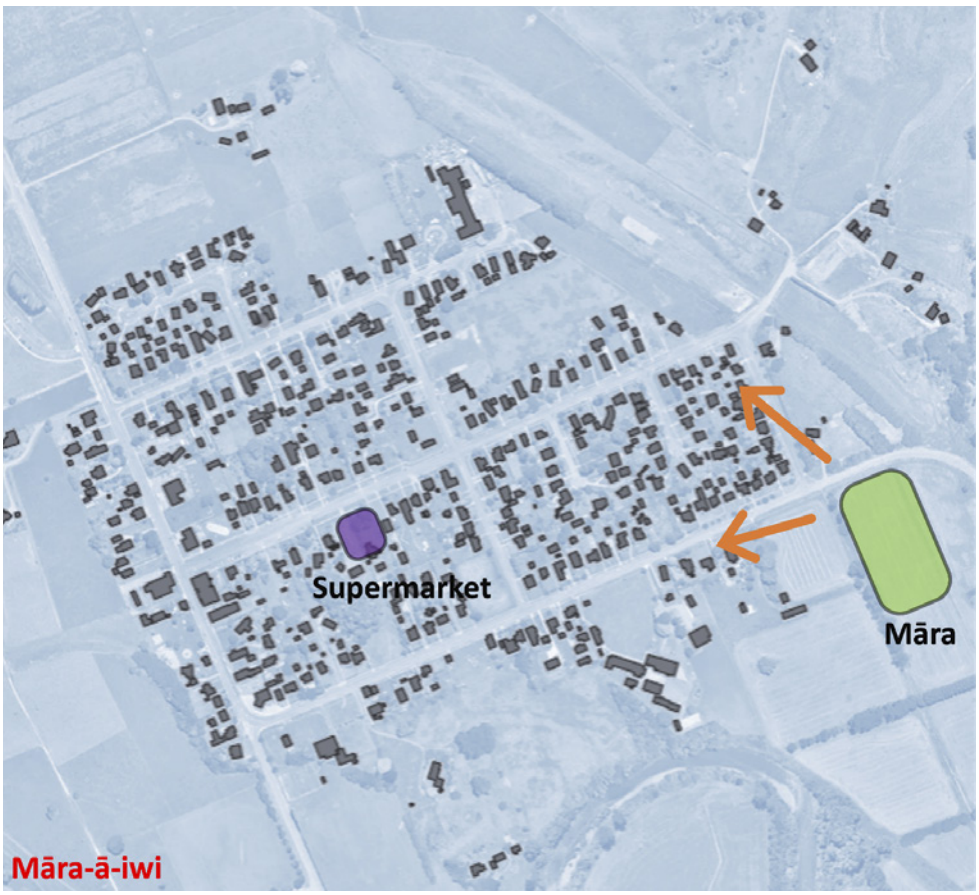

FIGURE 5 Māra-ā-iwi (orange arrows indicate mātauranga and learning outreach)

a tool to think about future kai security for the Ōpōtiki rohe. By sharing their mātauranga and memories of growing kai, they have inspired a compelling spatial framework for long-term urban planning.

> … Tē riro tō hū ki ngā kai
> O te kāinga o Maru-iwi,
> I whakataukī ai a Tapui-kākahu,
> "Te kai hoki i Wai-aua!"
> He whare moenga nōu, nō te tangata,
> Hei kume kupenga ki te ākau …
>
> … *Unsated was your desire for food*
> *At the home of the Maru-iwi,*
> *Of which Tapui-kākahu boasted,*
> *"Ah, the food of Wai-aua!"*
> *"'Twas a sleeping house for you, for all men,*
> *Where nets are hauled upon the beach …*
> (pātere of Te Whakatōhea)

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This article would not have been possible without the generous sharing of mātauranga and memories by our kaumātua participants: Te Riaki Amoamo, Robert Edwards, Julie Lux, Te Kahautu Maxwell, Danie Poihipi and Graeme Riesterer. We also acknowledge the following: Roger Rakuraku, Ngāti Ira; Dickie Farrar, CEO, Te Whakatōhea Māori Trust Board; Louisa Erikson, Operations Manager, Te Whakatōhea Māori Trust Board; Hope Hata, Te Whakatōhea, and Rik Jones, former grower at the Te Totara māra.

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Glossary

Aotearoa	Māori name for New Zealand; lit. "land of the long white cloud"
aruhe	edible rhizome of brackenfern, *Pteridium esculentum*
hāngī	earth oven

hapū	sub-tribe
hauora	health
Hawaiki	ancient homeland—the places from which Māori migrated to Aotearoa
hui	meeting
iwi	tribal group descended from a common ancestor and associated with a distinct territory
kahawai	Australian salmon, *Arripis trutta*
kai	food
kāinga	home(s)
kākā	large forest parrot, *Nestor meridionalis*
kākāriki	rock melon
kamokamo	squash, *Cucurbita pepo*
kānga pirau	fermented corn porridge, a sweet delicacy
kānga pungarehu	boiled corn cooked with ashes, a sweet delicacy
kānuka	white tea-tree, *Kunzea ericoides*
karamū	shrubs and small trees with pale bark and large leathery glossy leaves, *Coprosma lucida*, *Coprosma macrocarpa* and *Coprosma robusta*
kaumātua	Māori elder
kaupapa	guiding principles
Kei te hiakai tēnā?	Are you hungry?
kererū	New Zealand pigeon, *Hemiphaga novaeseelandiae*
kiekie	thick native vine, *Freycinetia baueriana* subsp. *banksii*
kina	sea egg, common sea urchin, *Evechinus chloroticus*
kōpeha	food store below ground
kōputu	heap, pile, collection
kōrero	talk, discussion
kōtero	fermented rīwai
kōuka	cabbage tree, *Cordyline australis*
kōura	salt-water crayfish, *Jasus edwardsii*
kuia	female elder
kūmara	sweet potato, *Ipomoea batatas*
mahinga kai	cultivation; food gathering place and practice
mana whenua	territorial rights, power from the land, authority over land or territory
mānuka	tea-tree, *Leptospermum scoparium*
Māori	Indigenous peoples of New Zealand
māra	garden
marae	open area in front of a meeting house
māra kai	food garden
māratautāne	sacred garden
mātauranga	knowledge, wisdom, understanding, education
Māui	demigod and a trickster, famous for his exploits and cleverness
me	and
merikaurau	marigold corn cultivar
mōteatea	lament, traditional chant, sung poetry
Muriwai	founding ancestress of Te Whakatōhea and wife of Tamatea
nihoniho	white maize
ohu	collective endeavour
Omarumutu	community in the Ōpōtiki District
Ōpape	small coastal settlement in the Ōpōtiki District
Ōpōtiki	traditional centre of Te Whakatōhea iwi; town in the eastern Bay of Plenty
pā	fortified village
Pākehā	New Zealander of European descent
paku(paku)	small ones (tubers)
papakāinga	communal Māori land, village, home
Papatūānuku	Earth Mother
pātere	song form used by women to express defiance and refute accusations or insults publicly
pikopiko	common shield fern, *Polystichum neozelandicum* subsp. *zerophyllum*
pungarehu	ash
purapura	large ones (tubers)
pūriri	large spreading tree of the northern North Island, *Vitex lucens*
rangatira	chief
Raukūmara	North Island mountain range, the western side of which is in the Ōpōtiki District
raupatu	confiscation
rīwai	potato, *Solanum tuberosum*
rohe	iwi territory
Rongomātāne	god of kūmara
rua	food store above ground
takiwā	district; often refers to hapū territory
tamariki	children

Tamatea	ancestor who navigated extensively throughout Aotearoa and husband of Muriwai
tangi(hanga)	rites for the dead, funeral
Tapui-kākahau	ancestor of Te Whakatōhea associated with the Waiaua area, from whom a well-known whakataukī referencing the abundance of kai within the rohe originates
tapu	sacrosanct, protected
taonga	treasure
Tarawa	founding ancestor of Te Whakatōhea, builder of the *Te Araumauma* waka
te tāwhara	the edible bracts of the kiekie
Te Tiriti o Waitangi	the Treaty of Waitangi (1840), the founding document of New Zealand
te ure(ure)	the fruit of the kiekie
Te Whakatōhea	iwi of the eastern Bay of Plenty region of New Zealand
tikanga	customary practices or behaviours
tīpuna	ancestors
tītī	muttonbird, *Puffinus griseus*
Tīwakawaka	grandson of the demigod Māui
Toi-te-huatahi	ancestor of many iwi from the Bay of Plenty area, including Te Whakatōhea
urupā	burial grounds
waiata	song, chant, psalm
Wai-aua (Waiaua)	rural locality and river in the Bay of Plenty near Ōpōtiki
waka	canoe
weka	woodhen, *Gallirallus australis greyi*, *Gallirallus australis australis*
whakakitenga-nui	concept framing how kai planning can connect ancestral mātauranga to future land use planning and wellbeing strategies (Maxwell, 2025)
whakapapa	genealogy, lineage
whakataukī	proverb
whānau	family; nuclear/extended family
whenua	land

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THE VĀ BETWEEN THE NEW ZEALAND HEALTH SYSTEM, PASIFIKA FAMILIES AND THE CHURCH

A qualitative study

*Taurere Teganahau**
Helen Anderson†
Rosemary Dewerse‡

Abstract

Research on the health outcomes of Pasifika people in New Zealand has begun to focus on the church's role as well as that of the Pasifika worldview. This study explores the relationship between the church, Pasifika families and the health system through the concept of vā. Five Pasifika participants, four parishioners and their church minister were interviewed online to facilitate dialogue and gather their voices. Four themes emerged from the interviews and the data analysis: (1) the role of family and close relationships, (2) interactions with healthcare, (3 the role of the church and (4) overarching systemic discussions. It was found that the preconceptions of some medical professionals regarding Pasifika familial, medical or religious values and practices may lead to unfruitful connections with Pasifika. Also, across all contexts, the values of engagement, honesty, respect and accessibility were key contributors to creating healthy relationships. The vā elements can form a framework to help in understanding the complexity of these connections.

Keywords

church, health, Pasifika, relatedness, vā

Introduction

In New Zealand, the Pasifika population is composed of multiple ethnicities, cultures and languages linked with the islands of the Pacific. The terms "Pasifika", "Pasifika people" and "Pasifika communities" are defined in New Zealand as groups of people originating from the subregion of the Pacific Ocean, namely, Melanesia, Micronesia

* Registered Osteopath, Unitec Institute of Technology, Auckland, New Zealand. Email: Taurereteg@hotmail.com
† Research Supervisor, Unitec Institute of Technology, Auckland, New Zealand.
‡ Academic Dean, Uniting College for Leadership and Theology/University of Divinity, Adelaide, Australia.

and Polynesia (Ministry of Health, 2020). Over 60% of the Pasifika population is concentrated within the Auckland region (Stats NZ, 2023a). The Pasifika population is projected to make up 11% of New Zealand's population by 2043, compared with 8% in 2018 (Stats NZ, 2023b). This growing population highlights the importance of understanding Pasifika health. However, it has been suggested that positive health outcomes within Pasifika communities are lower than those in the general New Zealand population (Ministry of Health, 2020; Ministry of Social Development, 2016; Ryan et al., 2019). Many factors have caused this difference in health outcomes.

When the relatedness between Pasifika people and the health system through different reports is summarised, communication seems to be a key determinant of the quality of care experienced by Pasifika (Taylor et al., 2019). This could mean that improving the communication and relationship between the Pasifika communities and the health system would improve health outcomes (Hopoi & Nosa, 2020; Ministry of Health, 2020; Taylor et al., 2019). Many reports and studies about Pasifika communities define the group as being collectivist and holistic (Health Promotion Forum of New Zealand, n.d.; Pulotu-Endemann, 2001). It is thought that an individual member of the group cannot be properly understood without their social context. In discussions of the entity or place where Pasifika traditions are being practised, the church appears to be central (Macpherson, 2011).

One way to understand communication factors through the lens of Pasifika peoples is by using the vā concept (Tuagalu, 2008).

The vā

The vā is a term defined mainly in the Samoan and Tongan languages. According to Wendt (1996), it is characterised by the space between individuals that relates them rather than being a literal empty space. It is a vast concept that connects Pasifika people, values and beliefs, socially and spiritually (Wendt, 1996). Ka'ili (2005) indicates the pan-Pacific nature of vā, which has linguistic commonalities across multiple Pasifika languages, including Tongan, Samoan, Rotuman and Tahitian. The common literal translation of this term tends to be "relationship" (Tuagalu, 2008; Wendt, 1996). However, there are arguments concerning the use of this specific translation (Reynolds, 2016). Through the Tongan lens, Poltorak (2007) argues that this term is fundamentally extraneous to the holistic context of the vā and mentions a latent ideology. He would rather use the translation "relatedness" (Poltorak, 2007).

The different elements of vā

Different elements of vā interact and demonstrate a holistic view, as seen in Figure 1 (Tuagalu, 2008). In Samoan understanding, vā o tagata indicates the relational space between people, vā fealofani indicates the relation between blood-related siblings or brotherly sisterly relations, vā feiloa'i is associated with meeting protocols, vā tapua'i refers to the worshipful space and vā fealoaloa'i refers to the respectful space (Tuagalu, 2008). Another Samoan expression linked with the vā is "ia teu le vā", which translates to the care of relationships (Anae, 2010). The vā emphasises the values of the community rather than individualism

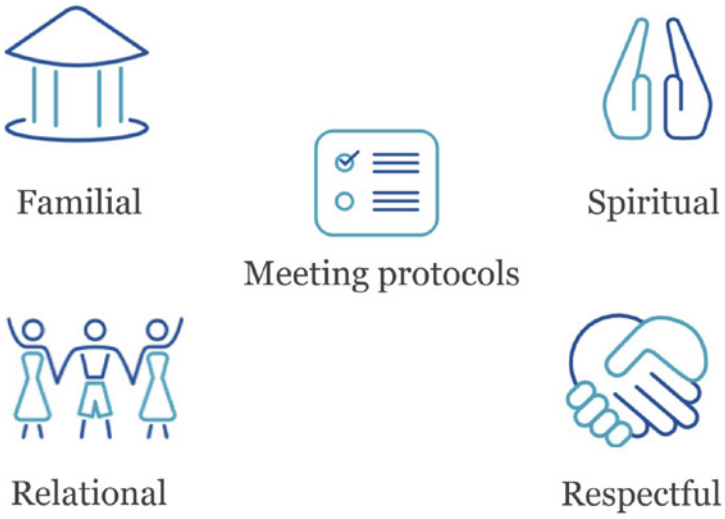

FIGURE 1 Different elements of vā (Tuagalu, 2008)

(Anae, 2010; Southwick et al., 2012; Tuagalu, 2008). Any individual within a Pasifika group can be defined fully only in the context of their position within the community.

The concept of vā enables access to the Pasifika worldview when it comes to the relatedness between Pasifika communities and the health system.

Pasifika–health system relationships

Racism towards Pasifika people in health settings, including verbal attacks, physical attacks and unfair situations, has been documented (Harris et al., 2018, 2019). Reports have been published about unconscious biases held by health practitioners in terms of Pasifika people's inability to understand and follow medication plans (Harris et al., 2018, 2019; McKinlay et al., 2015; Ministry of Health, 2020).

It appears that appropriate engagement and approaches of clinicians are essential for a trustworthy relationship (Chandra & Mohammadnezhad, 2020; Pio & Nosa, 2020). Examples include positive attitudes, soft vocal tone, politeness, welcoming behaviour and acknowledging the patient's expertise when appropriate (Chandra & Mohammadnezhad, 2020; Pio & Nosa, 2020). All those actions reflect the core values shared among all Pacific cultures: love, family, collectiveness, respect, spirituality and reciprocity (Pasefika Proud, 2020). In addition, the level of patient trust can be determined by the title of the doctor (Chandra & Mohammadnezhad, 2020). The title can be both a barrier and an enabler. On the one hand, the title can enable high compliance with management plans (Chandra & Mohammadnezhad, 2020). On the other hand, the title can reveal a power imbalance between Pasifika patients and health practitioners in the form of hesitancy to ask questions or disagreeing with doctors (Pio & Nosa, 2020).

Family, church and villages were and are arguably building blocks of community life in the Pacific islands. In New Zealand, the church tends to function like a village, where ministers are similar to a village chief (Macpherson, 2011). That is why it is thought that church ministers play an essential role in the health of the Pasifika communities.

Pasifika churches and health

In 2023, according to statistics in New Zealand, religion was significant in the life of the Pasifika communities, and over 60% of Pasifika people were affiliated with the Christian religion (Stats NZ, 2023a). Generally, it is thought that the church has a crucial role in Pasifika communities, simulating social structures from the Pacific islands (Hopoi & Nosa, 2020; Thomsen et al., 2018). Some Samoan heads of the church reported connecting with health promotion agencies (Hopoi & Nosa, 2020). The role of Samoan ministers consisted of authorising health promotion campaigns, such as Zumba dance fitness programmes, walks and sports activities (Hopoi & Nosa, 2020). An example of the role of the church in enhancing communication with the health system happened in 2021 during the COVID-19 health crisis. Health officials met with church ministers to consider different approaches to helping Pasifika communities ("Churches Credited with Helping", 2021). Church leaders' main tasks were to demystify false information about the vaccines, and their actions were credited with an increase in the vaccine uptake by the Pasifika population ("Churches Credited with Helping", 2021).

There were also, however, barriers to health promotion interventions within churches. Within Samoan churches, ministers reported failure of health interventions due to the irregular communication between health agencies and the church communities (Hopoi & Nosa, 2020). In addition, there was a slight decrease in Christian affiliations in 2023 compared with 2018, from just over 65% to just over 60% (Stats NZ, 2018, 2023a). The gradual shift of Pasifika generations shows a change from a culture centred on the church to a culture centred on a multi-support system (Ministry of Social Development, 2016; Thomsen et al., 2018).

This study sought to explore the relatedness between Pasifika people, the church and the New Zealand health system using the vā concept. It also sought a pathway to better health messaging and thus greater health outcomes for Pasifika. To do so, it used the Tafatolu framework that acknowledges both Pacific and Western worldviews, beliefs and values.

Methodology and methods

The Tafatolu framework, as illustrated in Figure 2, is a Samoan methodology developed by Fosi Palaamo (2018). He illustrated the Tafatolu as a three-sided methodological framework composed of a contemporary academic approach, a cultural approach and a self-approach that locates the researcher within the research.

Contemporary academic approach

The contemporary academic approach is one side of the Tafatolu methodological framework, which

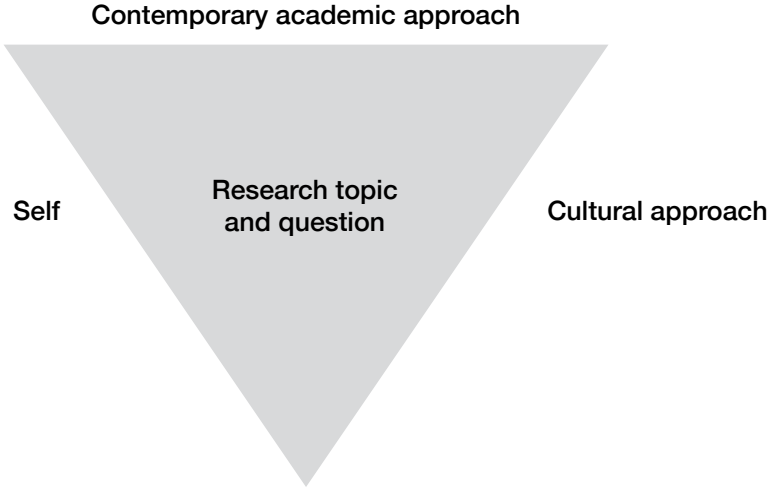

FIGURE 2 Tafatolu methodological framework (Palaamo, 2019)

includes dominant academic methodologies: quantitative, qualitative or mixed methods methodologies (Palaamo, 2018).

In this study, episodic narrative interviews were used to gather stories and experiences (Mueller, 2019). The episodic narrative interview is a fusion of different elements from narrative inquiry, episodic interview and semi-structured interview methodologies (Mueller, 2019).

Palaamo (2018) points out the need to merge and tailor the values of these contemporary academic approaches with values better matching those of the group being studied. In this study, the values of the interview methodologies mentioned above were fused with talanoa.

Cultural approach

The second side of the Tafatolu methodological framework, the cultural approach, incorporates any Indigenous methodology widely used by researchers for the study (Palaamo, 2018).

In this research project, the emphasis was placed on exploring health communication through the lens of Pasifika people. The narrative component of talanoa was thus the foundation of the cultural approach during the research with parishioners and church minister. For talanoa to be successful, empathy and emotions must be considered (Stewart-Withers et al., 2017). Talanoa fits well with the episodic narrative interview because they both rely on storytelling. In addition, talanoa embraced different tangents taken by participants during the interviews if needed (Stewart-Withers et al., 2017).

Self-approach

The third approach involved what the researcher brought to the project: the self-approach. According to Palaamo (2018), the researcher has the task of placing themselves on an outsider–insider spectrum depending on the subject being discussed.

Researcher's background

Iaorana, O Taurere TEGANAHAU to ʻu iʻoa. I am a Pasifika osteopath who grew up in a multicultured family (Chinese and Tahitian) in Taunoa, Papeete, Tahiti. The different concepts of Pasifika communities, family and culturally tailored behaviour were embedded in my education. After starting my studies in health, a memory from my experience of the Tahitian health system struck me. I tried to picture the entrance of hospitals or clinics in Tahiti. I realised that most people waiting outside of the building were native Polynesians. It should not have been normal to see so many Polynesians suffering from non-communicable diseases and having a lowered quality of life. From then on, my engagement with research on the underlying world between cultures and their associated health outcomes began.

Data collection

The data were recorded through online Zoom meetings due to the uncertainty around COVID-19 restrictions, which prevented face-to-face interviews at the time the research method was established in 2021. Each participant was interviewed twice, for an hour each session, to further

clarify emerging themes. The second interview enabled a better understanding and greater respect of the participants' voices.

Ethical considerations

Ethical approval for this research project was sought from the Unitec Research Ethics Committee. The principles observed were participant confidentiality, informed consent, truth and prevention of harm.

Participants

Initially, the Pasifika Centre at UNITEC recommended a church minister. Discussions with the minister about the study's goals and recruitment criteria led to the recommendation of participants. The research recruited seven participants who were all part of the church. Two parishioners became unavailable. The total number of participants included was five—four parishioners and the church minister. All participants were middle-aged parents, most of whom were born in the Pacific islands. Their heritage came from the Pacific Islands of Samoa only, Cook Islands only or a combination of Samoa and New Zealand European.

Family-centred participants

During recruitment, the church minister suggested some participants to me. Whenever someone was not able to be included, the church minister contacted a "back up participant" who was part of his family. By the end of the recruitment, all participants had a family link with the church minister. This outcome, while not by design, provided a replication of the connectedness typical within the Pasifika communities and enhanced the quality of the findings. Also, being recommended by a member of the same family made me experience and go through the intricate process of building trust and relationships.

Integration of the vā within the research

Because of my role as a researcher who is respectful of the concept of vā, one major part of the plan to build a positive relationship with the church was to attend church services. I first attended a service when COVID-19 health restrictions allowed gathering in 2022. When arriving, I noticed that Pasifika art and craft was on display right at the entrance, confirming that I was at the right place. The church minister welcomed me with open arms, offering me breakfast, a smile and particular care. It is a little tradition for that church to meet in the morning before church to have breakfast. A quite spacious area with tables and seats is used at the back of the church to welcome parishioners to eat. The white plastic tables, the food and the welcoming "Good morning" gave a similar atmosphere to that of a typical social Tahitian gathering for special occasions. A part of the area was open to the sky and used as a basketball half court. I was immediately invited to take some food, coffee and a seat at the minister's table. Because

TABLE 1 List of themes and subthemes

Themes	Subthemes
1. Role of family/close relationships	Role model and support for family
	Reminder of health
	Source of pressure
2. Interaction with healthcare	Positive health practitioner demeanour and communication
	Negative health practitioner demeanour and communication
	Pasifika cultural affiliation
3. Role of church	Mental/social health
	Physical health and its social aspect (fitness programme)
	Arguments/discussion on Pasifika population
4. Overarching systemic discussions	Discussions about healthcare/government
	Arguments about church

I am a Pasifika person, this familiar atmosphere had the effect of making me feel at home. The minister made the effort of presenting me to those at the table and in the church during the service. However, given my position as an outsider and newcomer, I felt pressured to show the best of myself. This feeling of pressure dissipated as soon as I interacted more with the church members. I believe that this initial introduction by a leader was crucial to welcoming me into this community.

Findings

The findings are presented using the Tafatolu methodology triad: academic, cultural and self. It is important to note the overlap between each part of the findings.

The academic part includes a table and figures to summarise the data (see Table 1 and Figures 3 to 6). The cultural part includes tables containing the participants' quotes (see Tables 2 to 5) and my French Polynesian symbols presented in the findings summary. The self part outlines my positioning on the insider–outsider spectrum within each thematic table.

Theme 1: Role of family/close relationships

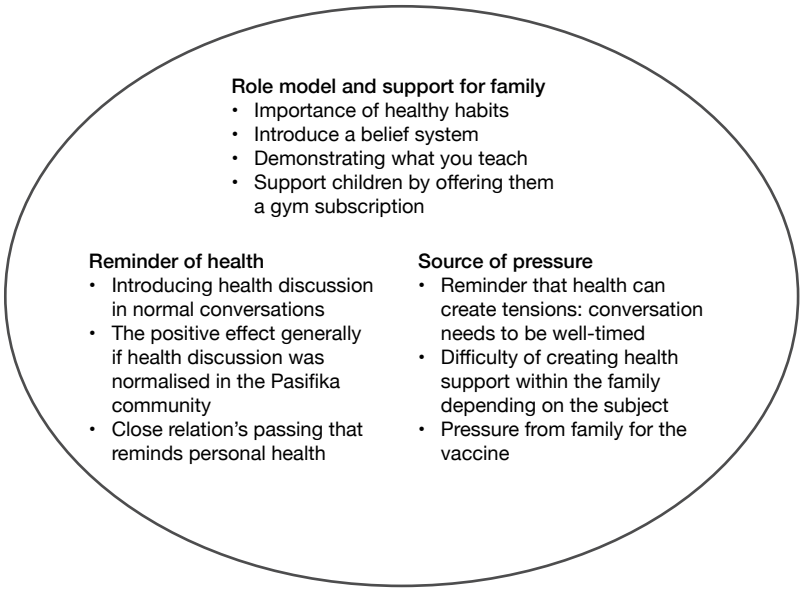

FIGURE 3 [Academic] Subthemes of Theme 1

TABLE 2 [Cultural and Self] Relevant participant quotes and self-positioning

Participant quotes	Insider–outsider positioning
"The most valuable thing I think is just knowing that they're there for me and not giving up, and just that continual support and unconditional support and love."	I have insider and outsider perspectives on the role of family and close relationships. I am an insider when it comes to the introduction to a religious belief system due to my upbringing in a Catholic family. I am also an insider to the presence of relational pressure when it comes to having health discussions between family members. However, I am outsider to any notion around being responsible for an upbringing of a child or the wake-up call from having a close relation pass away.
"If we could do something within our own kind of family units, the flow on the effect downstream generationally will be really good."	
"I did feel pressure from a lot of people, even though maybe it wasn't directed at me, I was more or less part of the wider discussion about people that weren't doing this and people who weren't … It was frowned upon … I suppose the feeling after that, while we were waiting in the waiting room just to see if there were any reactions was, I don't know, I just felt defeated."	

Theme 2: Interaction with healthcare

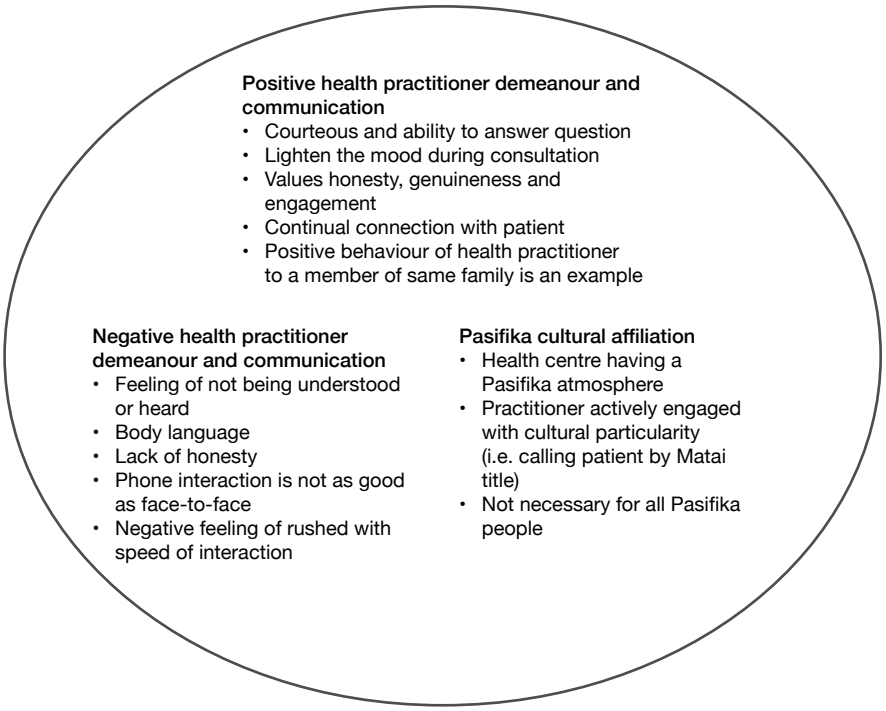

FIGURE 4 [Academic] Subthemes of Theme 2

TABLE 3 [Cultural and Self] Relevant participants quotes and self-positioning

Participant quotes	Insider–outsider positioning
"As Polys, we like to lighten the mood, and we just cracked little jokes here and there. But we'd just be talking in a serious and then I crack just a little funny to try and lighten the mood." "That is an important aspect for me when I see a doctor is that they're genuinely listening and wanting to find a solution to whatever issue I have."	I am an insider for most of the experience linked with direct health interaction. I am a Pasifika health practitioner and have searched in my own practice for the right way of communicating with Pasifika people. I resonate with most of the points that the participants have made about direct contact with health practitioners. When observing other practitioners, I was able to tell when some things were uncomfortable for Pasifika patients. However, I have not yet experienced a Pasifika clinic, hence, I am an outsider to all experiences linked with this type of clinic.
"Well, actually there wasn't that much eye contact, unless she just spoke to me or asked me about if I had any questions and then looked back at her computer." "In this situation here with my dad, I mean, this nurse pretty much said she didn't wanna give the information 'cause the information was bad. That's what really ticked me off, man."	
"So, my parents are in their kind of mid '70s. And so 10 years ago when that doctor retired, my parents were like, 'Oh, we don't wanna stay there 'cause there's no other Pālagi doctors that understand us' … And I would say, 'Mom, but (name of Pālagi doctor), he is Pālagi.' [chuckle] He wasn't the Pasifika GP, but he made every effort to talk with my parents, to explain things with my parents."	

Theme 3: Role of church

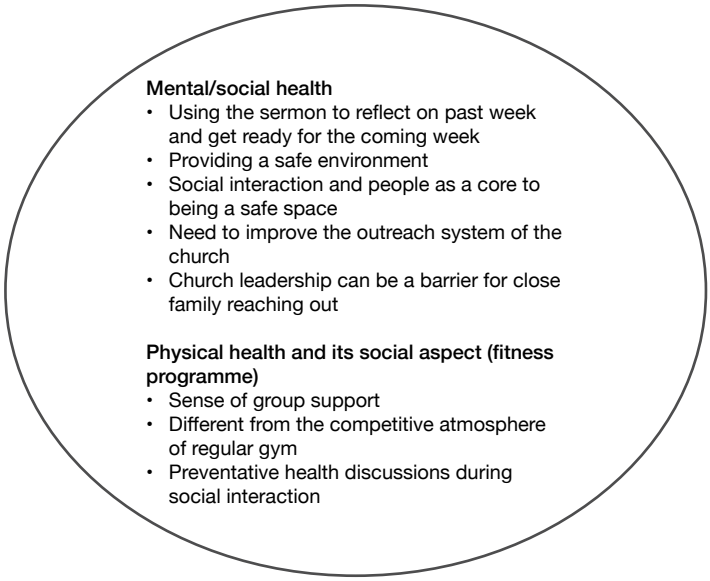

FIGURE 5 [Academic] Subthemes of Theme 3

TABLE 4 [Cultural and Self] Relevant participants quotes and self-positioning

Participant quotes	Insider–outsider positioning
"Yeah, it would be the people, so people, friendly. It's friendly, everyone's friendly, good place to just fellowship and yeah, just that's how I feel that church."	Being brought up in a religious family, I have experienced the Catholic church since childhood. I followed the family tradition of regularly attending church. Hence, I am an insider to the church atmosphere and interactions. Also, in the context of this research I attended church services that Participant 3 preached, giving me a snapshot of the participants' church environment and community. In addition, I have experienced one of the fitness programmes organised by the church and coached by Participant 3. I was able to connect with the participants who did those fitness sessions. Thanks to those church visits, I would mostly place myself as an insider for this theme of the church. The only aspect in which I would put myself as an outsider was in the experience having a church leader in my family.
"Some of those conversations might be, 'Oh, have you seen the new health strategy? It's around colon cancer or colon checks.' And we do that in a way that we kind of laugh about it first and we talk about, that's not the sort of thing that we wanna even go to." "Just the whole atmosphere with going to fitness at church is, there's no kind ... There's no feeling of having to compete with the person that's next to you or to look a certain way, to be a certain way."	

Theme 4: Overarching systemic discussions

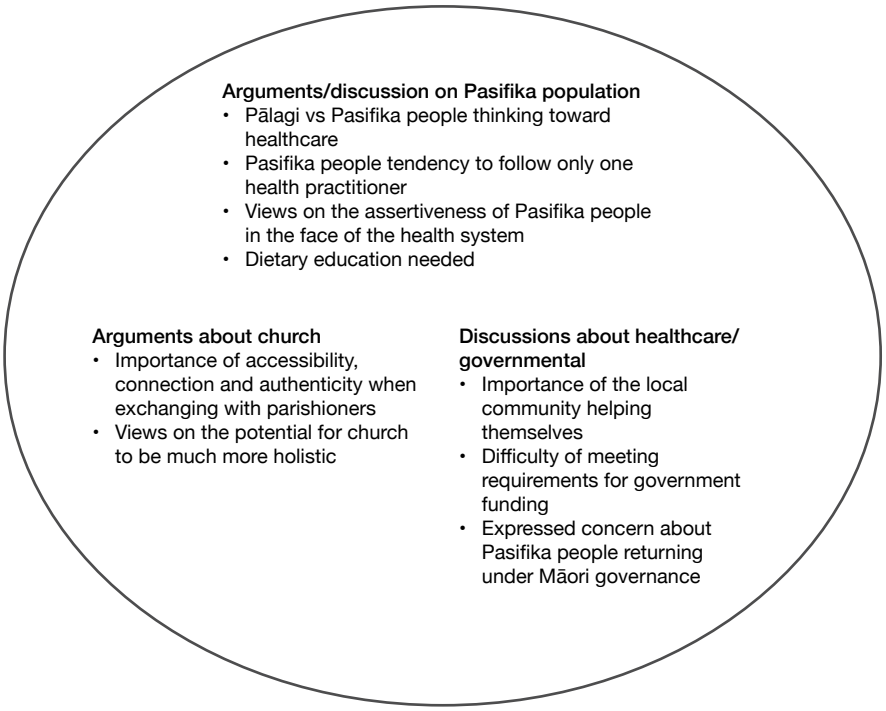

FIGURE 6 [Academic] Subthemes of Theme 4

TABLE 5 [Cultural and Self] Relevant participants quotes and self-positioning

Participant quotes	Insider–outsider positioning
"A lot of times the islanders they present when, and he's thinking, mate, you're having a heart attack right now go to the ... Call an ambulance. But they wait till the last minute. Whereas he said, Pālagi people … they come in. 'Oh look, I've got a little thing here. It's a little bit sore. Can you fix my finger?'"	I was able to engage as an insider in the discussion on the Pasifika communities and the arguments about church. I connected with the discussion comparing the Pālagi and Pasifika people thinking towards health as I have both heritages myself. However, I have not had experiences in situations involving the church and government. I was an outsider to those discussions.
"Most of the success came around organising communities to do it for themselves."	
"In terms of human connection, accessibility for me is a huge one. Because everything comes from that." "I can relate to them in terms of ... In a pastoral way, as a shepherd would shepherd the sheep, on a one-on-one way, a personable way, something, a way that we can help and encourage and push forward." "Offering something within a church context, within a community context, it still delivers wholly to the person, W-H-O-L-L-Y, in that sense, and something that I think the church hasn't quite embraced in the kind of way."	

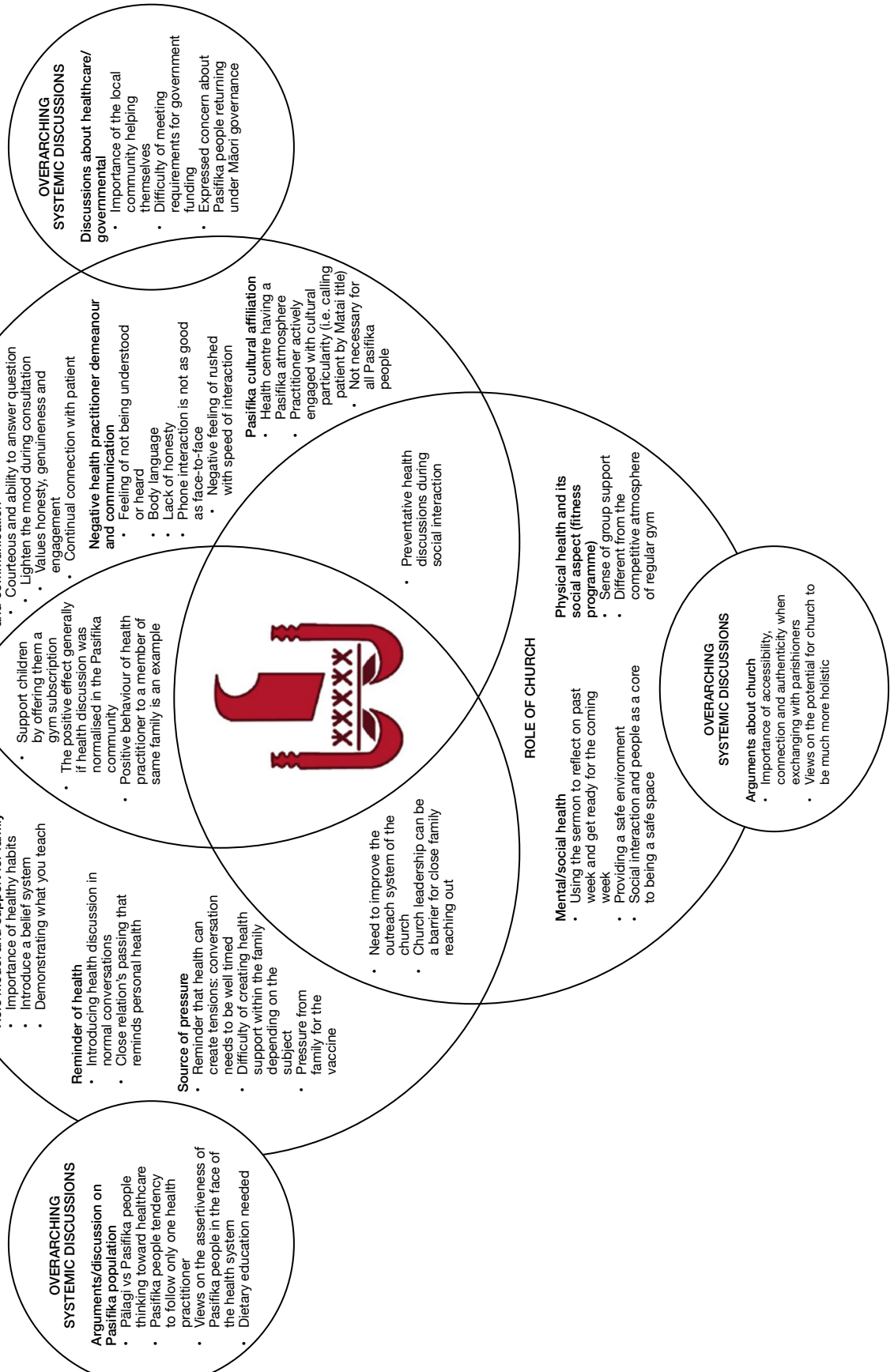

FIGURE 7 [Academic] Triple Venn diagram summarising the findings

Findings summary

The summarising triple Venn diagram in Figure 7 assembles all the themes with the different subthemes under each. It shows when a subtheme links two themes. At the centre is the Tahitian red canoe, as seen in Figure 8. At the periphery of each circle of the Venn diagram, smaller circles represent the overarching systemic discussion linked with each theme (role of family/close relations, interaction with healthcare and role of church). The Venn diagram shows the interrelationships of all the themes with some subthemes relating to more than one theme.

In this research, the symbolism of the red double-hulled canoe with its five tikis at the centre of the diagram has four representations. First, it represents the Pasifika communities with its core values. Second, it represents the exploration characteristic of this research. Third, it represents the complexity of the Pasifika communities. Lastly, it represents me, the researcher, in a pictorial way as an insider–outsider in the data. Therefore, it offers a unifying symbol, with links to my heritage, for these interwoven components.

The red colour of the double-hulled canoe recalls the red feathered belt worn exclusively by the members of the royal families (Babin, n.d.). With its sail, the double-hulled canoe carries five tikis representing the five archipelagos of French Polynesia (Babin, n.d.).

Discussion

This section establishes three main contexts in which the vā is discussed: the familial context, the health system context and the church context. The discussion is presented using a spider chart.

Relatedness of the different contexts with the concept of vā

The multifaceted relationships among the Pasifika communities, health system and the church are shaped by the shared values reflected in the different elements of vā. For each context where Pasifika health is being affected (family/closed relations, health system or church) the level of importance of the vā is different.

A spider chart is the best way to show my representation of the differences in importance of the elements of vā. In the spider chart shown in Figure 9, the five elements of vā (familial, spiritual, relational, meeting protocols and respectful) are contextualised to the key elements of Pasifika health—family/close relationships, church and the health system. The process of making this chart reflects how I represented my view of the findings through the lens of the different elements of vā, and I was mindful of what the participants saw as important in the three main contexts of Pasifika health. The chart's data and numbers represent the proportionate visual representation that came from my discussions with the participants. This chart is not a quantitative finding using actual

FIGURE 8 [Cultural] French Polynesian double-hulled voyaging canoe from the national flag

Note: The red double-hulled voyaging canoe is part of the French Polynesian national flag. The canoe is an emblem of the Polynesian civilisation, symbolic of essential values. It is an indispensable tool for communication between islands and fishing. The canoe is a pan-Pacific symbol because it has helped many Pasifika populations to travel during the great Pasifika migration.

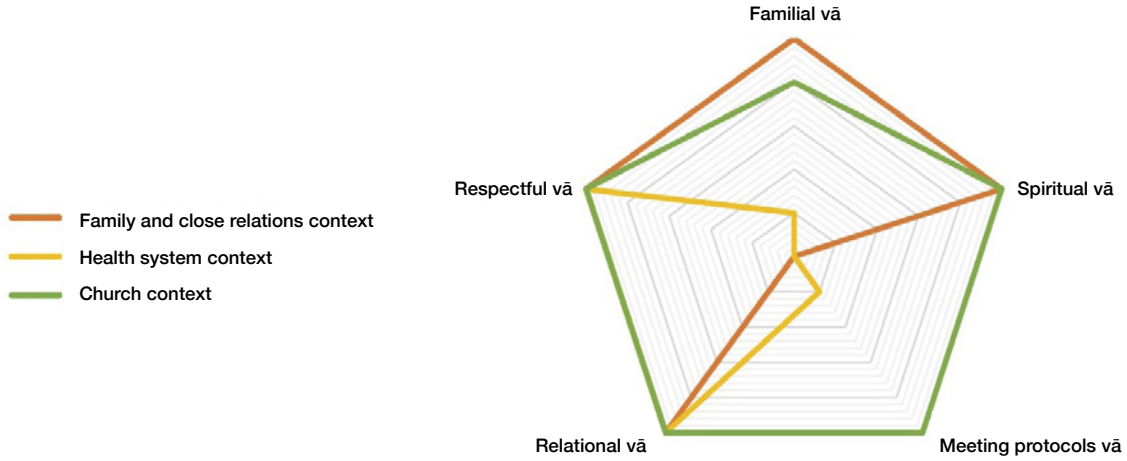

FIGURE 9 Spider chart representing the differing importance of vā according to context

numerical data but rather a visual, personalised self-reflection. The subjective importance for me of an element expressed by a participant would increase its proportionate value, for example, when a participant insisted on a particular value of theirs for a context. It is worth noting that if every participant made a similar chart, every one of them would probably place the axes representing the elements of vā of the spider chart differently from me.

Family and close relations context

For the family/close relationship context, four elements of vā emerged as highly important: familial, spiritual, relational and respectful.

The familial context can change the outcome of health advice. In most families, a support system is created to help each member of the family. Health advice is one of the supports given between family members. When the relationship between an individual and their close family is healthy, support and health advice can significantly affect their health and wellbeing for the better. Conversely, tense relations between blood-bond relatives build barriers to interaction. The timing, environmental context and nature of previous communication tends to play a role when communication between family members is challenging. Healthy communication between family members is challenged if the respectful or relational vā is low. Similar factors can play into the pressure that family can have on the individual. Some participants appeared to have a clash between their internal reflection of what they think they need compared with what their family tell them or provide them with. In pressured situations, an individual can feel compelled to carry out a health action that they would not have done otherwise alone.

Meanwhile, the spiritual vā in the familial context appears in the participants' upbringing. There was the importance of having a belief system in the familial mechanism to develop a framework for life management, especially for optimum health and positive behavioural values. Some participants spoke of this important inclusion in their upbringing and that of their children.

Health system context

The relational and respectful vā appeared to be important in the health system context. The values of honesty, being genuine and engaged were ever present in the discussion as positive values towards connecting with health practitioners. Those practitioners who give a caring, honest and engaged atmosphere, even those without Pacific heritage, can create a great bond and trusting environment with Pasifika people.

The health system context had a link with the familial vā. Close relations can exchange thoughts and feelings about a practitioner. When several family members all experience the same sincere care and positive engagement from a health practitioner, it reinforces that the practitioner's approach to them is genuinely authentic.

The meeting protocol vā in the health context is evident. The process of a health appointment should be an exchange between a medical practitioner, a patient and sometimes other family members. This

exchange can have the feeling of a formal cultural meeting, which can heighten the importance of the medical practitioner's behaviours. The speaker offers their thoughts and knowledge as a gift while the listener receives them, essentially making it a formal meeting about a patient's health issue. We could argue that a Pasifika patient's adherence to the health management may depend on whether the values of the meeting protocol vā are reflected.

Church context

In my interpretation of the qualitative data, the church community seems to be the most balanced when it comes to the elements of vā. Its village-like atmosphere fulfils the majority of the vā elements. In general, most parishioners would describe the church as offering strong spiritual, mental, social and emotional support. The parishioners tended to see the church as a safe place enabling healing and readying them for future hardships.

The familial vā has limitations in the context of the church, however. The church leader's family might find barriers to receiving pastoral care due to familial tensions. Some family members were reticent to engage in an intimate personal discussion with their church leaders because they were relatives. This sometimes limits health-related communication and support systems. Some participants then went to different church communities to look for another support system. We could argue that this pattern may be repeated within other Pasifika families attached to one church. Hence, one function of a church minister is supporting their parishioners, but when it comes to their relatives, it can become challenging to create a support platform.

The health system and the church can have a relationship in which they help each other. The church can provide a platform from which health advice can be shared with the Pasifika communities by trusted people. At the same time, the health system can fund a church health initiative for their communities, such as making training at church possible. One example is the funded fitness equipment for the church's fitness programme that I attended. However, it is worth noting that there is some difficulty for Pasifika church leaders to obtain governmental funding.

Summary of the spider chart

The spider chart reflects the concept of vā well, illustrating its complexity and the overlapping of different elements across the three contexts. The family/close relation context, the health system context and the church context showed differences. The different elements of vā emerged at different levels of importance in each context. The familial and spiritual elements of vā are more prevalent in the familial context than in the health system context. For a health practitioner, this could mean needing to be mindful of the importance and presence of the familial and spiritual vā when working with Pasifika patients even when not having direct access to these wider elements.

Interestingly, all three contexts overlapped, especially with the respectful vā and relational vā. This could mean that what is the most important when interacting in those different contexts with Pacific peoples is respect and relational connection.

Limitations and recommendations

This research has identified many threads for future research because it could not do face-to-face focus groups, which would have brought another dimension of discussion that could not be explored. To address the limitation, the study engaged in meeting online with the participants twice and visiting the church services to participate in the community's gathering once the COVID-19 restrictions were removed. In addition, this study revealed the need to further explore the notion of health communication issues across different generations and Pasifika culture beyond Samoan and Cook Island participants. Broadening the research to other Pasifika church members or larger congregations could challenge or confirm the findings from this family-centred study.

Table 6 summarises the key recommendations that came out from the findings within the three contexts discussed in this study.

Conclusion

A review of available literature uncovered a lack of parishioners' voices in the existing research on communication issues between the health system and the general Pasifika population at different levels. This research therefore explored the connection between the different contexts of Pasifika parishioner/family, the church and the health system using the vā as a framework and showing that these connections are multifaceted. The research's methodology and methods allowed a great connection between the participants and the researcher. This connection showed me the complexity of Pasifika peoples' engagement with the familial/close relationship, religious and medical contexts. Across all contexts, the different values of engagement, honesty, respect and accessibility are favourable to creating healthy relationships. In addition, there could be

TABLE 6 Recommendations of the data on health communication in the three different contexts of Pasifika/family, health system and the church

Contexts	Recommendations within vā
Pasifika/family	Importance of establishing a belief system to implement positive behavioural values (spiritual vā)
	Normalising health discussion within families to increase the positive effect downstream generationally (relational and familial vā)
	Being aware of the relationship, respect, relational and timing between individuals concerning health topics (respectful and relational vā)
Health system	Importance of a positive demeanour (respectful and relational vā) • Honesty • Genuineness • Engagement • Courtesy • Lightening of mood during consultation
	Negative factors (respectful and relational vā) • Decreased engagement or honesty • Phone interaction less appreciated than face to face • Rushed interaction
	Pasifika affiliation/heritage of health appointment can help but is not necessary for all Pasifika patients
Church	Robust health help, especially through spiritual, mental, social and emotional support (spiritual, respectful, familial and relational vā) • Weekly reset • Provide a safe place
	Can be a place of healing when family cannot be a support (respectful and relational vā)
	Physical health through fitness programmes (familial and relational vā) • Create a sense of group support • Social aspect can create a platform for health discussions
	Need for church leaders to maintain meeting protocols, relational and respectful vā • Accessibility • Connection • Authenticity

barriers within or between the different contexts. In some cases, overlapping familial connections within the church or health contexts had negative effects. That is why it is essential to be mindful of the complexity of all these relationships when it comes to health communication with Pacific peoples.

The complexity of each of the relationships shows that having no prejudgement before creating a link with a Pasifika individual is critical to successful engagement. Engaging with the vā elements can form a framework to help in understanding the complexity of these connections.

Glossary

Iaorana	Tahitian greetings
Matai	Chief
O [name] to ’u i‘oa	My name is
Pālagi	foreigner
tafatolu	three sides
talanoa	open and respectful dialogue or conversation
vā	relatedness
vā fealoaloa‘i	the respectful space
vā fealofani	the relation between blood-related siblings or brotherly sisterly relations
vā feiloa‘i	meeting protocols
vā o tagata	the relational space between people
vā tapua‘i	the worshipful space

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THE MOST IMPACTFUL FINANCIAL CHALLENGES SĀMOAN WOMEN IDENTIFIED UNDER DIFFERING COVID-19 RESPONSE STRATEGIES, 2020–2021

*Sarah McLean-Orsborn**

Abstract

This article examines the differing financial challenges faced by Sāmoan women across four countries during the COVID-19 pandemic, with a focus on the impact of national response strategies. Utilising survey data from 325 participants, the study reveals that 48% of respondents experienced negative financial effects, with younger women disproportionately affected. Textual analysis highlighted increased household costs, employment disruptions, business losses, and diminished remittances, compounded by limited government support in several contexts. The discussion situates these findings within an intersectional framework, demonstrating how gender, culture, socioeconomic status, and policy responses shaped financial vulnerability and resilience. The article underscores the necessity for culturally responsive and equitable policy interventions, advocating for the inclusion of Sāmoan perspectives in decision-making processes. These insights contribute to a deeper understanding of the structural and cultural determinants of financial wellbeing among Sāmoan women during global crises.

Keywords

COVID-19, Sāmoan women, pandemic response strategies

Introduction

On 31 December 2019, the China Country Office of the World Health Organization (WHO, 2020b) was informed that cases of pneumonia with an unknown cause had been detected in Wuhan City, in Hubei Province. On 9 January 2020, WHO reported that Chinese authorities had determined the cause of the "pneumonia" was a novel coronavirus, now commonly referred to as COVID-19. WHO (2020a) began a succession of meetings with their research and development team as they began to look at this as an epidemic.

While WHO was trying to understand the COVID-19 situation better, governments worldwide began planning and developing their pandemic responses. Governments had to consider the various strategies that could be employed to best protect their public health, while also

* Sāmoan (Tapatapao, Moamoa, Papa Sataua). Lecturer in Pacific Studies, Te Wananga o Waipapa School of Māori and Pacific Studies, Faculty of Arts and Education, Waipapa Taumata Rau | The University of Auckland, Auckland, New Zealand. Email: s.mclean-orsborn@auckland.ac.nz

factoring in resource availability (e.g., personal protection equipment, staffing, and facilities) and geographic location (Institute of Environmental Science and Research [ESR], 2023).

On 25 March 2020, Aotearoa New Zealand went into a "Level 4" lockdown, and people's lives changed abruptly. The ways in which work, study and socialising occurred now had to be undertaken remotely. Given the unprecedented circumstances and uncertainties people faced, their stress levels increased dramatically.

As a Sāmoan woman who at the time was worrying about housing and job security, as well as the health and wellbeing of my dad—and also trying to plan a PhD topic—I was aware that my research project would likely reach individuals who like myself were overwhelmed by the uncertainties of the pandemic, as well as individuals who were distressed or in crisis because of it. As a Pacific researcher, I have always understood that I have a duty of care when it comes to the safety and wellbeing of my research participants, and I felt that in order to create a research project that would be culturally and socially safe for participants, it would be best that I focus solely on Sāmoan women.

The aim of my doctoral research was to capture an understanding of the experiences of Sāmoan women throughout the COVID-19 pandemic, with a focus on the sociocultural contributors that impacted their positive wellbeing and how they mapped their way of coping. I sought to examine the global experiences of Sāmoan women by conducting an online survey followed by in-depth talanoa. Utilising a strengths-based approach, I envisioned that this research would contribute to informing and developing health promotion strategies and assist towards developing mental health and help-seeking frameworks grounded in the lived realities of Sāmoan women.

Literature review

The main strategies employed by governments around the world during the COVID-19 pandemic were focused on elimination, suppression, mitigation, and exclusion. As the pandemic progressed, countries often changed their approach.

Elimination strategy

An elimination strategy aims to reduce the number of disease cases spread within a specific geographic location or country to zero (ESR, 2023). While there is no internationally agreed-upon definition for a COVID-19 elimination strategy, Aotearoa epidemiologist Professor Michael Baker has outlined three main elements that can be expected:

a. An aim for zero community transmission with an understanding that outbreaks from border control failures may occur.
b. An investment into three broad categories of public health infrastructure: "border management with closely supervised quarantine of all arrivals from places that have not eliminated the virus; case based control measures, notably testing, case isolation, contact tracing, and quarantine; and population based interventions such as physical distancing and mask use".
c. Outbreaks from border control failures require swift and decisive actions. (Baker, Wilson, & Blakely, 2020, p. 2)

The New Zealand Government chose an explicit elimination approach after observing the effects COVID-19 had on Northern Hemisphere countries (Baker, Kvalsvig, & Verrall, 2020; Baker, Kvalsvig, Verrall, et al., 2020; Baker, Wilson, & Blakeley, 2020). Aotearoa's first case of COVID-19 was reported on 26 February 2020 (Baker, Wilson, & Blakeley, 2020).

The elimination strategy served Aotearoa well, resulting in the lowest number of COVID-19 cases, hospitalisations, and deaths among the 38 Organisation for Economic Co-operation and Development (OECD) member countries between 21 March 2020 and 2 December 2021 (Ministry of Health, 2022). On 21 March 2020, the New Zealand Government introduced a four-tiered alert-level system, which was continuously reviewed by the government based on the rapidly growing scientific knowledge about COVID-19 and emerging information about effective control measures (Baker, Kvalsvig, & Verrall, 2020; Department of the Prime Minister and Cabinet, 2022).

The alert levels, applied nationally and regionally, successfully eliminated three COVID-19 community outbreaks in March–May 2020, August–September 2020 and February–March 2021 (Vattiato et al., 2023). However, in August 2021, the "Delta" variant was detected in the community without a clear link to the border, and the rapid and effective public health response failed to eliminate the outbreak, which was mainly restricted to the Tāmaki Makaurau Auckland region (Vattiato et al., 2023). A nationwide vaccine roll-out campaign saw 94% of the population receive at least one dose of Pfizer-BioNTech's BNT162b2 vaccine by early December 2021, at

which point Aotearoa effectively transitioned from an elimination strategy to a mitigation strategy (Vattiato et al., 2023).

Suppression strategy

A suppression strategy aims to control the disease and keep the number of cases very low for as long as possible (Baker, Wilson, & Blakely, 2020; ESR, 2023). This approach implements strong measures to reduce the opportunity for the infection to spread, such as quarantining or isolation of infected people (ESR, 2023). The aim is to ensure that the healthcare system is not overwhelmed by keeping the infection rate low and delaying outbreaks (ESR, 2023).

Success of a suppression strategy requires quick identification and isolation of infected individuals and their contacts to prevent further spread. However, this can be challenging as cases may not be identified due to infected people being asymptomatic or experiencing only mild symptoms and therefore not seeking medical treatment (ESR, 2023). It is important to note it can take some time before the effectiveness of a suppression strategy is known for new pathogens (ESR, 2023).

Australia is a federation comprising six states and two territories. This allows each jurisdiction to have significant decision-making independence, including constitutional responsibility for health protection (Basseal et al., 2022; Commonwealth of Australia, 2022). Because of this structure, Australia manages disease outbreaks primarily through jurisdictional teams coordinating the data collection, analysis, and public health response (Basseal et al., 2022). The country officially had an elimination goal for COVID-19, but its approach has been described as "aggressive suppression" (Basseal et al., 2022; Blakely et al., 2020; Trauer, 2022).

Lockdown policies were intermittently implemented throughout 2020 and 2021 to achieve COVID-zero status and strict social distancing restrictions (Shergold et al., 2022). Despite periods without recording a single case of COVID-19, Australia's policies were only the seventh-most stringent of the OECD nations (Shergold et al., 2022).

Mitigation strategy

Mitigation looks to control an infectious disease outbreak instead of eliminating it. This strategy looks to ensure the healthcare system is not overwhelmed by progressively strengthening measures as the outbreak progresses and cases increase (ESR, 2023).

The approach of the United States to the COVID-19 pandemic is an example of a mitigation strategy. The federal response was slow to develop, leaving states and localities to lead their own responses; this resulted in uneven exercising of public health powers (Alexander et al., 2022; Haffajee & Mello, 2020). Following the first confirmed case of COVID-19 in the United States on 20 January 2020, a Coronavirus Task Force was established by the White House and the US Department of Health and Human Services, and a public health emergency was declared (Alexander et al., 2022).

A national emergency was then declared on 13 March 2020, and the White House introduced national recommendations such as "15 Days to Slow the Spread", a nationwide voluntary lockdown, which was then extended to 30 days (Alexander et al., 2022; Moreland et al., 2020; O'Grady et al., 2020). By 27 March, all 50 states and the federal government had declared emergencies for COVID-19 (Hodge, 2021).

Despite federal powers to ensure the public adhered to the lockdown, there was no unified, enforced response, and each state and locality determined their own measures (Alexander et al., 2022). By March 2020, 30 states had shut all non-essential businesses; 39 prohibited gatherings of any sort while others banned gatherings of more than 10; 44 closed dine-in seating in restaurants and bars; 47 mandated school closures; and 42 had a mandatory "Stay at Home" order in place at some point during the lockdown (Alexander et al., 2022).

The White House published an unmandated national plan for reopening in mid-April 2020, with reopening criteria depending on a downward trend of cases, sufficient hospital capacity, and vigorous testing infrastructure (Alexander et al., 2022). The reopening criteria also included a three-phase plan which outlined the gradual easing of public health measures, such as limits on public gatherings and restrictions on non-essential businesses (Alexander et al., 2022). Before the end of the national lockdown, however, several states had reopened without meeting the federal plan's key criteria (Alexander et al., 2022).

Exclusion strategy

An exclusion strategy aims to achieve zero community transmission and was successfully utilised by some Pacific nations and territories, such as American Sāmoa and Sāmoa. A State of Emergency (SOE) was declared in Sāmoa on 20 March 2020 in response to the COVID-19

pandemic ("Samoa Officially on Lockdown", 2020; Tamaalii, 2020). The head of state, Afioga Tuimaleali'ifano Va'aletoa Sualauvi II, adhering to Article 106 of the Constitution and with advice from the Cabinet, approved Emergency Orders deemed necessary to secure public safety and to safeguard the interests and welfare of Sāmoa (Parliament of Samoa, 1960; Tamaalii, 2020).

During the period of closed borders, the Sāmoan Government approved repatriation flights to bring citizens home (Government Press Secretariat, 2022). These flights were intended for those who had been unable to return to Sāmoa before the SOE, such as those overseas on Aotearoa's Recognised Seasonal Employer scheme, scholarship students, and those who had to travel abroad for approved medical care (Government Press Secretariat, 2022).

On 15 April 2020, the government eased some restrictions, allowing for the resumption of inter-island travel, the use of public transport, and the reopening of markets and restaurants with limited operating hours (United Nations in Samoa, 2020).

Government financial support

In Aotearoa, the government introduced the COVID-19 Wage Subsidy in March 2020. This subsidy provided financial support to employers, enabling them to retain non-essential staff who could not work from home during lockdowns (Ministry of Health, 2021; Work and Income, 2020). Full-time staff (working 20 hours or more per week) were eligible for $585.80 per week, while part-time employees were granted $350 (Work and Income, 2020). However, this was merely a subsidy and did not fully replace an individual's full wage. Employers had the option to top up the subsidy using their profits or employees' paid leave entitlements.

In Australia, the Melbourne Institute's (2020) *Taking the Pulse of the Nation* report revealed high rates of stress in April 2020, with almost 25% of Australians reporting that they were stressed about their ability to afford essential goods and services (Broadway et al., 2020). Following the implementation of government supports such as the Coronavirus Supplement and JobKeeper, financial stress dropped to around 20% and remained seemingly steady through June and July 2020 (Broadway et al., 2020; Campbell & Vines, 2021). However, financial stress spiked following the announcement of plans to reduce income support during Melbourne's second wave of COVID-19 (Broadway et al., 2020; Campbell & Vines, 2021).

While the Sāmoan Government introduced a limited form of a fiscal stimulus package which was directed primarily to former workers of the tourism sector, it was reported that it did not extend far enough; nor did it reach those in the informal sector or meet the needs of those living in poor conditions (Connell, 2021). This was further illustrated by the fact that more than 71% of households were struggling to service their loans and debts by mid-2020 (United Nations in Samoa, 2020). The only viable option for Sāmoa to provide sufficient economic support would have been to borrow internationally, a process described as unsustainable (Connell, 2021).

The US federal government did not establish any support funds and instead the onus was placed on employers to find ways to reduce their expenses while being subjected to COVID-19 restrictions, which often meant that, as in other countries without fiscal support for businesses, employees were asked to take unpaid leave (Jones et al., 2021).

Methodology

The current study focused on financial challenges Sāmoan women faced under differing COVID-19 response strategies and draws on data collected for a wider project that sought to understand how the COVID-19 pandemic impacted Sāmoan women.

An online survey was employed using a semi-structured questionnaire with eight closed-ended and four open-ended items. This type of survey is an effective tool for gathering data in a relatively short period and provides an opportunity to analyse and test the broader applicability of current theories and to verify the findings of previous studies (Albudaiwi, 2017; Ashcroft et al., 2022). The overarching aim of the wider project was to understand how Sāmoan women were experiencing COVID-19.

Designing a semi-structured survey allowed for the use of both open- and closed-ended questions. Closed-ended questions were constructed as a means of capturing the pandemic experience, including the negative and positive impacts of COVID-19, and help-seeking actions. Having open-ended questions was deemed important, as it provided an opportunity for participants to share their thoughts without being influenced by the answers to closed-ended questions (Brosius et al., 2022; Ranganathan & Caduff, 2023). The survey was administered online via Qualtrics, targeting Sāmoan women aged 16 years and older who were willing to share their experiences of the COVID-19 pandemic. The survey was live from 27 October 2020 until 20 October 2021.

Ethics approval was granted for this research by the University of Auckland Human Ethics Committee on 27 October 2020 (Ref. UAHPE-C2802).

Sampling

As this was a new study for which the location and size of the target population were unknown, labelling a sampling frame and implementing a sampling system was challenging. As this was the initial data collection phase, a sampling criterion was formed to allow as many responses as possible from the target population.

To recruit participants, an online advertisement with a link to the survey was shared among the researcher's personal and professional networks. Personal networks included social media (Facebook, Twitter, Instagram), and a post was shared across the researcher's Facebook and academic Instagram page (S. McLean-Orsborn, Instagram post, June 1, 2020, no longer publicly available). On 10 December 2020, the researcher paid NZ$28 to boost the post as an advertisement across these social media platforms, stipulating it was for Sāmoan women aged 16 years and older. The advertisement reached 23,390 people, and 118 people accessed the survey link on the boosted post.

The survey began with the Participant Information Sheet, which explained the study in lay terms and included contact information for people who had questions regarding the survey. It was explicitly stated on the survey's first page that completion and submission of the online questionnaire signalled consent to participate. The main questions posed by participants pertained to the aims of the research project and expressions of support. Upon completion of the survey, participants were informed that they could enter a prize draw and express interest in participating in a future talanoa about their COVID-19 experiences in more depth.

Participants

This study was made possible thanks to the participation of 325 Sāmoan women. While responses were expected to be received from Sāmoan women living in Aotearoa, Sāmoa, and Australia, when the survey closed it was discovered that responses were also received from Sāmoan women living in American Sāmoa, the United States, Fiji, France, Japan, Oman, and the United Kingdom.

Table 1 provides a comprehensive breakdown of participants' demographic information.

Data analysis

Survey data was exported from Qualtrics and processed into a dataset in Microsoft Excel. The data were analysed in line with the research aims and objectives to establish a context for the talanoa question guides. Of the 333 responses received, eight (2.40%) were excluded from the final dataset because those respondents had completed less than 80% of the survey.

Quantitative analysis began with calculating the total number of responses for each question. Frequencies (counts) and proportions (percentages) were then derived across participants' country of residence and age bracket. This approach enabled the identification of patterns in the data, specifically whether certain responses became more common or varied in prevalence, depending on demographic characteristics.

Open-ended qualitative responses were collated in an Excel spreadsheet and organised according to the corresponding survey question. Responses were then systematically coded to identify country of residence and recurring ideas and patterns. Once themes had emerged, they were refined into subheadings, under which related codes were grouped. This thematic organisation enabled the researcher to review the qualitative data holistically and determine which responses were most relevant for deeper analysis.

Results

When considering how best to present the findings of this research, it quickly became evident that the COVID-19 response strategies employed by different countries significantly shaped the experiences of Sāmoan women during the global pandemic. While existing literature highlights the complexities of responding to pandemics, there remains a scarcity of scholarship on the lived experiences of Sāmoan women, making it difficult to assess whether their realities align with global patterns (McLean-Orsborn, 2023).

The wider project this article originates from begins to fill this knowledge gap by documenting the heartaches, grief, love, joy, care, and support experienced by Sāmoan women during the COVID-19 pandemic. To honour and respectfully present the measina gifted by participants, the findings are organised according to the main countries (Aotearoa, Sāmoa, United States, and Australia) in which participants resided.

The findings reported here focus on two key questions posed to participants. The first was a multiple-choice question: "Select all the ways in which COVID-19 has affected you negatively",

TABLE 1 Demographic overview of survey participants (*N* = 325)

Location of participants	n	%
Aotearoa New Zealand	217	66.77
Sāmoa	47	14.46
United States	25	7.69
American Sāmoa	4	1.23
Australia	22	6.77
Fiji	5	1.54
France	1	0.31
Japan	2	0.62
Oman	1	0.31
United Kingdom	1	0.31

Ethnicity	n	%
Not applicable	189	58.15
New Zealand European	36	11.08
Māori	24	7.38
Chinese	21	6.46
Niuean	15	4.62
Tongan	13	4.00
German	12	3.69
Fijian	6	1.85
Irish	6	1.85
Tokelau	5	1.52
Cook Island Māori	5	1.52
Hawaiian	4	1.23
Indian	4	1.23
Scottish	3	0.92
American	3	0.92
Australia	3	0.92
British	2	0.62
Caucasian	1	0.31
Dutch	1	0.31
Fijian Indian	1	0.31
Filipino	1	0.31
French	1	0.31
Italian	1	0.31
Japanese	1	0.31
Korean	1	0.31
Mexican	1	0.31
Native American	1	0.31
European	1	0.31
Undisclosed	1	0.31

Age group	n	%
16–19	32	9.85
20–29	126	38.77
30–39	83	25.54
40–49	59	18.15
50–59	16	4.92
60–69	4	1.23
80–89	1	0.31
Undisclosed	4	1.23

Household size	n	%
1	10	3.12
2	29	9.03
3	42	13.08
4	46	14.33
5	60	18.69
6	48	14.95
7	39	12.15
8	15	4.67
9	7	2.18
10	10	3.12
11	6	1.87
12	3	0.93
13	1	0.31
14	1	0.31
15	1	0.31
17	1	0.31
20	2	0.62

Note: Ethnicity percentages do not add up to 100% due to participants selecting the multiple ethnicities that make up their identity. Age group and household size percentages do not add to 100% due to some participants opting to not share this information.

with options including Health, Housing, Employment, Education, Family, Friendships, Relationships, Fa'alavelave, Financially, Travel, and Other (please specify).

Almost half of the respondents (48%) reported that their finances were negatively affected during the COVID-19 pandemic (n = 153). This impact was most pronounced among younger participants, with 69% (n = 22/32) of those aged 16–19 years and 56% (n = 71/126) of those aged 20–29 years reporting financial difficulties.

The second question was a qualitative follow-up: "In light of the negative effects of COVID that you have selected, which was the most impactful and why?" The following subsections unpack participants' responses to this question.

Aotearoa

Aotearoa has a large Sāmoan population and is where this research project was situated. These factors explain why Sāmoan women living in Aotearoa comprised the largest cohort of respondents, with 217 taking part (68%). Over a quarter of participants reported that their finances had been negatively impacted (n = 82/217) by the pandemic, with 16 identifying their finances as their "most negatively impacted aspect of life".

Participants wrote that they supported their family and, in one instance, their church family because they were able to work during the lockdown. One explained how she had to assume primary responsibility: "Financially, the main income earner was forced to stay home during this period as he was 70+ and so the burden was left on myself to try and juggle study and work" (P61, 23 years). Another participant shared:

> My sister and I live together, and because we were essential workers were able to make that decision to support our parents and brothers with living costs. This left the one income earner up in Auckland (our Mum was an essential worker, too) mum to concentrate on only paying rent, and we covered everything else. As well as maintaining our living costs here in Te Whanganui-a-Tara, Wellington. (P127, 34 years)

Participants who reported increased cost of living attributed this to higher household consumption levels due to family members being at home more. Many participants described their attempts to remedy their situation by budgeting, but for some the financial impact of the lockdowns continued to linger:

> Our bills amount of usage has gone up, affecting us until now. Because during the COVID-19 pandemic, hours of work for my husband has been a crazy roller coaster, and we were struggling to make ends meet, budgeting with what we had in our pockets. So, the pandemic's [effect] on us financially is continuing in our family. (P53, 36 years)

Samoa

Among the 47 participants living in Sāmoa, 37 reported that COVID-19 had negatively impacted their finances. For 45% of these participants this was their "most negatively impacted aspect of life". Business owners elaborated that their operations, which catered primarily to tourists or individuals returning from overseas for special events, were significantly affected by the border closures. For example:

> I run a hair and beauty salon and usually I get a lot of bookings for weddings from overseas all throughout the year but with the borders shutting down no one has booked, and also the weddings that were booked from last year and deposited money, I had to refund their money into their overseas accounts because they couldn't travel over to have their wedding. (P292, 42 years)

Businesses catering for local clientele were not spared the financial impacts, as they also experienced a downturn when the State of Emergency Orders (SoEO) impacted their clients. For Participant 147, who ran a boutique store, the SoEO led to a decrease in social occasions and functions, which meant their customers had no need to make purchases, thus reducing her sales to zero for many weeks. Service-based businesses were not immune to this ripple effect either:

> My family owns a small security business, and our profits have dropped enormously because our clients are not doing so well at the time being, and also the people of Sāmoa are not stable enough to spend according to what they desire. So of now, we are trying to get used to the situation. (P120, 17 years)

With the absence of formal financial support from the Sāmoan Government to sustain businesses and employment, businesses were compelled to adjust their services. This often involved asking employees to work reduced hours, or, if the business was struggling, staff were asked to stay home without pay or were let go:

> We have worked accordingly to the hours given by the Restriction orders. Some of my family members could not continue working as the company that they use to work at is closed due to borders been closed. And there is no income coming in to help out raising our family. COVID-19 has impacted us financially as it affects our jobs and leads to be unemployed. With this financial problem, we have nowhere to turn to, no financial assistance from the government. I as a mother, I'm struggling to provide for my family and raising my child. (P280, 26 years)

Some participants shared that the financial support they received from family in the form of remittances was also impacted during this time:

> We depend most in our families overseas for money to do fa'alavelaves, kids' education and especially family things like food, etc. We normally received shopping and money every fortnight, but during this pandemic, our family working overseas are limit their support because of the financial effect in their homeland. (P186, 35 years)

> We rely on my husband for our everyday needs so does his family. Since COVID, his pay doesn't really keep us afloat. My husband lives in Australia, while we live in Sāmoa. We get to see him once at the end of the year. We have two daughters; everything was fine before COVID. His mother's job is unstable. So as my side. (P304, 26 years)

There were two participants that disclosed that the financial stress they were enduring had also resulted in additional mental distress. One felt she was being overwhelmed by the pressures she was facing:

> Due to stressing out over being stuck in Sāmoa from returning to continue my studies, I've struggled with depression more than ever. It's so much harder to be optimistic now than I was before. I find myself crying silently at night just to avoid my parents knowing because I don't want to stress them over my problems. Life in Sāmoa is really expensive, and since I'm here now but haven't finished my degree yet, I'm left to work in low-paying jobs. I'm my family's main financial resource, and I'm finding it really hard to cope. It has impacted me so bad that I find myself wanting the easy way out. (P287, 25 years)

United States

COVID-19 had a financial impact on 17 out of the 25 participants based in the United States, with 29% of these respondents indicating that this was their "most negatively impacted aspect of life". The qualitative responses revealed that for three participants this was due to losing their job. One participant shared that their family members' health prevented them from seeking additional employment, resulting in financial stress:

> During COVID, I lived with my whole family, including two immunocompromised persons. For this reason, even though we struggled financially during COVID, none of us could seek additional employment, and alternative housing was not an option for us. Thus, we lived on a very small paycheck which was a struggle to meet weekly grocery and utilities bills. (P157, 29 years)

Australia

While nine Australia-based participants reported that the COVID-19 pandemic positively impacted their finances, 11 participants reported negative impacts. Two participants, both living in households double the average number of people per household in Australia (2.5), reported that their finances were "the most negatively impacted aspect of life" (Australian Bureau of Statistics, 2021). Participant 16 was a 17-year-old living in a household of eight who collectively struggled to pay rent and bills, nearly going without food for one week.

The free-text responses also reflected the impact of redundancies and challenges in gaining (re) employment, with many forced to adjust to survive on a single income. Participant 249 detailed that she had lost her job due to the pandemic and had to utilise her savings; she eventually regained employment as an essential worker.

Discussion

The results presented in this study demonstrate that the financial impact of COVID-19 was a significant and unifying consequence for Sāmoan women across the four national contexts examined. While participants' experiences varied in relation to local public health measures, labour market structures, and access to government relief, financial strain consistently emerged as a pervasive and consequential outcome of the pandemic. For many participants—particularly younger women—this strain was intensified by the rise in the cost of living, increased household

consumption during lockdowns, and disruptions to employment and business activity.

This study provides the first global examination of the pandemic's financial effects on Sāmoan women. Of the 325 respondents, 48% reported that their finances were negatively affected during the COVID-19 pandemic. The quantitative results underscore the centrality of financial disruption in women's pandemic experiences, while the qualitative results illuminate how sociocultural expectations, family structures, and state policies shaped the intensity and nature of the disruption.

Utilising an intersectional lens reveals how gender, culture, socioeconomic status, and national context intersected to determine Sāmoan women's financial resilience or vulnerability during the pandemic (Matada Research Group, 2022). In highlighting the financial dimension as the dominant theme, this discussion section examines how government responses, labour market realities, and familial obligations interacted to produce layered and unequal financial impacts. Together, these findings deepen understanding of the structural and cultural factors that shaped Sāmoan women's financial wellbeing during the COVID-19 pandemic and point to the broader gendered inequities that such crises tend to exacerbate.

Lockdowns and restrictions

Quarantine was employed to separate those who were still healthy but potentially had been exposed to COVID-19 from those who had not (Kearns et al., 2021). The regional lockdowns that Aotearoa and Australia utilised as the pandemic progressed can be understood as a *cordon sanitaire* (sanitary cordon), as this refers to the restriction of people and movement within a larger, defined geographic location (Huremović, 2019). Implementing a quarantine is a significant public policy measure as it transcends the realms of public health, international relations, and law. It often results in vitriol being levelled at the state regarding the "unjustifiable" curbing of individual rights (Huremović, 2019). Most countries imposed a mandatory quarantine at the start of the pandemic to reduce the spread of COVID-19 variants within their borders (Huremović, 2019; Kearns et al., 2021).

Lockdown and restriction experiences varied depending on participants' health status, age, location, and socioeconomic status. Due to Pacific peoples being more likely to reside in overcrowded houses, the New Zealand Government allocated a budget to provide Pacific peoples with the option of isolating outside their homes if they were unable to isolate effectively (Ministry of Health, 2022; Tukuitonga, 2021).

Family support, or lack thereof

Participants often spoke of their pandemic experience with their "bubble". This term was adopted by the New Zealand Government, public health authorities, and the media to describe the primary household unit in which an individual lives (Freeman et al., 2022; Kearns et al., 2021). The term was used in a public messaging campaign to reinforce the idea of "staying in one's bubble" (Freeman et al., 2022; Kearns et al., 2021). Initially, one's bubble comprised one's household; however, as the pandemic progressed and restrictions were revised, one's bubble could span multiple households in cases of shared custody or blended families (Freeman et al., 2022; Kearns et al., 2021).

Participants who had lived or lived with someone "at-risk" of contracting COVID-19 due to living with a chronic health condition or disability, they were unlikely to report a boost in their connection to their community due to isolation, but they also were less likely to have been prepared for the pandemic due to their limited financial resources (Phibbs et al., 2015; Sibley et al., 2020).

Participants who reported living with six or more people may have been living with their extended family out of necessity. This could have been due to the family wanting to ensure they had secure housing, but because of their socioeconomic status, these participants required multiple income sources to afford it (Health Quality & Safety Commission New Zealand, 2021; Ratuva et al., 2021; Subica et al., 2023). This is common, as 40% of Pacific peoples in Aotearoa live in overcrowded houses (Ioane et al., 2021; Poulton et al., 2020). Before the pandemic, living in overcrowded houses had been associated with close-contact infectious diseases such as pneumonia and rheumatic fever, as well as a range of other adverse health outcomes, and this led to the increased COVID-19 infection rates among Pacific peoples (Baker et al., 2013; Derauf et al., 2020; Ministry of Health, 2021). This was also exemplified in the United States, where Pacific peoples experienced 10 times the COVID-19 infection rate compared with other ethnic groups due to living in overcrowded, multigenerational homes (Derauf et al., 2020; Kwan et al., 2022; Pillai et al., 2022).

A unique benefit of living with extended family during the lockdowns and restrictions was that Sāmoan women had access to social capital

(Chen et al., 2021). The social capital networks of the participants provided financial resources, information, aid, childcare, and emotional and psychological support (Aldrich & Meyer, 2015). While this could be seen as a means of minimising the impact on women who were often the primary caregivers and also working when schools and daycare centres closed, this was not the reality experienced by all participants or by women globally (Anderson et al., 2022; Australian Bureau of Statistics, 2020a, 2020b, 2022; Chen et al., 2021; Encarnacion et al., 2022; Thomsen et al., 2023; Workplace Gender Equality Agency, 2021).

Working through a pandemic

The pandemic resulted in the global disruption of how businesses, organisations, and institutions operated. With little to no advance warning, employees were either encouraged or required to work from home to meet their government's respective social distancing requirements (Workplace Gender Equality Agency, 2021).

Due to economic vulnerability, some participants, like many other Sāmoan and Pacific women, had to seek employment or additional employment to meet their living costs (Kwan et al., 2022; Pelizza et al., 2021). This was in addition to their domestic work and the unpaid care they provided to their family. Participants who had moved country before the pandemic took effect shared that their inability to gain employment due to restrictions put in place resulted in their bubble expecting them to carry out more unpaid care and domestic work (Encarnacion et al., 2022). Feminist economists refer to this inequity as the "third shift"; informally, it is also referred to as the "hypocrisy economy" because when people talk about empowering women, it has to do with work outside of the home in the paid economy, without any systemic attempts to enable or encourage men to take more responsibility (Power, 2020).

Although the COVID-19 pandemic had demonstrated that flexible work was possible and had the potential to reduce gender segregation and increase women's workforce participation, as mentioned by many participants, this was not a universal experience (Workplace Gender Equality Agency, 2021). Instead, women who could work from home were often always or often "actively" caring for children while balancing employment obligations (Workplace Gender Equality Agency, 2021). National and international studies have described this experience as the blurring of work-life boundaries for many people. This often led participants to do "hidden overtime", such as working longer than usual because they felt that they needed to make up for time spent caring for their children during work hours (OECD, 2021; Workplace Gender Equality Agency, 2021).

Prior to the pandemic in Aotearoa, Pacific communities had significant rates of in-work poverty compared with New Zealand Europeans (Plum et al., 2019). Evidence based on a single prioritised ethnic breakdown of poverty data indicates that Sāmoan women in Aotearoa are likely to be in the lowest socioeconomic bracket due to the substantial ethnic and gender pay gap that is deeply entrenched in society (Health Quality & Safety Commission New Zealand, 2021; Matada Research Group, 2022; Naepi, 2022; Plum et al., 2019).

This is not an isolated situation, as Pacific and Sāmoan women in the United States also face significant financial disadvantages. For instance, between 2007 and 2012, the poverty rate for Native Hawaiians and Other Pacific Islanders (NHOPI) in California increased by 97%, more than any other racial group (Ratuva et al., 2021). Understanding the pre-pandemic conditions of Pacific and Sāmoan women provides context for how the lockdowns and stay-at-home restrictions further exacerbated the living situations of participants and Pacific peoples in general.

Financial support governments provided during the pandemic

As noted above, the New Zealand Government established the COVID-19 Wage Subsidy in March 2020. Despite this support, however, participants still reported experiencing financial challenges, suggesting this aspect of the pandemic response did not adequately address the needs of the most vulnerable communities (Ministry of Health, 2021; Ratuva et al., 2021).

In Australia, 48% of participants indicated their finances had been negatively impacted, a figure higher than the nationally reported financial stress level of 25% (Broadway et al., 2020). The SOE in Sāmoa, while effective in preventing the spread of COVID-19, had significant financial implications, as reported by 79% of participants in Sāmoa. This was evident in responses describing how participants and their families struggled or could not afford living costs (see also United Nations in Samoa, 2020). During the pandemic, 54% of Sāmoan women residing in the United States reported that their income had been affected. This was due to employers needing to reduce their expenses in response to the COVID-19 restrictions. While flexible work arrangements allowed

for unpaid care work to be undertaken, women were less likely to have financial safety nets, such as savings, due to greater job insecurity and lower average pay rates (LeanIn.org & SurveyMonkey, 2020; Workplace Gender Equality Agency, 2016). Sāmoan women with pre-existing chronic illness(es) or disability/ies were even less likely to have access to the economic and social resources necessary for recovery (Chen et al., 2021).

For many participants, the financial support provided under their country's COVID-19 responses did not match their full wage. As a result, this aid did not help to relieve financial pressures and, in some cases, further exacerbated their financial situation. Rather than offering minimal subsidies, governments should look to establish a Universal Basic Income, as this would provide financial assistance during and after a pandemic, particularly supporting those who cannot work (Girum et al., 2021).

Conclusion

The main pandemic strategies adopted during the COVID-19 pandemic were elimination, suppression, mitigation, and exclusion. As the pandemic progressed, countries often changed their approach. The strategies focused on reducing the impact the virus had on people's health and wellbeing, but decision-makers generally failed to explore these approaches with an intersectional lens. This neglect to undertake an intersectional analysis resulted in homogenising of the expected experiences of the pandemic under each strategy (Crenshaw, 1989, 1991; Matada Research Group, 2022).

In both Aotearoa and the United States, Pacific peoples were identified as being more vulnerable to the impacts of COVID-19, reaffirming existing evidence and highlighting a correlation between inequitable pandemic experiences and being of a Pacific ethnicity and/or having low socioeconomic status. This research found that strategies that supported Sāmoan women were ones that had Sāmoan and Pacific stakeholders involved in the decision-making processes. In countries where Sāmoan and Pacific peoples are underrepresented, this resulted in limited to no additional resourcing, exacerbating the financial challenges faced by some within these communities due to the pandemic. The impacts of the pandemic on Sāmoan women differed largely due to variations in the entrenched inequities they experienced.

The research findings show the importance of being aware of Sāmoan communities and having an awareness of Sāmoan understandings, knowledge, and epistemologies when planning, designing, and implementing pandemic responses as well as policies that impact Sāmoan people. In Sāmoa, the pandemic, much like the measles epidemic, highlighted the severe underfunding of the public health and social welfare systems. These events serve as stark reminders of the critical need for a well-funded public health system. This includes well-equipped diagnostic facilities, public health disease control centres, and staff highly trained in the field of infectious diseases. The pandemic has also shown there is a pressing need to review and invest in Sāmoa's social welfare system (Olayemi et al., 2021; Thornton, 2020).

As nations and the world navigate their way out of the pandemic, the desire to return to "normal" can result in repression or amnesia surrounding the chaos and the trauma that preceded the recovery (Huremović, 2019). By providing a platform for Sāmoan women's experiences of the COVID-19 pandemic to be heard, this research helps to address the glaring inequities the pandemic highlighted, as well as ensure that when the next pandemic occurs, vulnerable communities are considered, consulted, and cared for.

Glossary

fa'alavelave	significant event, crisis, or ceremonial occasion that disrupts daily life
measina	treasure
talanoa	discussion

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STAYING, GOING, GONE

A survey of Māori (Indigenous) pharmacists' career plans in Aotearoa New Zealand

Shelby Rupa-Hayward[*]
Mariana Hudson[†]
Amber Young[‡]
Lisa J. Kremer[§]

Abstract

Māori pharmacists are under-represented within the pharmacist community at 2.1%. This figure is substantially lower than the approximately 18% representation of Māori within the total population of Aotearoa New Zealand. The purpose of this research was to determine why Māori stay in the pharmacy profession, consider leaving or leave the profession, and what roles they move into if they leave. Those who had ever been a Māori pharmacist were invited to complete an anonymous online questionnaire. The responses of the 28 participants, representing approximately 26% (n = 23) of registered Māori pharmacists (n = 89), plus five who had left the profession, are presented here. The main finding from this research is that the majority (61%) of the Māori pharmacist participants were dissatisfied with the pharmacy sector and had left, were considering leaving or were unsure whether they were going to stay. If Māori pharmacists are not able to use their skills and knowledge to make an impact on health equity, with a clear path for career growth, there is intention that they will leave the profession. This is especially pertinent for Māori pharmacists within the first five years of registration.

Keywords

healthcare provider, Indigenous, Māori, pharmacist, workforce

Introduction

Within Aotearoa New Zealand, Māori have unmet health needs, and this enduring underserving has manifested in alarming inequities in health outcomes between Māori and Pākehā (Curtis et al., 2023). These inequities can be linked to the

* Ngāpuhi, Ngāti Kahu. He Rau Kawakawa ki Ōtākou Whakaihu Waka | School of Pharmacy, University of Otago, Dunedin, New Zealand.
† Ngati Porou, Whakatōhea. Ngā Kaitiaki o Te Puna Rongoā | Māori Pharmacists Association, Taupō, New Zealand.
‡ Taranaki. He Rau Kawakawa ki Ōtākou Whakaihu Waka | School of Pharmacy, University of Otago, Dunedin, New Zealand.
§ Kāi Tahu, Kāti Māmoe, Waitaha. He Rau Kawakawa ki Ōtākou Whakaihu Waka | School of Pharmacy, University of Otago, Dunedin, New Zealand. Email: lisa.kremer@otago.ac.nz

ongoing effects of colonisation, systemic racism and the health system privileging Pākehā (Curtis et al., 2023; Reid et al., 2019). Furthermore, health outcomes are linked with social determinants of health: education, healthcare accessibility, income, employment, housing quality and racism. The social determinants of health all influence Māori life expectancy, resulting in Māori males living 6.6 years less than Pākehā or other and Māori females living 6.4 years less than Pākehā or other (Curtis et al., 2023; Reid et al., 2000; Stats NZ, 2022). There are inequities between rural and urban Māori health outcomes: all-cause (standardised incident rate ratio [SIRR] 1.07) and amenable mortality (SIRR 1.13) rates for rural Māori are higher than for those of urban Māori, suggesting that rural Māori experience additional health challenges (Crengle et al., 2022). A conservative estimate of the cost to the Aotearoa health system by not providing equitable healthcare between Māori and non-Māori is NZ$863.3 million per year. Most of this cost is associated with years of life lost, totalling $823.4 million per year (Reid et al., 2022). According to te Tiriti o Waitangi, Māori and non-Māori are entitled to the same standard of healthcare (Clark, 2019). Recent inquiries undertaken by the Waitangi Tribunal, a commission dedicated to investigating Crown breaches of te Tiriti o Waitangi, confirmed Tiriti breaches and the need to address health inequities experienced by Māori (Clark, 2019).

Establishing a diverse health workforce that is representative of the population it serves by "holding a mirror to society" (Crampton et al., 2018, pp. 59, 68) likely contributes to both achieving health equity and preventing the perpetuation of inequity (Marrast et al., 2014). A workforce representative of the unique and complex characteristics of those whom they serve are likely, through connection with those communities, to possess an understanding of how to best meet the health needs of their community (Hunter & Cook, 2020; Thomson et al., 2021).

According to Te Whatu Ora—Health New Zealand's (2023) 2023/24 workforce development plan, there is an estimated shortage of 170 full-time equivalent pharmacists needed today, increasing to an estimated 570 more needed by 2032. Although a number is not specified for Māori pharmacists, Te Whatu Ora intend to retain, invest and recruit Māori (Te Whatu Ora—Health New Zealand, 2023). What is known is that there is an under-representation of Māori pharmacists within the pharmacist community in that only 2.1% of the total pharmacist population identify as Māori. When "holding a mirror to society", this indicates a significant shortfall of more than 15% (the total Māori population in Aotearoa is approximately 18%) (Pharmacy Council of New Zealand [PCNZ], 2022; Stats NZ, 2019). The current under-representation of Māori pharmacists in the workforce poses a significant barrier to them effectively playing a key role in uplifting Māori health across the country.

The purpose of this research was to investigate Māori perspectives of continuing or leaving a career as a pharmacist in Aotearoa. We aimed to determine why Māori stay in the pharmacy profession, consider leaving or leave the profession, and what roles they move into if they leave. Understanding these factors will inform the development of support mechanisms, fostering recruitment and retention, and how to strategically invest in a Māori pharmacist workforce to assist Māori pharmacists remaining within the pharmacist workforce in Aotearoa.

Methods

Study design

This is a prospective cross-sectional study using an online survey, seeking participants' voices through quantitative data. Kaupapa Māori principles (by Māori, for Māori, with Māori, in which Māori beliefs and values are central) were applied throughout the research process and researchers followed Te Ara Tika (framework for Māori research ethics) developed by the Health Research Council of New Zealand (Hudson et al., 2019; Rolleston et al., 2016). This research was given ethical approval by the University of Otago Human Ethics Committee (reference D23/310, 20 November 2023).

Instrument design

The survey comprised a combination of multiple choice and free text options. The questions were informed by research carried out by Aspden et al. (2021) and Hutchings et al. (2023), and the *Pharmacy Workforce Demographic 2022* report (PCNZ, 2022). The survey was piloted with four Māori pharmacists, which informed the final survey questions. The survey began with a screening question confirming the consent and eligibility of potential participants. The survey was stratified according to participants, who were practising or non-practising pharmacists (the survey questionnaire is available online as Supplementary Material). Most questions were closed questions with the opportunity for free text input if the given choices did not suit participants.

The survey was sent out using the Qualtrics online platform. Participants could choose to enter the draw to win one of two $100 supermarket vouchers; their contact details were kept separate from the study data to uphold their privacy and kept confidential to the research team. The survey was completed anonymously, and no identifying data was collected.

Participant recruitment and data collection

The survey was open between November 2023 and January 2024. Subjects were deemed eligible for participation if they self-identified as Māori and had completed a BPharm (or equivalent) or were currently or previously registered as a pharmacist affiliated with any global pharmacy organisation, regardless of career stage. This included those who were not yet registered as a pharmacist (i.e., were intern pharmacists). Participant recruitment was done through emailing members of Ngā Kaitiaki o Te Puna Rongoā o Aotearoa (The Māori Pharmacists' Association [MPA]), social media posts and local networks. A second method used for recruitment was snowballing sampling, whereby participants were asked to forward the invitation to participate to other potential participants.

Analysis

Participant data was exported from Qualtrics to Microsoft Excel for simple descriptive statistical analysis from the multiple-choice questions. For age range comparisons, the population used was registered Māori pharmacist data from the Pharmacy Council workforce demographic report as this was a more accurate representation than using data on all registered pharmacists in Aotearoa. The free text responses in the survey questionnaire were coded and categorised through manifest content analysis and used to add further context to reasons why pharmacists would or would not want to stay in the profession, and their view on how their role could be improved. However, due to the limited number of free text responses, counting coding categories was not necessary (Graneheim & Lundman, 2004).

Results

A total of 28 participants were included in the analysis. Five participants were excluded because they had not completed at least 90% of the survey. Those who had ever been a Māori pharmacist were invited to complete an anonymous online questionnaire. The responses of 28 participants, representing approximately 26% ($n = 23$) of registered Māori pharmacists ($n = 89$), plus five who had left the profession, are shown in Table 1. There is no readily available dataset on the prevalence of Māori pharmacist attrition, so this could not be considered. Most participants were aged 25–34 ($n = 18$, 65%), two (7%) were younger than 25 years old, and four (14%) each were in the 35–44 years and 45–53 years age categories. According to the PCNZ (2023) workforce report, we reached between 19% and 51% representation for each demographic; however, none of the nine potential participants aged over 55 participated. Due to the small sample size, regions where pharmacists practised were not reported in order to maintain confidentiality.

When participants were asked if they were considering changing to a career outside of pharmacy within the next one to two years, 11 (39%) responded that they were not considering changing (definitely not: $n = 3$, probably not: $n = 8$). A quarter of participants ($n = 7$) responded that they were considering changing (definitely yes: $n = 1$, probably yes: $n = 6$), and five participants responded that they might or might not change. Five participants (18%) had already left pharmacy.

Combined groups: Staying, going, and unsure

All participants who were still practising pharmacists in the staying, going and unsure group ($n = 23$, 100%) believed that their level of satisfaction would improve if there were more staff, more time for continuing professional development, and a wider range of pharmacist roles and responsibilities. Most participants said that they liked being a pharmacist because they liked helping people ($n = 17$, 74%) and were a valued member of the community ($n = 16$, 70%). Most participants said that they did not like being a pharmacist because their pharmacist skills and knowledge were underutilised ($n = 15$, 65%) and the salary was too low ($n = 14$, 61%).

Staying: Registered pharmacist participants who wanted to stay in pharmacy

Most of the participants who wanted to stay in pharmacy ($n = 11$, 39%) stated that their main place of work was community pharmacy ($n = 5$, 45%); the remaining participants were in pharmacies in a hospital, a general practice (GP) or other. The majority had been working in pharmacy for more than five years ($n = 6$, 55%). Participants often had secondary roles, including pharmacy management, intern preceptor, teaching, clinical research, or government or professional body

work. Most thought their level of satisfaction could be improved with more staff (*n* = 7, 64%).

Most participants who wanted to stay selected that they liked being a pharmacist because they liked helping people (*n* = 8, 73%) and being a valued member of the community (*n* = 8, 73%). In free text responses, one participant commented on the restrictive nature of the pharmacy profession and workplace-based racism:

> I don't like that pharmacists must be attached to an organisation or employer in order to work, versus the ability to provide individual service provision. I also don't like talking about the same problems in the healthcare system that have been spoken about for decades. And I don't like knowing that racism is blatantly vocalised amongst some pharmacists. Intentionally or not. (Participant 7)

Participants in this group were also asked what factors were influencing them to leave the profession, and while some did not select any factors, some participants selected that they felt that their pharmacist skills and knowledge were underutilised (*n* = 4, 36%), there was not enough staff in their organisation (*n* = 3, 27%), they were working in a stressful environment (*n* = 3, 27%), they did not feel valued by their employer (*n* = 3, 27%) or they were not getting paid enough (*n* = 3, 27%). The factors that participants selected as influencing their desire to stay in the profession were feeling like they were making a difference to health outcomes (*n* = 10, 91%), liking the people they worked with (*n*=10, 91%), enjoying their role (*n* = 9, 82%) and being connected with their community (*n* = 9, 82%). In the free text responses, participants expressed optimism for the profession, including the ability to support the health of Māori communities and the widespread support they experienced with Māori colleagues; for example, "I feel like we are more likely to be able to positively influence the health of other Māori" (Participant 4). Another stated:

> I am fortunate to belong to an organisation who started as colleagues and friends, but who I now call whānau. MPA has given me the confidence to stand proud as a Māori pharmacist and not be afraid to challenge the system. We all have each other and keep each other safe, and support and lift each other all the time. (Participant 7)

Participants also described reasons for wanting to leave the profession. One participant described high workload, possibly signalling burnout:

> Due to the high workload that a lot of pharmacies are experiencing patients aren't receiving the full potential of care that a pharmacist can offer. I often find that I cannot take the necessary time required to fully assess a patient's needs or concerns because I have a lot of work that needs to be completed in the dispensary. There is a lot of pressure to complete a lot of tasks in a short amount of time. (Participant 16)

Another participant was grateful for the cultural support the MPA offered. They felt there was a lack of cultural safety among the leaders in the organisation:

> I feel culturally safe but that's because of my own learnings and support from MPA. I can see my other non-Māori colleagues making an effort but some of the leaders in the organisation are a bit tokenistic. (Participant 21)

Going: Registered pharmacist participants who wanted to leave pharmacy

Most of the participants who wanted to leave pharmacy (*n* = 7, 25%) stated that their main place of work was within a community pharmacy (*n* = 6, 86%), and some had secondary roles, including pharmacy management or clinical research (*n* = 2, 29%). Most of the participants had been working as a pharmacist for less than five years (*n* = 4, 57%).

Most participants who wanted to leave liked being a pharmacist because they liked helping people (*n* = 6, 86%) and being a valued member of the community (*n* = 6, 86%), and most participants disliked that pharmacist skills and knowledge were underutilised (*n* = 5, 71%). Being a valued member of the community was emphasised in a free text response from Participant 10, who stated, "Being a Māori pharmacist is so important in NZ. You're highly valued and sought after because of how easy it is to connect with people."

When asked what could be improved about their current role, almost all participants selected having more time for continuing professional development (*n* = 5, 71%). When asked what else could be improved, participants thought that increased awareness of pharmacists' roles and skillset was needed. One participant stated:

> On weekends people are more desperate for medical advice as GP surgeries are closed, Urgent Doctors

> is expensive and the wait at A and E [accident and emergency] is very long. I find because of these factors people are approaching pharmacists about their health needs more. They are typically things we are capable of doing but people seem to be unaware of. (Participant 3)

One participant who wanted to leave expressed concern about the current right-wing coalition government:

> This last year with the election has caused me concern with the rhetoric and beliefs that some staff have towards Māori and Pacific communities. It's the first time I've felt that the profession as a whole is lacking cultural safety towards staff and patients ... It becomes your role to try and educate staff in the workplace but it's unpaid and exhausting at times. (Participant 18)

Another participant who wanted to leave indicated the "double shift" they were experiencing: "What Māori pharmacists do in addition to pharmacy jobs, i.e., ensuring culturally safe environment, lobbying for Māori patients, karakia, etc." (Participant 24).

When asked about influencing factors for leaving pharmacy, all participants selected that they felt like their pharmacist skills and knowledge were underutilised (n = 7, 100%) and that they were bored in their job, with no opportunity for career growth (n = 4, 57%). When asked about reasons for staying in pharmacy, participants selected that they were working in a good team (n = 6, 86%) and that they were making a difference to health outcomes (n = 4, 57%).

Gone: Pharmacists who had left pharmacy

Five participants (18%) who had left the profession had completed a Bachelor of Pharmacy degree and all bar one had left the profession within five years of working as a pharmacist. No participants regretted completing their degree. Most selected being somewhat unhappy being a pharmacist (n = 4, 80%), and the majority were extremely happy with their new career (n = 4, 80%). These careers were within a healthcare setting, for example, medicine, public health or clinical research.

When asked why they left pharmacy, most participants selected the option of feeling bored in their pharmacist role and having no opportunity for career growth (n = 3, 60%). Other reasons included not being paid enough, not being valued by their employer, being in a stressful work environment, underutilisation of their pharmacist skills and knowledge, and being bullied in the pharmacy workplace.

When asked what could have changed their mind to stay in the profession, the free text responses varied, ranging from nothing to better pay and further opportunities:

> I need to explore other opportunities rather than staying in the profession. Pharmacy is a great platform to venture into other related field where there is more influence to make changes. Pharmacy can be both narrow and limited by others. (Participant 28)

Participants also emphasised their frustration about the understanding of a pharmacist's role. One participant stated in the free text response, "Pharmacy in health [is] still not fully understood by others to expand its sphere of influence for communities" (Participant 28).

Unsure: Registered pharmacist participants who were unsure about pharmacy

Five participants (18%) currently working as pharmacists selected that they might or might not leave pharmacy. Most of these participants stated that their main place of work was within a community pharmacy (n = 3, 60%), and that they often had secondary roles, including hospital pharmacy, teaching, clinical research, or government or professional body work (n = 2, 40%). Just under half had worked in pharmacy for less than five years (n = 2, 40%).

When asked what could be improved in their current role, most participants selected a wider range of pharmacist roles and responsibilities (n = 4, 80%) and increased scope of practice (n = 4, 80%). Most participants selected that they liked their current role because they liked helping people (n = 3, 60%) and disliked their current role because there was a lack of career progression (n = 5, 100%).

When asked about influencing factors for leaving pharmacy, most participants selected underutilisation of their pharmacist skills and knowledge (n = 4, 80%), inability to work at top of scope (n = 4, 80%) and not getting paid enough (n = 4, 80%). The influencing factors for staying in pharmacy that were selected the most were feeling connected with the community they were working in (n = 3, 60%), making a difference to health outcomes (n = 3, 60%) and working in a good team (n = 3, 60%) with people they liked (n = 3, 60%). In free text responses, one participant indicated a

feeling of obligation to the community to improve health outcomes for Māori, stating, "There aren't enough of us [Māori pharmacists]. With this new coalition govt [government], we will need many more to ensure the health of our whānau doesn't continue to decline" (Participant 13).

Another participant indicated the value of the MPA, stating, "Your community is key, maintaining contact with the MPA can be so inspiring and encouraging to see where your career could go" (Participant 14).

Discussion

The main finding from this research is that the majority (n = 17, 61%) of Māori pharmacist participants were dissatisfied with the pharmacy sector and had left, were considering leaving or were unsure whether they were going to stay. Our results suggest that if Māori pharmacists are going to leave the profession, they often do so within the first five years of registration. This is in keeping with recently published research in which the authors found that Aotearoa-based pharmacists (any ethnicity) who are unsatisfied with the pharmacy profession are likely to leave the profession within the first five years of registration (Aspden et al., 2021). For a representative Māori pharmacist workforce to contribute to health equity, we need to retain all the pharmacist workforce or the predicted estimate of 15% pharmacist shortfall in 2032 will be much higher (Te Whatu Ora—Health New Zealand, 2023).

In our study, the top three influencing factors for leaving the profession were pharmacist skills and knowledge being underutilised, not working at top of scope and being bored in their pharmacist role with no opportunity for career growth. This is supported by Aspden et al. (2021), who identified similar reasons for pharmacists wanting to leave the profession, including dissatisfaction with the pharmacy professional environment, lack of career pathways and opportunities, and underutilisation of pharmacists' skills and knowledge. Although Māori were included in this previous research, the numbers were not sufficient to evaluate workforce attrition rates based on ethnicity and reasons why Māori leave or want to leave the pharmacy profession. These findings are further supported by Australian data published just over 10 years ago with an almost identical story: early career pharmacists felt their skills and knowledge were underutilised, and they experienced job dissatisfaction associated with technical activities, such as dispensing, and minimal or no time to perform patient-facing clinical activities (Mak et al., 2013). Findings from British research published almost 15 years ago tell a similar story of lack of remuneration and underutilisation of skills and knowledge (Seston et al., 2009). Recently published United States data highlights the impact of the pandemic and burnout as key factors for pharmacists leaving the profession, in addition to funding, practice models and limited career advancement that aligned with skills and knowledge (Rech et al., 2022). Aotearoa, Australia, the United States and Great Britain data signals an international trend in pharmacists exiting the profession. Research is required on global Indigenous pharmacist workforce trends.

We found that when asked about what they liked about their work, only six (26%) participants selected "feel culturally safe". Reid et al. (2019) described the ongoing effects of colonisation, which are woven into society as racism and white privilege, within a system that unequally distributes resources and opportunities, and these could be influencing factors for the low number of participants who selected "I feel culturally safe". Additionally, Deroy and Schutze (2019) found that the lack of consideration for depth of cultural knowledge and discrimination in the workplace is a key influencing factor for Aboriginal and Torres Strait Islander health worker retention in Australia. These concepts require further investigation with Māori pharmacists.

Influencing factors for staying in the profession differed among the three (stay, going, unsure) groups. Participants who wanted to stay felt like they were making a difference to health outcomes (n = 10, 91%), whereas participants who wanted to leave and who were unsure selected this choice at a lower rate, 57% (n = 4) and 60% (n = 3) respectively. Previous research has shown that one of the main reasons for choosing to become a pharmacist is to improve people's health and wellbeing (Hanna et al., 2016). However, if pharmacists are not able to do this, it becomes a reason for wanting to leave the profession. Our results show that feeling connected with the community and working in a good team would positively influence those who want to leave and those who are unsure about staying in pharmacy. Additionally, participants who had multiple pharmacy sector roles, such as community pharmacy, advocacy or academic, through which they could maximise their application of skills and knowledge, were often the ones who selected to stay in pharmacy, and a lack of career progression was selected as a reason for participants to leave. Overall, our findings are similar to those in research published over 20 years ago, in

which pharmacist participants indicated that they had the least satisfying career compared with other healthcare professionals such as GPs, physicians or surgeons (Dowell et al., 2001). A strategy to retain Māori pharmacists in the profession is enabling pharmacists to work at the top of their scope, in roles that they find rewarding, and utilising their skill set to make a meaningful difference in the communities they work alongside. This is supported by a recent publication that found that some of the main ways to retain community pharmacists based in Ireland were improved opportunities for career progression, and better acknowledgement and resourcing of pharmacist professional activities (Lynch & O'Leary, 2023). Findings from Zambas et al. (2020) suggest that to recruit and retain Māori nursing students, it is important to create environments that welcome and respect te ao Māori values and strengths. Key findings from a report on how Māori medical doctors experience cultural loading highlights workplace expectations, such as expertise on tikanga, te reo Māori, te ao Māori, Māori representation, advocacy and support for Māori patients, Māori health, and equity issues (Tipene-Leach et al., 2024). This cultural load can cause stress and affect mental health and wellbeing with limited professional or financial recognition; furthermore, advice is often dismissed or not implemented (Tipene-Leach et al., 2024). To care for the wellbeing of Māori medical doctors, the report signals for action on support systems for the individual, organisation, workforce and health ecosystem, and also supported whānau, hapū, iwi and community roles (Tipene-Leach et al., 2024). It is likely that Māori pharmacist recruitment and retention would increase if workplaces also welcomed, respected and upheld Māori values to increase the feeling of cultural safety, and limited cultural loading.

Participants in this research signalled that work–life balance was an area to improve on. Many participants across the staying, leaving and unsure groups stated their workplace did not have enough staff, they worked in a stressful environment and their workload was too high. All these factors can contribute to burnout, which, according to a recent systematic review, affected 51% of surveyed pharmacists (Dee et al., 2023). Within this review, COVID-19 was identified as a contributing factor for worsening rates of burnout (Dee et al., 2023). Additionally, research with Māori doctors has described the double shift of having to carry additional workloads, for example, being the go-to person for knowledge of te ao Māori, interactions with Māori patients, as well as the challenge of poor work–life balance and cultural expression within the workplace (Lucas et al., 2014). It is likely that Māori pharmacists also experience this double shift; however, this requires further research. Future research including interviews would also increase understanding of workforce needs.

To retain Māori pharmacists within the profession, the health sector needs to "plug the pipeline". Three actionable findings from this research in this regard are (a) flexible employment settings that enable pharmacists to use their skills and knowledge, (b) increased scope of practice and (c) adequate remuneration. Three findings from this research on what is working well for retention and should continue are (a) providing opportunities for community connection that lead to meaningful professional relationships, (b) engaging in pharmacist activities that contribute to equitable health outcomes and (c) ensuring Māori pharmacists are flourishing within a team that they feel safe in.

A limitation of this research is that participants were not asked whether their pharmacist role was full-time or part-time. Hours of employment mean that some people may have a varied week, which may influence their decision to remain practising as a pharmacist. Pharmacists were not asked specifically about finding solutions to reduce day-to-day workloads to enable them to use their skills and knowledge, such as the role of Pharmacy Accuracy Checking Technicians on workflow. Pharmacists were also not asked about their intention to practise pharmacy overseas and the influence this has on retention within Aotearoa. Although the sample size of this study is small, it represents approximately a quarter of the Māori pharmacist population at the time of the survey.

Conclusion

The first five years post-registration for Māori pharmacists are formative years for retention within pharmacy. They require adequate remuneration and the ability to use the skills and knowledge that they possess within a community that they feel connected to and to which they can contribute to their achieving health equity. Early career Māori pharmacists need to have a clear pathway for career growth and work within a team that they both enjoy working with and feel culturally safe with.

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Glossary

Disclaimer: Many of the descriptions used in this glossary are specific interpretations for this publication, and do not denote the fullness of meaning normally associated with the word or term. All efforts have been made to uphold the taonga of each kupu within the writing of this publication.

Aotearoa	the North Island of New Zealand, now commonly referred to as New Zealand
hapū	subtribe
iwi	tribe
karakia	incantation or prayer
Kaupapa Māori	research using Māori knowledge by Māori researchers
kupu	words, vocabulary
Māori	Indigenous peoples of Aotearoa
Pākehā	Non-Indigenous people of Aotearoa with a European descent; New Zealand European
taonga	treasure
te ao Māori	Māori worldview
te reo Māori	Māori language
te Tiriti o Waitangi (te reo Māori version)	the Treaty of Waitangi (English version)
tikanga	protocols or correct way or doing things
whānau	family, collective

Data access statement

Full dataset from participants will not be made available under Māori data governance protocol Te Mana Rauranga. All material that can be shared is included in the manuscript. A copy of the full survey can be obtained by emailing the corresponding author.

Supplemental material

Supplemental material for this article is available online.

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WEAVING A PŪRĀKAU INTO EDUCATION

A tuakana–teina learning journey in mātauranga Māori

*Aidan Mark Harrison**

Abstract

This research investigated how mātauranga Māori through a pūrākau could be used to increase a tauiwi teacher's confidence and practice within a tuakana–teina learning relationship. Mātauranga Māori relates to the interwoven connections between humans and the world that inform tikanga. Relationship with the local hapū and their tikanga of partnership and whakamana provided a framework of whanaungatanga, through which ako occurred between the hapū and the tuakana–teina. The specific localised pūrākau presented a new pedagogical paradigm, inviting the tuakana–teina into an intensely collaborative, dynamic, personalised learning journey that promoted role modelling by the tuakana and risk taking by the teina. Further research is needed to investigate how this relationship could be replicated with other staff at different schools with different pūrākau.

Keywords

ako, education, learning relationships, mātauranga Māori, pūrākau, tuakana–teina

Mā te whakaatu, ka mōhio,
Mā te mōhio, ka mārama,
Mā te mārama, ka matau,
Mā te matau, ka ora.
By discussion, comes understanding,
by understanding comes light,
by light comes wisdom,
by wisdom, comes life.
—Pā Henare Tate (Barlow, 1994)

Do the best you can until you know better. Then, when you know better, do better.
—Maya Angelou

Background

The two whakatauākī above both allude to relationships in learning that can bring enlightenment. However, learning and growth occur only if this enlightenment is woven into thinking, attitudes, beliefs and ultimately actions. This research shows how enlightenment in ako can come from whanaungatanga—the fostering of family-like relationships between the local hapū and two teachers, as tuakana and teina.

* Master of Theology Researcher, Laidlaw College, Christchurch, New Zealand. Email: harrisonaidan@hotmail.com

I am a Pākehā who grew up immersed in te ao Māori of Te Tairawhiti, East Cape of the North Island, where the influence of local hapū was a natural part of our everyday life. I have been an educator for 24 years, which has included roles of integrating mātauranga Māori (MM) and its associated te reo me ōna tikanga Māori into teaching craft and curriculum. Within educational settings, I have experienced the flourishing of learning relationships when the MM of te ao Māori is outworked through tikanga, including tuakana–teina, ako, whanaungatanga and tūrangawaewae. R. Bishop maintains that MM enriches Māori as well as tauiwi students' learning (MOE, 2015). However, my own anecdotal evidence alongside that of other researchers suggests that many teachers are not well supported to meaningfully integrate MM into education (Tolbert et al., 2023).

With this background of MM and tikanga Māori improving learning outcomes in my own and others' teaching practice, I sought to formally investigate this learning. This research reports on a learning journey of me, as tuakana, and another teacher as teina. The purpose was to increase the confidence and practice of the teina of integrating a pūrākau into his teaching practice. The specific pūrākau was entitled *Taniwha and the Rakaia Gorge*, which was gifted to schools by Te Taumutu Rūnanga o Ngāi Tahu, who represent the local hapū (Gillon et al., 2019). Smith (2021) discusses the importance of Māori agency in Māori research; however, tauiwi involvement is not ostensibly excluded. As tauiwi tuakana and teina, we actively sought local hapū tikanga to guide learning relationships (Smith, 2021; Tolbert et al., 2023). Their tikanga emphasised partnership and whakamana. Whakamana is defined as empowerment through uplifting others' mana—their inherent personal value. The first learning relationship was with the iwi of Ngāi Tahu and the local hapū, Ngāi Te Ruahikihiki ki Taumutu from the Waitaha area of Te Waipounamu. Te Taumutu rūnanga are mana whenua that hold the tikanga and MM associated with the pūrākau. I have a longstanding, active and collaborative learning relationship with the rūnanga and their education facilitator, Liz Hill-Taiaroa of Kōia te Mātauraka, who gave permission for the use of their pūrākau. We regularly met before, during and after this research to advance educational outcomes for all students in our shared takiwā, and continue our collegial relationship today. One expression of this ongoing relationship is the rūnanga using portions from my larger study (A. Harrison, 2024) for their professional development with local high school science teachers. The second key relationship was between me, as tuakana, and the teina. The teina was seeking to increase his confidence and practice in weaving a pūrākau into a water science unit of work with Year 7 and 8 students.

This research sits within the Ngāi Tahu iwi takiwā of Te Waipounamu, which has inherent cultural differences from North Island iwi. Late 20th century research by O'Regan (2001) noted, for a variety of historical reasons, far fewer visible public connections to te ao Māori, including education, within the Ngāi Tahu takiwā. However, Liz named numerous initiatives and people over many generations that have faithfully promoted Ngāi Tahu educational aspirations (personal communication, 2 March 2026). One of the more recent events to strengthen relationships between Ngāi Tahu rūnanga and local schools followed the Canterbury earthquakes of 2010 and 2011. Mana whenua collaborated with the Ministry of Education (MOE) to rebuild and refurbish schools impacted by the earthquakes. In 2015–2016, several Ōtautahi Ngāi Tahu rūnanga were funded by the MOE to research and collate localised cultural narratives, including pūrākau, to be shared with local schools. These narratives highlighted and affirmed the importance of te ao Māori through Ngāi Tahutanga. This education research continues a resurgence of relationship building through partnership and resource sharing between Te Taumutu rūnanga and local schools through the pūrākau *Taniwha and the Rakaia Gorge*.

Literature review

Mātauranga Māori

Māori academics and leaders agree that MM is grounded in Māori ontologies and epistemologies of an interwoven holistic system of traditional, cultural and spiritual knowledge that informs interactions between the environment, fauna and flora, and humans (Marsden & Royal, 2003; S. M. Mead, 2003; Tate, 2012; Walker, 1990). H. M. Mead (2025) affirms the importance of MM as a taonga for Māori identity as well as for *all* New Zealand citizens, helping non-Māori identify more positively as citizens of New Zealand. MM, like other Indigenous knowledge systems, searches for expansive interwoven connections in contrast to some Western modes that focus inwards to detail knowledge in discrete units (Durie, 1999). MM is inherently connected to the environment, and learning is fostered and transferred through

multiple generations (Hikuroa, 2017; O'Keeffe et al., 2019; Pihama & Lee-Morgan, 2022; Semken & Butler Freeman, 2008).

Pūrākau, as part of MM, can be broadly defined as cultural narratives that are part of storytelling and knowledge transmission (Pihama et al., 2019). Pūrākau have been likened to local legends, myths or stories that may also teach tikanga as well as other forms of knowledge (G. Bishop, 2021; Ihimaera & Hereaka, 2019; Stansfield, 2020). Marsden and Royal (2003) explain that pūrākau, more than just stories, were deliberate pedagogical constructs employed by wise leaders to encapsulate and teach a worldview of woven relationships. A Ngāi Tahu example of a foundational pūrākau is *Te Waiatatanga mai o te Atua*, in which relationships are expressed through the divine singing creation into existence. This pūrākau was gifted to Rev Charles Creed by Matiaha Tiromōrehu in 1849, arguably an early example of partnership with tauiwi educators (Tiramōrehu et al., 1987). Local Ngāi Tahu leader and historian Te Maire Tau describes pūrākau as part of oral traditions that incorporate myth and history, and have a functional purpose to explain life and ways of living (Tau, 2003).

Pertinent to this specific research, although aimed at older students, *Mana Ōrite mō te Mātauranga Māori* (MOE, 2020) is an initiative to ensure equal status for MM in education. Also, research by Gilbert et al. (2005) discusses storytelling, including pūrākau, in science education that improves learning outcomes.

Tikanga Māori

MM informs tikanga Māori about the tika way of acting (Barlow, 1994; Royal, 2012). The key aspects of this research's tikanga were whanaungatanga, tuakana–teina and ako. In this study's context, the tikanga of whanaungatanga can be defined as the nurturing of schoolwide community relationships (MOE, 2011).

Tuakana–teina refers to relationships between people in which there is a gifting from the tuakana to the teina (S. M. Mead, 2003; Pere, 1994). Research by Kenny (2010), Harlen and Holroyd (1997), and Hipkins (2002) espouses the value of more experienced teachers sharing with novices to increase their confidence. From a pedagogical perspective, within spiral discourse, ako is shared in a reciprocal relationship (R. Bishop & Glynn, 1999). R. Bishop (1996) defines spiral discourse as part of whanaungatanga whereby a whānau-like relationship is fostered through collaborative storying and restorying within a trusting relationship. This space for shared discussion grows with commitment and connectedness, leading to an increased responsibility for professional learning.

Similarly, from a Western paradigm, Timperley et al. (2007) describe professional growth as the concept of "novice to expert" through developmental progressions. Lortie (1975) comments that teachers learn from other teachers, thus aligning with Vygotsky and Cole's (1978) research on the scaffolding of learning through social constructivism. Western ideas regarding learning, such as the teaching as inquiry cycle from the New Zealand Curriculum (MOE, 2007), can be reflected in the spiral discourse of te ao Māori as a woven learning journey.

Woven learning journey

This study used a pūrākau to promote learning through MM by responding to human and environment interactions as an interwoven whole. The different approaches of Indigenous knowledge, such as MM, and Western science can complement each other in a meaningful way that enriches learning in education (Mazzocchi, 2006). He Awa Whiria is a framework by Macfarlane et al. (2015) that details the successful integration of MM and Western science in education. Education research by Cliffe-Tautari (2020) affirmed how pūrākau could improve Māori *students*' confidence in learning and identity. In contrast, this research was an intervention to discover how a pūrākau could improve a tauiwi *teacher*'s confidence and practice. As tuakana, I would be supporting the teina to weave MM, as a pūrākau, using the tikanga Māori of tuakana–teina, ako and whanaungatanga into his teaching practice. Therefore, the research question was: How can a pūrākau and tikanga Māori enhance teaching confidence and practice?

Methodology

Case study with relativist paradigm

A case study methodology suited this intervention because we were researching *how* one teacher at one school could integrate one pūrākau to increase their confidence and practice (Lincoln & Guba, 1985). Case study methodology lent itself to drawing out and analysing our thoughts as the tuakana and teina about our challenges, successes and missteps on our shared learning journey (Baxter & Jack, 2008).

There are two important cultural considerations that, as the researcher, I acknowledged from the outset. First, as a tauiwi I have a valid, but contested, role to play in advancing educational

research in te ao Māori (Smith, 2021). I am aware of past colonial methods of research that have been detrimental to Māori and pūrākau (Berryman et al., 2017; Furness et al., 2016; Hill & May, 2013; Hotere-Barnes, 2015; Lee, 2009; Walker, 1990); therefore, I regularly sought out relationship and guidance from the local hapū to ensure appropriate tikanga was followed (R. Bishop & Glynn, 1999; Jones, 2012; Macfarlane et al., 2015; Smith, 2021). Secondly, I have a store of professional and experiential knowledge about pūrākau that I must consider carefully as I position myself alongside the local hapū and teina (Creswell et al., 2003). This knowledge was carefully referenced as I worked collaboratively with the teina to increase *their* confidence and practice (Atkins & Wallace, 2012; Liston & Zeichner, 1987; Punch, 2009).

The theoretical framework I used was a relativist paradigm, which acknowledges constructivist (Pitsoe & Maila, 2012) and interpretivist learning theories (H. Harrison et al., 2017). The relativist paradigm was well suited for this research on pūrākau because the participating teacher's reality was multiple and subjective, based on the meanings and understandings that were informed by his prior experiences and the case study research itself (Cohen et al., 2007). Constructivism suited this research because it proposes that teina construct knowledge over time through their experience. The learning experiences of the teina were initially modelled by me as tuakana for the teina to then adapt into his own practice as his own confidence grew (Vygotsky & Cole, 1978). Interpretivism is a framework that seeks to draw out and distil the subjective understanding of this new learning for the teina (H. Harrison et al., 2017; Lortie, 1975). Through tuakana–teina, we collaboratively learned through an iterative inductive ako approach (Punch, 2009). This methodology seeks to make meaning of a teacher's experiences using tikanga Māori concepts of whanaungatanga and ako in which our learning roles were reversed as appropriate.

Research design

Data collection included tikanga Māori methods such as participant-driven, kanohi-ki-te-kanohi hui, spiral discourse and collaborative storytelling through observations and interviews. Data were recorded, transcribed and thematically grouped (Berryman et al., 2017; R. Bishop & Glynn, 1999).

Purposeful sampling was based on a set of research criteria that included one pūrākau, one tuakana, one unit of work, in one school. Triangulation of data was carried out by analysing multiple data sets, including teacher perspectives of his students' work, photos and recorded role plays (Creswell et al., 2003). The study was given approval by the University of Otago's Human Ethics committee.

Research intervention

I met with the teina for a couple of weeks before teaching to discuss how we would integrate the study's pūrākau into the water science unit of work. The specific pūrākau follows the journey of a local taniwha working and calling in partnership (akin to a tuakana) to the fish and birds (teina) to help keep the water clean to meet the wider community's needs. The pūrākau concludes with an agreement from all, including people, to help keep the water clean. The teina had three different Year 7/8 classes, the first class of which I taught largely by myself. I then met with the teina to discuss pedagogy and plan how he would teach the second class. I mainly observed him teaching this second class; however, some team teaching and modifications were "made on the hoof". His third class was taught without supervision. It should be noted that for this third class he had a student teacher, which provided him with the opportunity to work with her as her tuakana. We met weekly after all three classes to discuss and record feedback and plan for future lessons. The pūrākau intervention took nine weeks in total.

Data analysis

Constructionist thematic analysis entailed searching for themes within the data, which were then condensed into three major themes that addressed the research question (Braun & Clarke, 2006). The three themes identified were tikanga Māori, pūrākau as a local narrative and the woven learning journey.

Results and discussions

Tikanga Māori

The first theme of learning from this research was the importance of tikanga Māori in weaving and strengthening relationships. The pūrākau itself highlighted the benefits of relationships, whanaungatanga, between its main characters through the birds and fish saying, "Don't worry taniwha we will help you keep the water clean" (Gillon et al., 2019, p. 24). The interaction of the characters within the pūrākau reflected the interwoven connections of whanaungatanga, in ako, between the hapū and us as tuakana–teina (S. M. Mead, 2003; Pere, 1994).

Mentoring of teina by elders or tuakana

continues to be common tikanga within te ao Māori for the preservation and transmission of values and knowledge (Buck, 1949; Elder et al., 1934; Moon, 2003; O'Regan et al., 2009; Pitama et al., 2002; Te Whāiti et al., 1997; Walker, 2001). Of primary relational importance to this research was the whanaungatanga that was interwoven between the local hapū, tuakana and teina through ako. Following Tolbert et al. (2023), I consciously positioned myself as teina in partnering with the hapū. This positionality then changed for me when acting as tuakana working with the teina to help improve his confidence and practice (Lortie, 1975). Throughout the research, the concept of ako learning being reciprocal, given and received, caused numerous role reversals of tuakana–teina as we, the teachers and hapū, all learned from one another. Whanaungatanga was a key part of the ako process as it allowed for an ease of role changes because of the family-like relationships that we had built with one another. The teina commented on how whanaungatanga from me instilled a sense of trust between us, which promoted his confidence in taking risks in his practice: "I felt more comfortable to try something new." The rapport that we had developed allowed for meaningful dialogue to challenge his previous assumptions of pedagogy, teaching content, order and timing (Lortie, 1975). Aligning with research by Kenny (2010) about professional learning relationships, the teina stated that "one of the biggest impacts to using the pūrākau" to increase his confidence and practice was a directly from "partnering with me" in the tuakana–teina relationship (Hipkins, 2002). The teina said, "I felt safe to try this new strategy/practice because … you are more experienced … knowledgeable … you presented it in a way I could understand … I could see the students engaging with it." These statements support research by King (2014), who suggests that teachers must have a conceptual understanding of practices for them to become embedded in their practice.

Aligning with research by O'Keeffe et al. (2019), the teina had a critical disposition to increase his confidence by being open to challenging his assumptions. He expressed a willingness to extend his depth of understanding and an ability to communicate his opinions and experiences in a reflective manner that provided a rich source of data (Palinkas et al., 2015). The teina admitted that past learning experiences impacted how he taught (Lortie, 1975), which included teachers espousing new knowledge, often as discrete units, to students as passive objects, containers to be filled, as tabula rasa (Milton & Rogers, 2021). However, as tuakana, I modelled how pūrākau pedagogy seeks interwoven connections between the learning and the learners, in contrast to a "sage on the stage", "information packets" teacher-directed learning approach. The teina saw and adapted his teaching practice to a more whānau-centric approach *with* his students, becoming more of a "guide on the side"—even an observer of his students' learning. The teina moved away from what Freire (1970) described as the "banking model" of education in which the teacher narrated the appropriate knowledge to the students, whose sole responsibility was to receive, file and store this as a deposit. He was pleased to see and hear how the students talked about their environment, their river, in ways that related to them, as "they made the connections themselves". As he saw their self-directed ako, he grew in confidence, which affirmed his changed practice (Hipkins, 2002; Timperley et al., 2007). The teina noted that he had taught this unit three years in a row with a teacher-centric approach. He acknowledged that using this pūrākau with whanaungatanga alongside the students and seeking their ideas of connection to content provided a far more effective style of drawing out latent student energy, agency and learning. As Lortie (1975) asserts, the value of adopting new pedagogies into practice is a skill of effective teachers. Using pūrākau, not just as a new teaching strategy but as a new pedagogical paradigm—a different way of thinking about interwoven connections—opened the teina to an innovative way of conceptually thinking about teaching and learning practices (King, 2014). The teina was able to make new connections between his thinking and teaching practice, which flowed into teaching and learning for himself and the students.

Due to our high level of trust, he also felt free to communicate his reservations about perceived competing coverage of the science and MM content (Liston & Zeichner, 1987; Lortie, 1975): "There is a tension around time. MM and science learning objectives … can't replace each other; they aren't complete substitutes … MM could take time away from the other." After one lesson in which we did not cover all the learning objectives, I affirmed I had successfully used this strategy and I was confident we would be able to do justice to both MM and science. Due to the trust we developed through whanaungatanga, he was able to put these concerns aside and follow my direction of teaching sequence and content coverage (Lortie, 1975).

As tuakana, I leveraged on this trust as well as mitigated his fear of "getting it wrong" by sharing

related subject experience and knowledge, and role modelling this new strategy (Harlen & Holroyd, 1997). I interwove the pūrākau throughout the unit of work, repeatedly returning to its themes in each of the five successive lessons, leading to students constructing a role play or storyboard as evidence of their understanding. He commented:

> You gave me a picture of what it looks like to use one [pūrākau] … more holistically … to do this effectively ... it worked. The students were engaged and many managed to make connections between all three aspects of the unit.

In following lessons, we were both open to suggesting minor changes on the hoof as well as teachable moments when the students suggested possible deviations. Our whanaungatanga was increasing the confidence and practice of the teina as he saw the successful adaptation of delivery and content by responding collaboratively in the moment to engage student learning (Hipkins, 2002; Timperley et al., 2007).

Having watched my teaching practice, the teina then became the tuakana to his student teacher. The teina commented, "I felt more confident in guiding her because it went well with me." However, he also noted that he had much less time to develop whanaungatanga with her, and as a result, she made far fewer connections to the pūrākau: "Her confidence with this new strategy was limited." This contrast of integration of the pūrākau between the teina and his student teacher suggests that his growth in confidence and practice was directly linked to our whanaungatanga through the time and effort we had invested in our learning relationship.

In another aspect of whanaungatanga, I role modelled linking the pūrākau to my own personal story through showing whānau photos of our recent visit to the Rakaia Gorge. The students eagerly engaged with the photos and videos, asking questions about who my family members were and where the photos were taken. The teina said he "would often introduce and share about his family at the start of the year" but that he had not woven his personal story into later science curriculum content before. In a combination of the whanaungatanga and local place-based context, the teina shared that the Rakaia River was a place where he, as an immigrant, had made a deep connection to the beauty and "wow" of New Zealand as his home. This is further explored in the next section.

Pūrākau as a local narrative

We purposely chose a pūrākau that drew upon the Rakaia and local rivers that are close to where the teina and students live and learn. Culturally responsive pedagogy, improving student learning outcomes, espouses teaching content that reflects where students come from, what they value and what they already know (González et al., 2005). We also wanted to honour the local hapū, Ngāi Te Ruahikihi ki Taumutu, as they gifted their mātauranga-a-iwi for us to share (Glassey et al., 2023).

The teina and I discussed this background of the connection between the local environment and peoples flourishing through the pūrākau. The concept of community and whānau being connected to a local place is evident in two MOE initiatives. Tātaiako focused on place-based learning, tangata whenuatanga, alongside the local curriculum considering students' identities and cultures (MOE, 2011, 2019). The pūrākau, as Semken and Butler Freeman (2008) expound, allowed a leveraging of learning from the emotional and relational attachments that people have to places. The teina commented on how his past teachers and lecturers who had shared about their special places had "hooked" him into learning with them, and he was now experiencing that with the students. He stated, "That's how the pūrākau can bring out the best in science … makes it interesting, we all love … remember stories … especially local stories … a really useful tool … not isolated to somewhere else … it's local." The teina commented that "this was the most local context" of all the lessons he had taught. He could see how the content was more interesting and relevant to the students as they connected to *our* river or water. He felt his confidence increase as the students made multiple connections to the local animals and plants named in the pūrākau as well as the local river that runs along the school boundary: "I would just listen, and I could tell they're engaged … I should probably leave them to it because if I step in it kind of breaks the flow."

The teina was surprised to see how a planned five-minute revisiting of the pūrākau at the beginning of the lesson turned into 17 minutes: "There are so many connections they were making … there was more … ako between me and the kids through the local context." The teina was seeing himself and his students becoming more aware of their own learning as they asked questions (Ausubel, 2000). The teina noted how he was pleased to see his Māori and kapa haka students "light up" as they related te reo Māori words

such as taniwha, manu, ika, harakeke and toetoe to their own cultural understandings. As most students made meaningful connections to the pūrākau, the teina gained a sense that this was affirming a shared understanding of our culture as New Zealanders. The pūrākau promoted a sense of tūrangawaewae and kaitiakitanga for this land and water (S. M. Mead, 2003). As the sense of belonging and confidence of the teina and the students increased, the teina felt free to allow students to lead the learning because "they were coming up with connections that were relevant to them".

Visiting the local river in conjunction with the pūrākau invoked a visceral challenge within the teina, which he passed on to the class, to understand and act with kaitiakitanga towards the local environment (Buxton, 2010; Southgate, 2006). As we stood next to the local river, the teina remarked that this is "not just a lecture. [I am] relating to the kids' culture … knowing my kids and what engages them." The teina then took this a practical step further by linking their learning to their local school community:

> I was making it place-based so we focus on the local river … its health is not good … worst in Canterbury … [W]e have a role to play in changing that … learning about the science and ecology of our unhealthy local river … through this pūrākau.

In summary, the teina was beginning to see how greater whanaungatanga through shared school-wide learning relationships between the hapū, tuakana–teina, students and the local river was improving learning.

Woven learning journey

Using the tikanga Māori of whanaungatanga as tuakana, I was able to build the confidence of the teina to integrate the pūrākau into his practice. The teina was able to reconcile his view of the distinct divisions of Western science and to embrace the inherent interwoven nature of MM "to make connections" by using this pūrākau. Due to the whanaungatanga, the teina felt free to share his concerns (Liston & Zeichner, 1987; Lortie, 1975) of a perceived "shotgun spread" approach, of trying to link together the three science concepts of water cycle, water ecology, and water guardianship and sustainability. He acknowledged the more explicit connections of the pūrākau to water treatment and guardianship but felt the "tension of the water cycle being less strongly connected to the pūrākau". However, he was pleased to see two students make a novel connection between the water cycle and pūrākau in the taniwha and a water droplet becoming friends for a time in the river before separating out to sea. The teina continued this discussion by linking their learning back to the water cycle, where the water droplet would evaporate from the river or sea into the clouds, allowing the taniwha and water droplet to rejoin again later through rainfall precipitation onto the mountain and back again into the river. We both commented on how their initial idea sparked new ako for us as teachers. As teachers, we were the teina learning through ako from the students as tuakana.

The teina enthusiastically shared my observation linking the water cycle to the students' pepeha. This link details the water moving between the rangi, maunga, awa, roto and moana. One group of students readily connected their pepeha into the wider water unit with a character quoting their maunga and awa as part of the storyboarding final assessment. Tensions may arise regarding the cultural appropriateness of tauiwi claiming relational ties to a river that holds whakapapa significance to local hapū alongside more recent arrivals of tauiwi to this land. However, when discussing this perspective of the distinctive significance of the pūrākau and its river to local Māori, the hapū education facilitator quickly dismissed these concerns. Their stance towards education with local schools is with tikanga inspired by partnership and whakamana by working together to uplift the inherent value of all peoples, Māori and tauiwi. Local hapū sought to share and affirm responsibility in caring for *our* local river because an exclusive mana whenua ownership and responsibility for maintaining its health was considered completely untenable. This approach does not diminish the deeper layers and whakapapa connections that local hapū have to the river, but neither does it seek to exclude tauiwi from *our* shared responsibility for kaitiakitanga of rivers.

The teina was ecstatic about the students' novel self-directed connections:

> I didn't tell them that … this takes the pressure off me having to find all the connections myself … it was the pūrākau … and MM … that allowed that weaving together … I was surprised like how much they could actually combine all three [science concepts]; I think every group integrated all three things we asked for.

The teina also recalled a student referencing the Waitī (freshwater) and Waitā (saltwater) stars of

Matariki. The teina was able to see how the students readily took to the task of relating science concepts and the local context to MM in the pūrākau. This reiterated the premise stated by Macfarlane et al. (2015), in his appropriately named He Awa Whiria framework, that Indigenous knowledge and Western science can enrich learning as they literally weave and flow together. Aligning with Mazzocchi (2006), the teina saw how this pūrākau was "acting as a bridge between Western science … and MM concepts" because the students were weaving multiple connections and incorporating themselves into the summative assessment:

> I saw how this engaged my students, especially my learners who really connect to Māori or Pasifika cultures … but this pūrākau isn't just for them … this is grounded in a local context for all the students wherever they are from that are in my class.

This quotation gives evidence of pūrākau affirming not only Māori identity (Cliffe-Tautari, 2020) but all our shared culture as New Zealanders linked to this land (H. M. Mead, 2012; Semken & Butler Freeman, 2008; Tuan, 1977). The teina noted:

> [T]hey weren't just talking about the water cycle; they were singing about it ... acting it out … making stories ... [casting themselves] as guardians of the water with the taniwha … emphasising partnership and whanaungatanga … with this local place.

The teina was very surprised at how already high levels of student engagement increased as he showed his own photos and videos of himself at the Rakaia River. The personal connection the teina had to the local river seemed to be infectious in students' engagement. The teina noted that "some students could barely contain themselves, jumping off their seats … standing … raising their voices, … bursting with questions … making shared connections with my pictures of me at the Rakaia River". This affirms the tikanga of whanaungatanga leading to learning that the teina had made with his students and his past teachers who shared about themselves. His students now sought out more whanaungatanga—deeper connections with him. Just as ako is reciprocal learning, we saw them making reciprocal whanaungatanga connections with the teina. His students provided many of their own personal connections to the river, thereby supporting Tuan's (1977) research on places being imbued with meaning by human experience. However, it was the teina and his experience of place that the students connected to the most. The students sought and found meaningful connections to the local place, science concepts and MM in the pūrākau *because* of their teacher.

The teina acknowledged that his past teaching had tried to include all cultures. Ladson-Billings (2014) discusses how effective learning and understanding are both linked to a deep understanding and appreciation of culture. This pūrākau forced him to reframe his practice regarding science and culture in two ways: first, to use a pūrākau to teach science concepts; second, to present the narrative through one culture, that of the local hapū and their pūrākau. The specific pūrākau presents the river as our river. This intense personalising, personifying and subsequent kaitiakitanga of the river is common to MM (H. M. Mead, 2012; Tau, 2000) as well as other Indigenous cultures (Campbell, 2024; Tuan, 1977). Langer (2003) describes how we are part of nature, and the teina was struck by the "relative" ease with which the students became involved and identified with the river through an Indigenous perspective of the environment. The personalising of culture, place and river resonated in the students' ideas that the teina shared:

> [W]e came from the river ourselves … it provides water, food, entertainment … [W]e are 90% water … there is no way for us, or other animals or crops to survive without water ... [I]f we destroy the water, we destroy ourselves.

The teina felt a responsibility to be confident in his practice because the health of our local river, just as the pūrākau echoed, was, and is "under threat". We discussed how the pūrākau collectively called us all to play our part as kaitiaki, like the taniwha, to keep the water clean. Rather than a disconnected, distant place, the river of this pūrākau related to our local river, and the teina felt the shared responsibility to encourage the students to look after it. The teina noted that this was not just a figurative or hypothetical call but a challenge that needed to be honoured in his improved practice of integrating the pūrākau.

The pūrākau was not simply a new strategy that passively served the learning of teachers and students. As the tuakana, I discovered that the pedagogy of pūrākau means that they are constructed and portrayed with a purpose that promotes their own agency by inviting us into a relationship with the pūrākau itself. These interwoven relationships within the pūrākau were deliberate constructs to encapsulate a worldview,

to role model and to encourage similar practices of interweaving relationships outside the pūrākau (Marsden & Royal, 2003). The learning relationships of the pūrākau characters were presented within a context of ako through whanaungatanga. As the tuakana, I came to see the pūrākau actively modelling and inviting us, as hapū, tuakana–teina and students, to participate in these same relationships of ako through whanaungatanga.

Conclusions

This educational research intervention sought to document how a pūrākau and local hapū tikanga, within a tuakana–teina relationship, could enhance teaching confidence and practice. The MM and tikanga embodied in this local pūrākau, as well as the pūrākau call to whanaungatanga, connection and action, provided the teina with new ako learning opportunities to increase his confidence and practice. The pūrākau as a pedagogical paradigm invited the tuakana–teina and students to discover interwoven connections between the pūrākau, science concepts and the local area, where ako was enriched for all.

The confidence and practice of the teina in using the pūrākau grew as he saw the tuakana and students making novel connections. The teina noted that "the pūrākau brought out the best in MM and science together". Other tikanga themes of kaitiakitanga, as a vocational call, were interwoven with a second theme of promoting a sense of tūrangawaewae through connection and responsibility to a local place. The two themes of kaitiakitanga and tūrangawaewae within the pūrākau were woven together through ako in the water science unit. The sense of tūrangawaewae that the teachers felt strengthened the whanaungatanga of the tuakana–teina and hapū relationship, which helped the teina feel more at ease in taking risks with incorporating the pūrākau into his practice. The teina became convinced of the appropriateness of the pūrākau to promote learning as he saw the students find personal connections and tūrangawaewae through the pūrākau.

Throughout this research, it was the tikanga of whanaungatanga between us, as tuakana–teina and hapū, engaging with the MM and pūrākau paradigm of interwoven connections that enlightened our learning journey. This study shows how whanaungatanga brought enlightenment and wisdom to learning for us and the students alike, as alluded to in Pā Henare Tate's whakatauākī (Barlow, 1994). As we, tuakana–teina, students and hapū, learned together through ako, the confidence of the teina grew because he was led to understand the richness of the pūrākau as a new pedagogical paradigm that sought out interwoven expansive relationships (Durie, 1999). As the teina learned how to interact with this pūrākau better, in line with Angelou's whakatauākī, he did better in his teaching practice. In addition, his confidence was further informed by the novel connections that he and the students made through their understanding, making the curriculum relevant to *their* understandings of *their* local world. Further research would be required to determine whether the self-reported confidence of the teina using this pūrākau flows into his teaching practice with other units of work. Similarly, further research to include other teachers at different schools using different pūrākau would be beneficial.

Final thoughts

The holistic and authentic inclusion of this localised pūrākau as well as the relationship with local hapū, collaborative planning, dynamic team teaching and practical classroom experience were strengths of the approach. The tikanga of the local hapū, partnership and whakamana affirmed our positionality and encouraged our learning as tauiwi tuakana–teina. Their tikanga helped us to successfully integrate the pūrākau into a unit of science work through increasing the confidence and practice of the teina. The local hapū and pūrākau both advocated tikanga of whanaungatanga, kaitiakitanga and tūrangawaewae alongside the tuakana–teina relationship. This tikanga helped facilitate ako that benefited the confidence and practice of the teina in using the pūrākau. Together our contributions became greater than if separate, and their interwoven nature ultimately improved the ako of tuakana–teina as well as that of the students.

Glossary

ako	reciprocal learning
awa	river
awa whiria	braided river
hapū	subtribe
harakeke	flax
hui	meeting
ika	fish
iwi	tribe
kaitiaki	guardians
kaitiakitanga	guardianship
kanohi-ki-te-kanohi	face-to-face
kapa haka	Māori dance group
kōia te mātauraka	to dig for or to cultivate mātauraka

mana	inherent personal value
mana whenua	the tribal authority for an area
manu	birds
mātauraka/mātauranga	knowledge
mātauranga-a-iwi	local iwi Māori knowledge
mātauranga Māori	Māori knowledge and ways of knowing
maunga	mountain
moana	sea
Ngāi Tahutanga	Ngāi Tahu culture and identity (see https://ngaitahu.iwi.nz/te-runanga-o-ngai-tahu/our-work-pou/culture/)
Ōtautahi	Christchurch
Pākehā	New Zealander of European descent
pepeha	Māori tribal identity connection to a local place
pūrākau	local cultural narrative
rangi	sky
roto	lake
takiwā	region
tangata whenuatanga	place-based learning, place-based sociocultural awareness
taniwha	water guardian
taonga	treasure
tauiwi	non-Māori
te ao Māori	the Māori world
te reo me ōna tikanga Māori	Māori language and cultural practices
Te Tairāwhiti	East Cape of the North Island of New Zealand
Te Waipounamu	the South Island
tika	right
tikanga	Māori cultural practices
toetoe	giant tussock grass
tuakana–teina	experienced–novice
tūrangawaewae	belonging
Waitaha	Canterbury
whakamana	empowerment
whakapapa	intergenerational
whakatauākī	proverbs
whānau	family
whanaungatanga	family-like relationships

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GATHERING THE AUTHENTIC VOICES OF INDIGENOUS YOUNG PEOPLE

School-based research engagement processes

*Te Wai Barbarich-Unasa**
Jane Koziol-McLain†
Denise Wilson‡
Terry Dobbs§
Shyamala Nada-Raja||
Michael Roguski¶
*Moana Eruera***

Abstract

Crucial to promoting Indigenous youth autonomy is engaging with young people in research processes in a way that promotes their voice and cultural agency. Like other young people, taitamariki Māori perceptions of their own lives and experiences provide essential input towards creating better conditions for and with them, now and in the future. In planning Harmonised, our school-based taitamariki and Māori-centred project promoting healthy intimate partner relationships that ran from 2016 to 2020, we found little literature to guide our engagement processes. In this article we share learnings from our research, how we engaged with schools, and how we worked with Indigenous young people to hear their authentic voices.

Keywords

healthy relationships, young people, Māori-centred, violence prevention, engagement

* Waikato, Ngāti Pāoa, Ngāti Maniapoto, Ngāi Te Rangi. Senior Lecturer, Taupua Waiora Centre for Māori Health Research, Auckland University of Technology, Auckland, New Zealand. Email: tewai.barbarich-unasa@aut.ac.nz
† Professor, Centre for Interdisciplinary Trauma Research, Auckland University of Technology, Auckland, New Zealand.
‡ Tainui, Ngāti Porou ki Harataunga, Whakatohea, Ngāti Oneone, Ngāti Tūwharetoa. Associate Dean Māori Advancement, Taupua Waiora Centre for Māori Health Research, Auckland University of Technology, Auckland, New Zealand.
§ Ngāpuhi, Te Rarawa. Research Co-Director – Māori, Vine – Violence Information Aotearoa, University of Auckland, New Zealand
|| Senior Research Fellow, Centre for Pacific Health, University of Otago, Dunedin, New Zealand.
¶ Te Ātiawa, Ngāti Tūwharetoa. Managing Director, Kaitiaki Research and Evaluation, Wellington, New Zealand.
** Ngāpuhi, Ngāti Ruanui. Chief Executive Officer, Ngāpuhi Iwi Social Services, Kaikohe, New Zealand.

Introduction

Engaging young people in research that concerns them is both their right and recognised as methodological best practice (Schmid & Garrels, 2025; Spriggs et al., 2010). Article 12 of the United Nations (UN, 1989) Convention on the Rights of the Child explains that children and young people have the right to have their views heard, taken seriously, and given due weight in accordance with their age and maturity, especially in matters affecting them. Later, the UN Committee on the Rights of the Child (2009) and the UN Declaration of Indigenous Rights (UN General Assembly, 2007) affirmed these rights for Indigenous children. However, dominant Western adult-framed methodologies and methods may not promote an Indigenous youth voice. For example, surveys with adult predetermined structured questions and response options can oversimplify and ignore important information relevant to young Indigenous people (Eruera & Dobbs, 2010). In planning Harmonised (2016–2020), our school-based taitamariki and Māori-centred project promoting healthy relationships, we encountered a dearth of literature that explicitly addressed taitamariki and school-based engagement processes. To address this gap, the foundational works of Cram (2009), Hudson et al. (2010), and Smith (2012) provided essential guidance in shaping our engagement strategy.

This article shares our path to enact culturally responsive school engagement strategies consistent with our Harmonised team kaupapa. Our learnings might be transferable to enhance work with Indigenous young people in different contexts.

The Harmonised project

The Harmonised research team comprised a group of Māori and tauiwi multidisciplinary researchers whose research and practice backgrounds covered the areas of Māori health, youth health and advocacy, social work, psychology, and nursing. The overall objective of the Harmonised project was to develop, test, and disseminate an interactive, personalised smartphone app for young people (aged 13–18 years) to promote their healthy intimate partner relationships. Built for secondary school students with a specific focus on Māori, the app also enhanced the capacity for friends and whānau to support taitamariki in their relationship decision-making. Our kaupapa determined that the app developed as a result of a co-design process that drew on the perspectives of the multidisciplinary research team; a Community Advisory Group (CAG), comprising a range of Māori and non-Māori youth, research, tikanga Māori, and education experts; and a Taitamariki Advisory Group (TAG). Throughout the research, we engaged with a tuakana group comprising foundation TAG members and a teina group comprising younger TAG members between 13 and 17 years old who replaced the tuakana members as they moved beyond secondary school. These talented and inspirational taitamariki were crucial to developing healthy relationship resources and the project's success. Their role was to ensure a young person's perspective throughout our mahi. As a research team, we were responsible to the CAG and TAG for manaaki and kaitiakitanga, and to whakarongo.

The project proceeded in three stages. The first stage consisted of a series of focus groups with taitamariki that aimed to

1. identify taitamariki definitions of an "intimate partner relationship" as opposed to adult-developed descriptions of taitamariki "relationships";
2. identify what constituted healthy and unhealthy intimate partner relationships in their context by using the Indigenous wellbeing framework Te Whare Tapa Whā (Durie, 1985). The Whare Tapa Whā wellbeing domains allowed a holistic description of the individual's sense of wellbeing and aspects impacting on relationship wellbeing, including the importance of whānau—an aspect which has not been included in Western relationship measures or wellbeing frameworks to date (Dobbs, 2021); and
3. explore how taitamariki make decisions within their intimate partner relationships.

The second stage of the project involved app development and specification of the trial to test whether the app was beneficial for taitamariki following its implementation. We conducted focus groups with taitamariki to elicit their views on young people's priorities and decision-making within their intimate partner relationships. Fundamentally, this phase of the project sought to reveal a conceptualisation of their intimate partner relationship wellbeing in young people's own words. Alongside this was our interest in using an Indigenous approach to facilitate young people's voices within the discourse of intimate partner relationships. This included, for example, whakawhitiwhiti kōrero among the taitamariki, a form of discussion that was led by the taitamariki with minimal prompt from the research team. The TAG contributed to applying focus group data to the app's development, promoting a user-friendly

experience specific to Indigenous taitamariki. Focus groups were also convened in the first stage with taitamariki to discuss and finalise questions for a survey testing app effectiveness. The TAG also had significant input into developing the survey carried out in the pilot schools to ensure every aspect was taitamariki-centred.

The third stage of Harmonised centred on implementing the app in eight Aotearoa New Zealand secondary schools and initiating a stepped wedge trial (Koziol-McLain et al., 2021). Through the stepped wedge trial, the app was introduced to all eight schools over two school terms, with the order decided randomly. Each school completed five short online surveys across a 15-month period. This approach meant every school had access to the app, while still allowing us to see what difference it made over time. Rolling it out in stages also made it easier for schools to manage and support within their normal routines. The study protocol, outlining mixed-methods data collection, including focus groups and taitamariki surveys, is available elsewhere (Koziol-McLain et al., 2021). The schools included kura kaupapa Māori and mainstream secondary, urban, and rural schools. In this phase, we also asked schools to participate in focus groups about healthy relationships, services offered by each school, the healthy relationships curriculum, and school-based recruitment for a taitamariki survey (see Koziol-McLain et al., 2021, for further detail). This research involved significant engagement with our participating schools. The process included obtaining informed consent from school principals and school governing bodies; working through safety pathways and protocols; participating in key stakeholder focus groups to develop a bespoke implementation plan for each school; facilitating focus groups with young people; app implementation; follow-up; and responding to teacher, parent and student queries and conversations generated by our engagement with the schools and taitamariki. Each participating school identified someone in the school to serve as a liaison person for our research team.

This article focuses on the engagement processes carried out between researchers and taitamariki within schools. Our engagement methods to create strong connections with the taitamariki throughout the project may be of value to future researchers in mainstream and Indigenous settings when engaging with taitamariki.

Māori-centred methodology

In Māori-centred research, Māori keep control of the research to maintain the mana of their kōrero (Wilson et al., 2021). A defining feature of Māori-centred research is that Māori are significant participants and researchers (Mooney, 2012). Within the Harmonised team, Māori were represented equally alongside non-Māori researchers, including a bicultural leadership approach. A Māori-centred research methodology guided our processes and advocated for the voices of taitamariki to be heard. Māori-centred research enabled the construction of Māori knowledge, and, in the Harmonised project, this approach produced knowledge about relationship wellbeing for taitamariki Māori in the participating schools.

Durie (1997) explained that Māori-centred research is founded on three cornerstones: whakapiki tangata (enablement), whakatuia (integration), and mana Māori (control). Furthermore, underpinning Māori-centred research are the expectations that the research processes and outcomes are of benefit to Māori, are inclusive of tikanga, values and needs of Māori, and privilege te ao Māori. In this article, tikanga refers to culturally grounded practices, values, and processes that guide appropriate conduct within Māori contexts. Tikanga is not fixed or universal; rather, it is relational and contextual, shaped by the people involved, the setting, the purpose, and the time. What is considered tika therefore emerges through collective understanding and shared practice rather than predetermined rules.

Māori-centred methodology was operationalised through deliberate structural and relational practices within our bicultural research team. Co-leadership between Māori and tauiwi investigators ensured shared decision-making and accountability at all stages of the project, preventing Māori perspectives from being relegated to retrospective consultation. This model supported mana Māori by embedding Māori authority within governance, design, interpretation, and dissemination processes.

A Māori advisory group provided cultural oversight and strategic guidance, ensuring the research remained aligned with tikanga, community priorities, and te ao Māori perspectives. In parallel, a tauiwi advisory group supported reflexive practice and critical engagement, strengthening bicultural accountability rather than defaulting to dominant research norms. Furthermore, this relational approach was supported by regular team check-ins that created space to reflect on process, power dynamics, and cultural safety (Wilson et al., 2021).

These hui were used to ensure Māori voices were not only present but centred in shaping decisions, framing findings, and determining appropriate language and dissemination pathways. Together, these structures moved the methodology beyond symbolic inclusion towards genuine partnership and Māori leadership within a bicultural research context.

Importantly, through the engagement phase of the Harmonised project, the Māori-centred approach provided a backbone for all interactions. This approach supported culturally appropriate engagement that empowered both Māori as tangata whenua and tauiwi. Through this approach, the research team were able to support the needs of taitamariki Māori in mainstream settings as well as those in a Kaupapa Māori environment (Bishop, 1996; Cunningham, 2000; Smith, 2012).

Harmonised kaingākau, tikanga, and whanonga pono

Our planning for engaging with taitamariki began at the first research team hui. The team affirmed the aim to support the health and wellbeing of taitamariki by co-creating an app that provided a mechanism for people to get help and complemented supports provided by friends and whānau. The importance of having whānau support their relationships and seeking advice from whānau about their relationships has been highlighted in Dobbs (2021). At that first hui, we purposefully identified the Harmonised team tikanga and principles to guide our decision-making and practice as we engaged with one other, communities, schools, advisory group members, and taitamariki participating in the research. These principles and values supported the design and delivery of Māori health research in a way that provided a holistic approach in a culturally safe and ethical manner (Mooney, 2012). At this hui we also intentionally identified the term *taitamariki*, acknowledging that this kupu is commonly used within Te Tai Tokerau to refer to young people. As the original concept for this research emerged from whakaaro and community dialogue in Te Tai Tokerau, retaining this term honours the whakapapa of the project and situates it within its Northland origins. However, we recognise that in other regions young people may be referred to as taiohi and rangatahi.

The research team, CAG, and TAG members discussed the team principles to ensure the research adhered to the kaupapa and would benefit taitamariki. This process also meant that although a single research team member liaised directly with each school, through the team tikanga, other team members could confidently step in and provide support or complete the data collection at any point.

Correct and culturally responsive engagement was a critical component of each recruitment stage, as providing an opportunity for taitamariki to share their perspectives within a school setting was a priority. It was also vital that the correct processes were in place to ensure the research remained safe and appropriate. The team principles effectively guided every aspect of engagement with taitamariki and allowed the establishment of positive connections.

The Harmonised kaingākau were developed collaboratively with the research team, kaumātua, and TAG members to ensure that understandings of appropriate conduct reflected shared values rather than imposed interpretations. This aligns with best practice in research with taitamariki, where cultural safety, relational accountability, and youth participation are central (Graham et al., 2015; Hudson et al., 2010; Ware et al., 2018). In this way, "right" and "true" were not abstract ideals; rather they were collectively negotiated through whakawhitiwhiti kōrero and grounded in tikanga, respect for mana, and responsiveness to the lived realities of taitamariki. As the values and principles were the backbone of our school engagement, it is important to understand that these were revisited on multiple occasions with all researchers and TAG members. Therefore, the final product is one that our team constructed to be culturally appropriate and taitamariki-centred. Table 1 lists the kaingākau, tikanga, and whanonga pono of the Harmonised project.

School engagement approach

As noted by Barbarich (2019), the establishment of respectful and trusting relationships plays a critical role in the effective implementation of research. In line with this, our school engagement was facilitated through relationships established prior to data collection. These existing connections with school leadership and wellbeing teams enabled safe access, trust-building, and practical implementation within busy school environments. While these relationships supported culturally grounded engagement with taitamariki, they did not influence the content of the kōrero or the subsequent analysis; participation remained strictly voluntary and was guided by consistent processes across all sites.

We acknowledge that working within established networks may introduce perceived selection bias and limit whose voices are included. To

TABLE 1 Harmonised project kaingākau, tikanga, and whanonga pono

Kaingākau (the values that inform and guide what we do)	
Tika	Being tika always—acting in true and correct ways.
Kaitiakitanga	We will care for each other, and the young people associated with our research.
Manaakitanga	Relationships with fellow team members, young people, schools, parents, and the community must be respectful and caring at all times.
Reciprocity	Reciprocity will underpin all partnerships and relationships with young people, schools, parents, and the community.
Inclusive of young people	Our decisions and actions will be inclusive of young people.
Confidentiality	We will be clear about the limits of confidentiality to ensure young people's safety.
Safety	Safety is a priority at all times.
Tikanga (the right way of doing things)	
Adhere to health & safety protocols to optimise young people's physical, emotional, and cultural wellbeing.	
Implement the research to a high standard at all times, which meets ethical requirements, decision-aid science standards, research conduct standards, and team members' professional practice standards.	
All members will take responsibility to ensure that their actions and decisions are inclusive of young people.	
Whanonga pono (principles)	
We appreciate taitamariki within the context of their whānau and both historical and contemporary influences that they negotiate.	
Our decision-making and doing the best that we can will be informed by our kaupapa and the principles enshrined within human rights, the UN (1989) Convention on the Rights of the Child, the UN Declaration of Indigenous Peoples Rights (UN General Assembly, 2007), Ethical Research Involving Children (ERIC; Graham et al., 2015), trauma-informed care, and our personal integrity.	
We will recognise the diversity (e.g., age, sexual orientation) within young people as a group, and the power differences that exist between them and adults.	
We will be culturally responsive.	

mitigate this, we embedded reflexive team kōrero, bicultural advisory oversight, and transparent reporting practices throughout the research. Consequently, our findings should be understood as reflecting the specific experiences of taitamariki within the participating schools, rather than representing all young people. Future research should seek to extend engagement beyond existing networks to broaden inclusion.

There are two key aspects to be considered regarding school engagement:

1. For taitamariki to participate, issues of powerlessness and voicelessness need to be addressed as typically, adults make choices about who should and should not participate in research (Fox, 2013, p. 988). Consideration must be given to how children are given the option not to participate (Dobbs, 2021).
2. Ensuring school staff have a belief that taitamariki can participate in research. Therefore, the consent process is important and not seen as a one-off action but continues through the whole research project (Dobbs, 2021).

Without carrying out research ethically, the *authentic voice* of young people will not be heard. This term is understood from a mana-enhancing (human rights) framework (Dobbs, 2021).

The Harmonised project values guided our engagement with all schools and research participants. We used these helpful tools to promote a culturally appropriate experience for the researcher and research participants. The following sections provide insights into how our team incorporated our values into our "doing" of Harmonised research engagement.

Applying our kaingākau

Tika: Doing things the right way

Adhering to the project's tikanga was crucial for taitamariki engagement (Hudson et al., 2010). The team sought initial consent from each principal and school board to conduct the research. Following school-level consent, the school liaison supported logistical coordination by identifying suitable classes based on timetabling and availability. Taitamariki were then invited to participate voluntarily and self-select into the project, consistent with the kaupapa of youth agency (Barbarich-Unasa, 2023; Eruera & Dobbs, 2010); individual participants were not selected by school staff. It is important to note that informed consent was continuously upheld. Although a particular class may have been identified, all taitamariki in that class would individually consent or decline (Hudson et al., 2010). In three participating schools, all taitamariki from Years 9 to 13 were invited to participate as the school had less than 100 students in that age group.

At the taitamariki information hui, the team would mihi to everyone present and create links through whakapapa or the specific geographical area. This is an important process for building meaningful connections. When able, if there were research team members who came from a particular school region, they would engage with the local schools to ensure a familiar face and tautoko the relationship. In te ao Māori, the known or familiar face is integral to engagement and provides a context of knowing and trusting in processes like research (Cram, 2009). This aspect, being tika, meant that members of the research team were familiar with a particular school and community, which was vital to enrich the engagement further.

Another aspect of tika carried out through the engagement processes was allowing taitamariki to remain autonomous and provide direction for the kōrero and how they engaged with the team members. This was achieved through whakawhiti-whiti kōrero in the second phase of the project. The safe discussion of kaupapa identified by taitamariki was facilitated by various activities like using sticky notes. If taitamariki felt uncomfortable, such activities allowed them to have their questions answered anonymously.

Kaitiakitanga: Responsibility to care for and protect

Kaitiakitanga occurred during our fieldwork and in treating taitamariki kōrero as taonga. Our priority was to ensure we kept taitamariki and the research team safe. Respect for the school, taitamariki, and their whānau meant that the research was dutiful, and the team could authentically engage. The research team kept whānau informed by providing information about the research and how to seek support. Consent forms were provided, and offers made to discuss the research if they had any questions. Support for the research was obtained from every school through the principal or school board. We remained respectful at the school visits by identifying strategies to keep all participants safe and in an environment where they felt they could share their kōrero.

As we were dealing with a potentially triggering kaupapa (intimate partner relationships), respecting the stories shared and the collected research data was essential. Every part of engagement with taitamariki would begin with a short

kōrero to discuss the kaupapa. We acknowledged this could be heavy and uncomfortable for them, and said they could either head back to their respective classes or stay and do some of their other mahi until they felt ready to rejoin their class. Obtaining consent from taitamariki at every engagement we had with them further reiterated that at any stage they were able to withdraw from the project should they no longer be in a position to participate. This also meant we kept them safe by not adding further mahi to their busy schedules and commitments. We responded to taitamariki disclosure statements in real time because it was vital for them to be aware that the research team had created a safe environment and help was available.

Throughout the research process, it was important to be mindful of each school community's various cultures. We remained culturally safe by providing an environment that upheld the mana of all involved and empowered who they were. We also maintained a reflexive approach by collaborating with whānau, hapū, and iwi members where possible. Creating safe spaces further established our relationships across the board, supported the kaupapa of our research, and helped guide our research processes.

Safety is heightened when working with taitamariki using a social media app. We needed to ensure, as the research team, that we were able to identify an app user quickly should there be any safety concerns. We created a safety plan with each pilot school to ensure there were procedures around people to contact should the research team moderator identify a post that raised a safety concern for taitamariki. Hypervigilance regarding safety was a critical approach to take, and it was beneficial for the research team to know the ports of call if such a situation arose.

Manaakitanga: Showing respect, generosity, and care for others

Manaakitanga was essential for the research team in building relationships with the school and taitamariki participants. We engaged with the school community at staff meetings, school assemblies, and board meetings, where applicable. We also became familiar with the research participants and taitamariki through whakawhanaungatanga, hui, and class visits. Ensuring trust and communication between all parties was imperative to create authentic and safe research.

Due to the relationships built with each participating school, our in-person visits were much more meaningful as we would kōrero about the various activities or events. This catch-up kōrero allowed us to understand better how diverse and complex the environment could be. By listening and gaining a better understanding, we could adapt our research while achieving our research goals. Taking time to listen to our taitamariki prompted us to make significant changes to our app, including the use of avatars, personalisation of profiles, the inclusion of their own relationship values, and the kinds of resources that could be posted within the app, thus promoting more taitamariki-led initiatives.

Appreciating participants' time, being present, actively building meaningful relationships, and recognising the expertise of all participants and school communities was significant. Every kanohiki-te-kanohi visit involved sharing kai. Kōrero over kai can become much more meaningful when you show simple gestures of appreciation—for instance, acknowledging that any time given to our research was important and valuable. Therefore, looking after the liaisons and taitamariki meant being on time for hui and connecting to the groups we were talking with.

Utu: Reciprocity

Reciprocity is a significant Māori value and an essential principle in Indigenous research (Cram, 2009). Common to Western conceptualisations of reciprocity is a sense of transactional exchange, whereby participants "give" their knowledge and time and researchers "take". In accordance with te ao Māori, within the Harmonised project reciprocity was reflected as a relational commitment. While taitamariki shared their lived experiences and insights, their knowledge remained theirs; the research team acted as kaitiaki of that knowledge and were accountable to them in how it was interpreted and shared. Reciprocity was enacted through returning findings in accessible formats, creating spaces for taitamariki to respond to interpretations, ensuring their voices shaped outputs, and supporting schools with insights that informed practice and wellbeing initiatives. In this way, value was reciprocated through meaningful influence, visibility, and benefit rather than extraction, strengthening both the relationships and the integrity of the research.

Inclusive of young people

Taitamariki are experts in their own lived experiences, and school communities hold contextual knowledge about how their educational environments function. Recognising these complementary forms of expertise, we designed an engagement

process that valued taitamariki voices alongside the practical and relational knowledge of school staff (Barbarich-Unasa, 2023; Eruera & Dobbs, 2010). As a research team, we created structured opportunities for collaboration beyond data collection, including conference presentations, hui participation, advisory group involvement, and contributions to dissemination events. Schools were invited to nominate students to join the TAG and support the shaping of key outputs. These pathways enabled taitamariki and school stakeholders to engage more deeply with the research and, where desired, adopt leadership roles within their school contexts. Throughout the project, we continuously acknowledged that taitamariki are capable knowledge holders whose participation strengthens collective ownership and awareness of healthy relationship practices within their communities.

Confidentiality

Confidentiality remained a significant priority throughout the research carried out. Ways in which we ensured confidentiality through the app development and implementation process included every taitamariki creating a profile and username which would not be visible to any users on the app. However, we were clear that for safety reasons, the research team moderators had access to usernames and profiles should there be a need to identify an individual taitamariki immediately.

With every gathering between the taitamariki and the research team, we continuously highlighted confidentiality to ensure taitamariki were comfortable and were reminded about the importance of creating a safe space for kōrero with each other. Confidentiality ensured that taitamariki felt safe to share their kōrero and knew they could not be identified through the app.

Limitations

The Harmonised project team recognised that using secondary schools as a research site had some limitations. Understanding and navigating the school education processes required considerable time and flexibility within the planned research timeline. There were constraints in our ability to book times to meet with staff and have access to taitamariki to implement aspects of the research, such as integrating the app and completing surveys. It is essential to understand that schools fill their calendars for the following year by Term 4 of the current year. Therefore, making times for required research activities is difficult, resulting in multiple visits or delays during visits. There was also a hierarchy to follow when scheduling visits, such as first engaging with an administrator, who would then direct you to the appropriate contact person. Engaging with senior staff was more effective in securing scheduled visits as they were in a position to approve or deny requests. However, this was not always the case and following up to confirm a date and time was often necessary through email, or even required another school visit.

Concerning following our kaingākau, tikanga, and whanonga pono, we do not mean to imply to readers that we always got it right. We did encounter rough waters along the way. Despite our best intentions, the dominant Western and adult structures and mode of being were, and continue to be, difficult to identify and overcome, particularly for recognising the privilege of successful non-Māori in academic spaces. In this article, we have shared our learning journey to stimulate discussion and move towards respectful partnerships across cultures, as Te Tiriti o Waitangi calls for.

Hamley et al. (2023) explained that whanaungatanga is at the heart of the wellbeing of taitamariki. This aligns closely with the tikanga upheld in this research and reinforces the significance of building meaningful and effective relationships. The Harmonised project has contributed towards a deeper understanding of supporting taitamariki to become aware of healthy and unhealthy relationships. Taitamariki worked hard to explain their lived realities about their relationships so we could better understand what support adults could provide. Furthermore, the whanaungatanga and engagement practices incorporated to carry out such widespread research were significant in ensuring we heard the voices of our young people and addressed their concerns. The mahi conducted and the kaupapa of this article provide initial insights into effectively engaging with our young people and highlight the importance of navigating the school environment alongside a te ao Māori approach.

Conclusion

Effective engagement processes are crucial to uphold the mana of taitamariki and provide them with the appropriate resources, space, and mechanisms to share their experiences and whakaaro in a culturally appropriate manner. Our journey to uphold and enact culturally responsive school engagement strategies was central to the Harmonised project team and research activities. The learning and experience we gained have the potential to be transferrable and help enhance

future mahi with Indigenous young people within a variety of different contexts.

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Glossary

hapū	subtribe
hui	meeting
iwi	tribe
kai	food
kaingākau	values
kaitiakitanga	guardianship
kanohi-ki-te-kanohi	face-to-face
kaumātua	elders
kaupapa	philosophy, belief
Kaupapa Māori	Māori approach, Māori ideology
kōrero	conversations
kupu	word
kura kaupapa Māori	Māori language schools
mahi	work
mana	prestige, authority, status, spiritual power
manaaki	care for
Māori	Indigenous peoples of Aotearoa
mihi	greet
rangatahi	youth, younger generation
taiohi	youth, adolescents
taitamariki	youth, adolescents
tangata whenua	the first people of Aotearoa
taonga	treasure
tauiwi	non-Māori
tautoko	provide support, verify authenticity
te ao Māori	the Māori worldview
teina	younger taitamariki members
tuakana	older taitamariki members
Te Tai Tokerau	Northland
Te Tiriti o Waitangi	the Treaty of Waitangi (1840), signed by Māori chiefs and the British Crown
tika	appropriate or correct
tikanga	the right way of doing things
utu	reciprocity
whakaaro	thinking, planning, considering
whakapapa	lineage, genealogy
whakarongo	listen carefully
whakawhanaungatanga	process of establishing relationships, relating well to others
whakawhitiwhiti kōrero	active discussion and deliberation
whānau	extended family networks
whanaungatanga	connectedness
whanonga pono	principles

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ATTITUDES TOWARDS CAT MANAGEMENT IN AOTEAROA NEW ZEALAND

A Māori-centred literature review

*Helen W. Nathan**

Abstract

Cats occupy a complicated space in Aotearoa New Zealand. Domestic cats are valued companion animals. In contrast, feral cats are recognised as one of the most damaging invasive species nationally and internationally. Given this duality, it is important to understand how all New Zealanders perceive and value both feral and companion cats. This literature review explores contemporary Māori attitudes and values towards cats, as documented in academic and grey literature, as well as iwi and hapū management plans. Insights drawn across these sources suggest that most Māori consider feral cats to be pests, and efforts to implement feral cat control or eradication are generally supported, with some reservations about the methods used to achieve this. Most iwi or hapū management plans include some reference to management of pest mammals, and just under a quarter cite feral cats specifically. Māori attitudes towards management of companion cats are poorly documented.

Keywords

pest management, feral cat, companion animal, invasive species, Predator Free 2050

Introduction

Invasive mammalian predators are some of the primary drivers of the worldwide crisis of biodiversity decline, particularly in Aotearoa New Zealand (Doherty et al., 2016). A recent meta-analysis found that eradication, control and management of invasive species had the largest positive impact of any conservation action investigated (Langhammer et al., 2024). Nonetheless, techniques used to manage or eradicate pest mammals are frequently controversial (see, e.g., Warburton et al., 2021). A sizeable effort has therefore gone into researching the attitudes and values of contemporary New Zealanders towards pest mammals and techniques to manage them. This has become increasingly important since the government's adoption in 2016 of the Predator Free 2050 mission (PF2050), which aims to completely eradicate rats, mustelids, and possums from the entire country by 2050 (Murphy et al., 2019). In November 2025, the government announced the addition of feral cats—unowned cats that live

* Te Roroa, Ngāti Whātua, Ngāpuhi. Biosecurity Consultant, Boffa Miskell Ltd, Whangārei, New Zealand.
Email: helen.nathan@boffamiskell.co.nz

completely independently of humans—to the list of species targeted under PF2050, after overwhelming support for this measure was demonstrated in public consultation (Potaka, 2025).

A number of studies have explored the impacts of demographic and non-demographic factors on attitudes to pest management in Aotearoa, including gender, age, personal values, and underlying worldview, among others (e.g., Bassett et al., 2020; MacDonald et al., 2020; J. C. Russell, 2014). The attitudes of some special interest groups, such as conservationists and pet owners, have also been interrogated (e.g., Farnworth et al., 2011, 2014; Harrod et al., 2016; Heimann & Medvecky, 2022; Mercier et al., 2024).

The views of Māori on pest management issues have sometimes, but not always, been addressed. Some surveys did not ask respondents for ethnicity information (e.g., Farnworth et al., 2011, 2014; Sheppard & Urquhart, 1991), while others did record respondents' ethnicity but did not present the views of Māori independently of others (e.g., Kaine et al., 2024; K. J. Russell et al., 2017). Frequently, Māori are under-represented in survey populations (Ingham et al., 2023), limiting the opportunity for specific discussion of the views of Māori respondents.

In contrast to the comparably rich literature on New Zealander's attitudes to pest mammal control in general, there are few examples that are focused on feral cats in particular (Kannemeyer, 2017). This is despite serious impacts of feral cats, including predation on native fauna (Glen et al., 2023) and acting as the definitive host for *Toxoplasma gondii*, the parasite which causes toxoplasmosis and is linked to health impacts in pregnant women (Khairullah et al., 2024), abortion in sheep (Dubey, 2009), and deaths of native birds and dolphins (Roberts et al., 2020; Roe et al., 2013). Nevertheless, managing feral cats as a pest is sometimes controversial in Aotearoa, largely because domestic cats are highly valued pets: there are an estimated 1.2 million companion cats in the country, and 40% of households own at least one cat, making them the most popular pet (Companion Animals New Zealand, 2024).

Some stakeholders and commentators have advocated for the inclusion of feral cats in the PF2050 strategy (Gower, 2023; Rouco et al., 2017; Southern Lakes Sanctuary, 2023), and some predator eradication projects are already targeting feral cats (e.g., Parkes, 2022). The topic has also received attention in popular media, with journalists documenting the viewpoints of stakeholders, including the Society for the Prevention of Cruelty to Animals (SPCA) and conservationists (Newshub, 2023; Page, 2023). However, there has been little discussion of the specific views of Māori on the inclusion of feral cats in PF2050, either in popular media or more formal sources. For example, a report produced by the National Cat Management Strategy Group (2020) makes no mention at all of Māori, iwi or hapū in its discussion of stakeholders concerned with cat management.

The objective of this literature review is to synthesise existing published information about the views of contemporary Māori on cat management in Aotearoa, thereby contributing to a highly topical public conversation around the status of cats as both pets and pests. While the primary focus was on feral cats, issues of companion cat management are intertwined and were also investigated. This literature review forms the first step in a wider research programme that will explore this topic in further detail.

Methods

The scope of the literature review included written documents, published in a publicly accessible location (not in confidential documents), and within the following categories: iwi and hapū management plans; academic journals; theses; and grey literature, including institutional or government reports and websites. For the purposes of this literature review, the "contemporary" period was defined as the past 40 years, so perspectives pre-dating 1985 were considered out of scope.

Iwi and hapū management plans

Iwi and hapū management plans (IHMPs) are environmental planning documents that are prepared by iwi and hapū to express their values, concerns and aspirations in the context of managing the environment and resources within their rohe (Ministry for the Environment, 2024). IHMPs were sourced from the websites of the 16 regional councils/unitary authorities, iwi and hapū authority websites, and via Google Search.

Each IHMP was reviewed manually to determine its relevance to the scope of this review. Excluded documents included those not publicly accessible online, those that were not focused on the terrestrial environment (e.g., IHMPs that were exclusively focused on marine or freshwater environments), and superseded versions (i.e., where a more recent version of the IHMP was available).

After excluding out-of-scope documents, keyword searches relevant to pest mammal management were used to identify relevant sections

of each IHMP to read in full. The keywords used were "pest", "preda*", "feral cat", "stray cat", "wild cat", "exotic", "invasive, tox*", "pois*" and "1080" (where * represents a wildcard). If a document was not searchable, it was read in its entirety to identify relevant content. For each IHMP, a record was kept of whether it contained any reference to pest mammal management, and any reference to cats specifically. Any appendices associated with IHMPs were also reviewed following the above process, and relevant information from these was included in the record for the main document.

Academic journals and grey literature

A variety of academic databases, journal archives, and grey literature repositories were searched for relevant information between 13 September 2024 and 18 March 2025, as listed in Table 1. For each resource, an initial search used highly specific keywords to find resources highlighting Māori views on cats, as illustrated in Table 2. If the initial search produced no results, the search was repeated with fewer keywords.

This sourcing process found no articles that addressed Māori attitudes to cats as the primary focus. Search results were therefore assessed for more general relevance, based on article title and abstract (where available). Articles were retained for further analysis if they appeared to align with one or more of the following key themes: (1) social attitudes towards pest mammal management in Aotearoa; (2) social attitudes towards cat management in Aotearoa (including feral and domestic cats); and (3) Māori-led or Māori-supported feral cat management in Aotearoa.

TABLE 1 List of repositories included in the literature search process

Academic journal databases
Google Scholar
ProQuest Science & Technology
EBSCO portal database
NZ Research – DigitalNZ
Journal archives
MAI Journal: A New Zealand Journal of Indigenous Scholarship archive
AlterNative Journal: An International Journal of Indigenous Peoples archive
Kōtuitui: New Zealand Journal of Social Sciences Online archive
New Zealand Journal of Ecology archive
Grey literature repositories
Te Tira Whakamātaki reports and articles archive
Manaaki Whenua Landcare Research Digital Library
Predator Free New Zealand Trust: Our Research
Parliamentary Commissioner for the Environment archive
Department of Conservation Science Publications archive
Local Government Magazine archive

TABLE 2 Keyword search terms used during the literature search process

AND →			
OR →	Māori	Feral cat	Attitudes
	Maori	Stray cat	Values
		Cat	Control
		Predator	Management
		Pest	Eradication

Note: Depending on the search functionality available at each repository, the initial search was sometimes broken into multiple searches (e.g., if Boolean operators AND and OR were not available).

This approach was intended to find information on Māori attitudes towards cats that may have been reported within more generalised discussions (e.g., surveys of the general public that reported some ethnicity data) and to inform contextual discussions around the role of Māori in cat management in Aotearoa.

Further relevant articles were identified from the reference lists of articles that were read during the literature review process (a snowballing approach) and during peer review of this manuscript. References deemed out of scope included those with a focus on non-mammalian pest species or countries other than Aotearoa, as well as discussions around tikanga, animal welfare, and/or ethics where these did not directly refer to modern cat management.

Results

Iwi and hapū management plans

After applying exclusions, there were 92 unique IHMPs that were within the review scope. The IHMPs in the final dataset spanned a publication date range from 1991 to 2023 (and three undated documents), with a median publication year of 2016.

Many of the IHMPs reviewed were pitched at a high level and dealt mainly with expectations for managing relationships with council, government agencies, developers, and so on, in a resource management context. A frequently stated aim was to provide a basis for understanding iwi and hapū values related to natural resource and environmental management (e.g., Nga Potiki a Tamapahore Trust, 2019; Te Roroa Whatu Ora & Mana Whenua Trusts, 2019; Te Runanga o Ngati Kahu, 2011).

Of the 92 IHMPs reviewed, 74 (80%) contained some reference to pest mammal management. This ranged from a brief mention of pest mammals as an issue (e.g., Ngaati Whanaunga Environmental Services Department, 2019; Ngāi Tamawhariua, 2014; Ngāi te Ahi Hapū, 2013; Te Runanga o Ngati Kahu, 2011), through to thorough treatment of the subject, including detailed iwi and hapū objectives and policies relating to pest mammal control (e.g., Ngāi Tahu ki Murihiku/Te Rūnanga o Ngāi Tahu, 2008; Ngāti Mutunga, 2019; Taranaki Iwi, 2019; Te Rūnanga o Kaikōura Inc., 2009). Twenty-one IHMPs (23%) specifically noted feral cats as a problem.

Academic journals and grey literature

A total of 61 articles aligned with at least one of the key themes. These included 13 articles that were aligned with more than one key theme (Table 3). Articles that were rejected during the literature search phase were not quantified, nor were those that did not align with a key theme.

The key theme present in the largest number of articles related to social attitudes towards cat management in Aotearoa; 36 relevant articles were found, of which 14 (39%) included some information that was specific to Māori. Thirty-two articles were found that aligned with the key theme related to social attitudes towards pest mammal management in Aotearoa, of which 17 (53%) included information about Māori. There were only a handful ($n = 6$) documents that reported on Māori-led or Māori-supported feral cat management (Table 3).

Synthesis

This synthesis brings together information drawn from all the sources reviewed to outline contemporary Māori attitudes towards cat management in Aotearoa, as they are currently documented.

Cats in iwi and hapū management plans

Just under a quarter of IHMPs specifically noted feral cats as a problem. In the majority of these ($n = 12$), feral cats were simply listed among other examples of pest mammal species having negative impacts on native biodiversity, mahinga kai, or other cultural values. In these plans, issues and objectives relating to pest species were often presented in a generalised way. For example, the Taranaki Iwi Rautaki Tiaki Whenua: Reserves Management Plan 2019–2029 states that "an ongoing trapping regime, including annual control with bait-stations, will be implemented and maintained on all our properties" (Taranaki Iwi, 2019, p. 51), with feral cats having been listed among pest species present in the reserves earlier in the document.

Some IHMPs ($n = 9$) went into more specific detail about the threat posed by feral cats and/or management of this pest species. The two most common themes ($n = 3$ IHMPs each) were that domestic (in addition to feral) cats were recognised as a threat (Kāi Tahu ki Otago, 2005; Korowai Kāhui ō Te Patuwai Tribal Council, 2011; Taranaki Iwi, n.d.), and concern about the impact of feral cats on tītī, an important traditional food resource (Korowai Kāhui ō Te Patuwai Tribal Council, 2011; Ngāti Kuri Trust Board, 2018; Te Runanga o Ngāi Tahu, 1992). Two IHMPs pointed to a lack of feral cat control and monitoring in the area covered by the plan (Kāi Tahu ki Otago, 2005; Te Rūnanga o Kaikōura Inc., 2009), while another

TABLE 3 Alignment of articles reviewed to key research themes

Reference	Key theme			
	Social attitudes to pest mammal management	Social attitudes to cat management	Māori-led or supported feral cat management	Information specific to Māori
Aley & Russell (2019)				
Bassett et al. (2020)				
Black et al. (2022)				✓
Blackstock (2024)				
Chamberlain et al. (2024)				
Companion Animals New Zealand (2020)				✓
Companion Animals New Zealand (2024)				✓
Department of Conservation (2021)				✓
Department of Conservation (2023)				✓
Dickie & Medvecky (2023)				
Dowsett (2024)				✓
Farnworth et al. (2011)				
Farnworth et al. (2014)				
Fitzgerald et al. (2007)				
Forrest, Awawdeh, et al. (2023)				✓
Forrest et al. (2019)				✓
Forrest, Pearson, & Awawdeh (2023)				✓
A. Fraser (2006)				
W. Fraser (2006)				✓
Gates et al. (2019)				✓
Hall et al. (2016)				
Harper (2022)				✓
Harrod et al. (2016)				
Heimann (2018)				
Heimann & Medvecky (2022)				
C. Horn & Kilvington (2002)				✓
S. R. Horn et al. (2022)				✓
Hughey et al. (2019)				✓
Kaine & Wright (2022)				
Kaine et al. (2024)				
Kannemeyer (2017)				✓
Kannemeyer et al. (2019)				✓
Kikillus et al. (2017)				
Kirk et al. (2020)				
Linklater et al. (2019)				
Macaskill et al. (2025)				
MacDonald et al. (2015)				
MacDonald et al. (2020)				
MacDonald et al. (2024)				
Mercier et al. (2024)				✓
National Cat Management Strategy Group (2020)				
Nguyen et al. (2022)				
Niemiec et al. (2017)				
Ogden & Gilbert (2011)				
Ogilvie et al. (2006)				✓
Ovenden et al. (2024)				
Palmer & Thomas (2023)				
Peltzer et al. (2019)				✓
Predator Free NZ Trust & Fresh Perspective (2022)				✓
Predator Free NZ Trust & Spring (2024)				✓
Predator Free Rakiura (2023)				✓
Russell (2014)				
Russell et al. (2017)				
Saunders et al. (2021)				✓
Sheppard & Urquhart (1991)				
Te Tira Whakamātaki (2024)				✓
J. K. Walker et al. (2017)				✓
Warburton et al. (2021)				✓
Wilkinson & Fitzgerald (2014)				✓
Woodhouse (2021)				✓
Woolley & Hartley (2019)				

identified the need to develop a pest management and biosecurity strategy, with feral cats specified as a target species (Tūpuna Maunga o Tāmaki Makaurau Authority, 2022). Only one IHMP described feral cat trapping currently in place in wetlands and riparian areas and maintained by Fish & Game New Zealand (Ngāti Tahu–Ngāti Whaoa, 2018). A unique observation was made in Ngāi Tahu ki Murihiku/Te Rūnanga o Ngāi Tahu (2008), which discussed feral cats in the context of possum control using 1080 toxin and described by-kill of feral cats as an advantage of this pest control method.

With regard to pest mammal management more broadly, some IHMPs expressed a preference for eradication rather than suppression (Te Rūnanga o Kaikōura Inc., 2009; Te Rūnanga o Ngāi Tahu, 2013), and the importance of monitoring pest management outcomes was also stressed in several IHMPs (Ngāi Tahu ki Murihiku/Te Rūnanga o Ngāi Tahu, 2008; Ngati Kuta Charitable Trust, 2005; Te Rūnanga o Kaikōura Inc., 2009; Te Ūkaipō Iwi Environmental Management Unit, 2022).

Thirty-four IHMPs (46%) expressed some view on the use of vertebrate toxins to control pests. These views ranged from opposition to any use of toxins (Nga Uri o Tahinga Trust, n.d.; Pirirakau Incorporated Society, 2017; Te Upokorehe Hapū, 2012) to specific opposition to aerial sowing of toxins (Ngāti Pūkenga Iwi ki Tauranga Trust, 2013; Te Rūnanga o Ngāti Whare Trust, 2011) to support for best-practice use of toxins based on the benefits to native biodiversity (Ngāi Tahu ki Murihiku/Te Rūnanga o Ngāi Tahu, 2008; Ngāti Mutunga, 2019; Taranaki Iwi, 2019). However, the most commonly expressed views were in the middle ground, with qualified support for responsible toxin use. For instance, some IHMPs stated a preference to minimise toxin use in favour of non-toxic means of control like trapping, while not presenting a blanket opposition to toxin use (Maniapoto Māori Trust Board, 2018; Ngā Hapū o Ahipara, 2023; Patuharakeke Te Iwi Trust Board Inc., 2014; Te Rūnanga o Ngāi Tahu, 2013). Support for research into non-toxic means of control was noted in several IHMPs (Ngāi Tahu ki Murihiku/Te Rūnanga o Ngāi Tahu, 2008; Ngāti Tahu–Ngāti Whaoa, 2018; Ngāti Tama ki Te Waipounamu Trust, 2018; Te Rūnanga o Ngāi Tahu, 2013; Te Runanga o NgāiTakoto, 2017; Te Rūnanga o Ngāti Whare Trust, 2011).

Māori attitudes towards cat management in Aotearoa New Zealand

This section synthesises information documented in academic and grey literature. It primarily consists of data from surveys or interviews where respondents of Māori ethnicity were identified, and their views on cat management were reported on and/or quantified. Under-representation of Māori in sampled populations was acknowledged by multiple authors (e.g., Forrest, Awawdeh, et al., 2023; Forrest, Pearson, et al., 2023; W. Fraser, 2001; Hughey et al., 2019; Kaine et al., 2024). Where more generalised information is included in the synthesis (e.g., attitudes of other ethnic groups), the intention is to provide comparative perspectives or context within which to interpret the Māori-specific data.

Although we reviewed articles falling under three broad themes, it is beyond the scope of this article to provide a detailed synthesis of all information relevant to those themes. Instead, the focus is on integrating the information that was specific to Māori attitudes towards cat management in Aotearoa and placing these in the broad context of comparative perspectives.

In a survey of 1,015 Māori respondents, Black et al. (2022) found that the majority of Māori felt strongly about the importance of biosecurity, and that cats were identified as a priority animal pest species. Similarly, in focus-group discussions conducted by Wilkinson and Fitzgerald (2014), all groups, including one consisting of Ngāti Hine hapū members, identified feral cats as a pest species.

In most studies where Māori views on feral cat control were contrasted directly with those of New Zealand Europeans, there tended to be little difference in recognition of feral cats as pests, and general acceptance of a need to control them. Te Tira Whakamātaki (2024), for example, found that the views of Māori and New Zealand Europeans on the seriousness of feral cats as a threat were near-identical: 53% of each rated cats as a "very serious threat" and 27% of Māori (compared to 26% of New Zealand Europeans) rated cats as a "large threat". Similarly, J. K. Walker et al. (2017) found that 87% of Māori respondents thought that action should be taken to control feral cats, compared with 89% of New Zealand Europeans. In contrast, Forrest et al. (2019) found that a higher proportion of Māori than other ethnicities responded neutrally when asked whether cats and dogs that have become feral should be put down (although noting that the inclusion of dogs in this question may have been influential). There is also

some evidence of differing views on appropriate methods of feral cat control, with one survey finding that Māori were less in favour of lethal methods of feral cat control (26% favoured) than New Zealand Europeans (50% favoured) (J. K. Walker et al., 2017).

In terms of companion cats, recent data show a slightly lower rate of cat ownership among Māori than New Zealand Europeans (40% vs 43% of households, respectively) (Companion Animals New Zealand, 2024). The results of previous surveys suggest that many New Zealanders perceive companion cats as an important threat to native wildlife, although typically less so than feral and stray cats (e.g., around 50% of respondents vs approximately 75%, respectively, in Hughey et al., 2019). Cat owners are also significantly less likely than non-owners to agree that companion cats pose a threat to wildlife (Bassett et al., 2020; Hall et al., 2016; Kaine et al., 2024; Woolley & Hartley, 2019). Those studies, however, did not examine the effect of ethnicity on this issue, so further research is required to ascertain if Māori attitudes regarding the biodiversity impacts of companion cats differ significantly from those of the general public.

There is some evidence of divergent pet management practices between Māori and non-Māori, although this is inconsistent across studies. In a survey by Gates et al. (2019), Māori respondents had significantly lower rates of de-sexing companion cats and dogs than New Zealand Europeans, but a more recent survey found no difference in de-sexing rates by ethnicity (Forrest, Awawdeh, et al., 2023). In another survey of pet owners, a lower proportion of Māori than non-Māori respondents strongly agreed with statements that companion cats should be de-sexed and microchipped, and a higher proportion stated that they were neutral on these practices (Forrest et al., 2019; Forrest, Pearson, & Awawdeh, 2023). Potential reasons for ethnicity-based differences in pet management practices were not explored in detail in these studies and require more research.

Chamberlain (2024) found that adoption of cat containment measures among New Zealanders was driven by cat owners' capability, opportunity and motivation; for example, cat owners were more likely to contain their cats if they were motivated by a belief that containment is beneficial for cats, had knowledge about how to perform containment, and the time and environmental circumstances permitted them to do so. Further investigation of how capability, opportunity and motivation vary by ethnicity may be enlightening.

It is notable that public views on companion cat management practices appear to be changing over time. Surveys by Companion Animals New Zealand (2020, 2024) show that rates of de-sexing and microchipping cats are increasing, with microchipping rates in particular growing very rapidly from 49% in 2020 to 72% in 2024. Furthermore, a survey undertaken by Predator Free NZ Trust in 2024 found an increase in support for national legislation requiring de-sexing of cats (from 50% to 57%) and for national legislation requiring cats be kept indoors (from 21% to 25%) compared with the results of a prior survey in 2022 (Predator Free NZ Trust & Fresh Perspective, 2022; Predator Free NZ Trust & Spring, 2024). These statistics did not take ethnicity into account, so further research is required to ascertain if Māori attitudes are following the same trends.

Review limitations

The management of cats as both pets and pests is currently a hot topic in Aotearoa, and this review has aimed to contribute to the public conversation by synthesising documented information about contemporary Māori views on this topic. As such, the scope of this review was deliberately limited, and therefore so are the conclusions that can be drawn.

This review does not represent an exhaustive exploration of Māori perspectives on cats, or on management of pest species more generally. In particular, historical (pre-1985) perspectives, and in-depth discussions of tikanga and ethics as related to the management of pest species, are not examined. Review of some periodically produced reports was limited to the more recent publications in the series (e.g., the Companion Animals New Zealand surveys). While the author sought to conduct the literature review in a systematic and objective way, the outcome is still subject to reviewer effects and may reflect the author's experiences and perspectives.

Discussion

The concept of kaitiakitanga is often understood simply as "guardianship" within a conservation context. However, the true meaning of the term embraces wider ancestral, social and environmental dimensions and encompasses identity, purpose and practice (Kawharu, 2000). Some key values underlying kaitiakitanga are those of whakapapa, tikanga Māori, rangatiratanga, mauri, mana, and manaakitanga (see McAllister et al. 2023 and Stewart & Birdsall 2025 for more detailed reading on these concepts). These values

come together in a worldview which prioritises a strong connection to place and the responsibility and authority to care for the environment and resources.

While rooted in traditional values, te ao Māori is highly relevant to contemporary challenges (Lambert & Mark-Shadbolt, 2021; E. Walker et al., 2024), including the management of invasive pest species (S. Palmer et al., 2020). For many Māori who participate in resource management or conservation-related activities, te ao Māori underpins their inspiration to do so. A recent survey found that, relative to their New Zealand European counterparts, Māori respondents reported a stronger influence of whānau, tikanga, and Te Tiriti o Waitangi obligations on their motivation for protecting the natural environment, and they were also more likely to say that they were actively practising kaitiakitanga at place (Te Tira Whakamātaki, 2024). Most Māori agree that native species have greater rights than non-native species (Mercier et al., 2024), and removing invasive predators is considered to enhance mauri within the environment (Woodhouse, 2021). This is reflected in strong support for predator control and eradication, with 84% of Māori agreeing we should kill rats, possums and stoats to protect native species (Te Tira Whakamātaki, 2024). Māori also place strong importance on negative impacts on traditional resources, like mahinga kai, when asked to define what constitutes a pest (Wilkinson & Fitzgerald, 2014).

The review of academic and grey literature found no works that primarily focused on documenting contemporary Māori attitudes towards feral cats. However, evidence drawn from a range of sources indicates that most Māori consider feral cats to be serious pests, and they support efforts to control or eradicate them. Although slightly less than a quarter of IHMPs made specific note of feral cats as a pest, this may reflect the high-level resource management scope of most IHMPs, as well as changing awareness of the impacts of feral cats within the last 10 years, recalling that the median publication date of IHMPs was 2016. With the recent addition of feral cats to the PF2050 target species list, it seems likely that public acceptance of feral cat control, including by Māori, will continue to increase. More nuanced conversations around control methods are needed, and Māori will have unique perspectives to contribute. For instance, the results of this review suggest that monitoring the non-target impacts of toxin use, and advocating for ongoing research into alternative methods of control, are important ways in which Māori are exercising kaitiakitanga and a holistic understanding of environmental wellbeing in the context of pest control.

Māori participation in, and leadership of, feral cat management is widespread, with many iwi and hapū around the country actively involved in feral cat control and eradication projects. For example, the Tū Mai Taonga project aims to completely eradicate feral cats and rats from Aotea, Great Barrier Island (Parkes, 2022). It is led by Ngāti Rehua Ngātiwai ki Aotea hapū, and more than half the workers are mana whenua, many of whom have been enabled to return home to the island after residing elsewhere (Duval, 2023). In addition to place-based projects within their own rohe, Māori aspire to play a larger role in strategy and policy-setting at the nationwide scale. When asked who should be leading environmental decision-making in Aotearoa, Māori respondents in a recent survey ranked iwi or hapū entities as their most preferred options by a substantial margin (Te Tira Whakamātaki, 2024). As feral cat control and eradication become increasingly common, it is essential to include Māori in related policy-making as treaty partners, as the owners of large tracts of land, and as active kaitiaki.

The views of contemporary Māori on how companion cats should be managed appear to be particularly under-studied. Two studies have found that Māori are less supportive of de-sexing and microchipping than non-Māori (Forrest, Pearson, & Awawdeh, 2023; Gates et al., 2019); however, the potential reasons behind these differences were not explored and require further study. Some IHMPs (Kāi Tahu ki Otago, 2005; Korowai Kāhui ō Te Patuwai Tribal Council, 2011; Ngāti Kuri Trust Board, 2018) acknowledge domestic cats (in addition to their feral counterparts) as threats to biodiversity. With feral cat eradication now an official national goal, discussions around responsible management of companion cats will inevitably surface. It will not be possible to eradicate feral cats if their populations are continuously replenished via escape or dumping of companion cats and kittens. For Māori who aspire to feral cat eradication, it will be essential to explore what it means to be a responsible pet owner within a te ao Māori framework. For instance, can ensuring that pet cats are de-sexed, or imposing a cat curfew, be considered an expression of manaakitanga and kaitiakitanga? It will also be critically important that barriers to adoption of responsible cat management practices by Māori and all New Zealanders be identified and mitigated.

Conclusion

This literature review has established that little academic attention has been directed at documenting the attitudes of contemporary Māori towards cats and cat management in Aotearoa. However, evidence collated across a range of sources, including IHMPs, suggests that Māori typically consider feral cats to be pests and that they support efforts to control or eradicate them. Further research in this space could focus on more detailed enquiry around the acceptability (or not) of different feral cat management methods to Māori (e.g., trapping or shooting vs the use of toxins) and what underlying values or contextual factors are influential in shaping these views.

Conversations around feral cats as a pest species inevitably touch on issues of responsible management of companion cats. This review has revealed that very little is known about the views of contemporary Māori on companion cat management practices such as de-sexing, microchipping, and cat containment. Further research into these topics is also recommended to help inform the ongoing public conversation about the role of cats in Aotearoa today.

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Glossary

hapū	subtribe, kinship group
iwi	tribe, extended kinship group
kaitiaki	guardian, custodian
kaitiakitanga	guardianship, custodianship of the environment and natural resources
mahinga kai	natural food resources
mana	authority
manaakitanga	nurture, reciprocity
mana whenua	power associated with possession and occupation of tribal land
mauri	a binding force between physical and spiritual realms
rangatiratanga	sovereignty, self-determination
rohe	area of land
te ao Māori	the Māori worldview
Te Tiriti o Waitangi	the Treaty of Waitangi (1840), founding document of New Zealand
tikanga	customary system of values and practices
tītī	muttonbird
whakapapa	genealogical connection
whānau	family, including extended family

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WEAVING MAATAURANGA

The Ko Tuna Anahe framework for culturally responsive type 2 diabetes education for Maaori communities

*Rebekah Crosswell**
Hinetu Nikora†
Ryan Paul‡
Rawiri Keenan§
Tom Roa||
Cathy Buntting¶
*Apo Aporosa***
Capri Paekau††
Glenda Raumati‡‡
*Suzanne Moorhouse****
Anna Tiatia Fa'atoese Latu†††

* Te Whakatōhea. Research Officer, Division of Health, School of Equity and Innovation, University of Waikato, Kirikiriroa | Hamilton, New Zealand. Email: rebekah.crosswell@waikato.ac.nz
† Tuhoe, Waikato, Te Aitanga-a-Hauiti. Research Assistant, Division of Health, School of Equity and Innovation, University of Waikato, Kirikiriroa | Hamilton, New Zealand.
‡ Ngāti Māru, Hauraki. Associate Professor of Medicine, Division of Health, School of Equity and Innovation, University of Waikato, Kirikiriroa; Te Whatu Ora Waikato, Kirikiriroa | Hamilton, New Zealand.
§ Te Atiawa. Associate Professor of Medicine, Division of Health, School of Equity and Innovation, University of Waikato, Kirikiriroa | Hamilton, New Zealand.
|| Ngāti Maniapoto, Waikato, Ngāti Apakura. Professor, Te Pua Wānanga, Faculty of Maaori and Indigenous studies, University of Waikato, Kirikiriroa | Hamilton, New Zealand.
¶ Senior Lecturer & Director of Science Learning Hub, Te Kura Toi Tangata—School of Education, University of Waikato, Kirikiriroa | Hamilton, New Zealand.
** Vasu ni koro | Naduri, Fiji. Duruvesi—Bula ni Pasivika | Senior Lecturer in Pacific Health, Division of Health, School of Equity and Innovation, University of Waikato, Kirikiriroa | Hamilton, New Zealand.
†† Waikato Tainui. Research Assistant & Mate Huka Programme Lead, Ngā Miro Community Health Centre, Waikato, New Zealand.
‡‡ Waikato Tainui. Kaiwhakahaere, Ngā Miro Health, Ngā Miro Community Health Centre, Waikato, New Zealand.
*** Nurse Lead & Diabetes Nurse, Hauraki Primary Health Care Organisation, Kirikiriroa | Hamilton, New Zealand.
††† Kai Tahu. Programme Director, Doctor of Medicine, Division of Health, School of Equity and Innovation, University of Waikato, Kirikiriroa | Hamilton, New Zealand.

Abstract

The significant burden of type 2 diabetes (T2D) for Maaori populations highlights the crucial need for culturally responsive health education. This study used Kaupapa Maaori participatory action research methodology in collaboration with a semi-rural Waikato community to develop tailored T2D educational resources. The process included initial consultation, thematic analysis, resource development, community feedback, and final refinement. Eleven participants (aged 35–44) engaged in focus groups to ascertain their preferences for educational materials. Maaori researchers undertook thematic analysis, integrating Kaupapa Maaori concepts and a strength-based perspective. Two themes emerged: mātauranga (the pursuit of knowledge, truth, and intergenerational wisdom) and whaanau aspirations (focusing on cultural identity and whaanau-centred approaches). These themes underpinned the development of the Ko Tuna Anahe framework and, in turn, the resources of a website and book. Community feedback was overwhelmingly positive, confirming the resources' cultural appropriateness and accessibility, and demonstrating the value of community-led, culturally embedded approaches in health education.

Keywords

type 2 diabetes, Maaori health, Kaupapa Maaori, participatory action research, health education, community engagement

Introduction

Type 2 diabetes (T2D) presents a significant and growing global health challenge, and Indigenous populations, including Maaori in Aotearoa New Zealand, experience a disproportionately higher burden (Ministry of Health, 2023). This disparity manifests in earlier T2D onset, increased complications, and poorer health outcomes (Ministry of Health, 2022, 2023; Olokoba et al., 2012; van Dieren et al., 2010).

These disparities have their source in complex historical and socio-economic factors. Colonisation has disrupted traditional Maaori ways of life, leading to land alienation, eroded cultural practices and language, and the suppression of maatauranga Maaori (Moewaka Barnes & McCreanor, 2019). The adoption and prioritisation of Westernised knowledge and healthcare systems has further contributed to systemic inequities in healthcare access and outcomes (Curtis et al., 2022), fuelling health disparities that manifest in significantly higher rates of morbidity and mortality for Maaori (Ministry of Health, 2023). This reality points to the critical need for T2D educational interventions that focus on solutions, actively address the core causes of inequity, and advance Maaori health outcomes.

Type 2 Diabetes (T2D) disparities are often incorrectly viewed as purely social or individualistic issues. However, international research provides conceptual precision to this link by demonstrating a direct relationship between Indigenous-specific traumatic life experiences and increased cardiometabolic risk (Lewis et al., 2021). This risk is explicitly mediated by a psychophysiological trauma stress response (Lewis et al., 2021). This underscores that the suppression of maatauranga Maaori is not only a cultural loss but a physiological driver of metabolic inequity.

Effective diabetes management necessitates comprehensive education encompassing kai, medication, physical activity, and lifestyle adjustments (Świątoniowska et al., 2019). Such education is crucial for fostering coping skills, enhancing collective agency regarding diabetes knowledge, and improving engagement with healthcare services (Powers et al., 2017). Education has the potential to drive positive behavioural change, enhance medication adherence, and increase both quality of life and mental resilience (Świątoniowska et al., 2019).

Despite a range of existing educational modalities in Aotearoa, including written materials (Diabetes New Zealand, 2024), technology-based platforms (Dobson et al., 2015; Farmer et al., 2016), and group education (Krebs et al., 2013; Tipene-Leach et al., 2013), there remains a persistent scarcity of whaanau-led, culturally tailored T2D resources specific to the Aotearoa context (Crosswell et al., 2024). In turn, the lack of culturally meaningful resources often leads to patient dissatisfaction and reliance on informal information that perpetuates systemic failures (Bacal & Jansen, 2006; Chepulis et al., 2021; Crosswell et al., 2024; Jansen et al., 2011). There is a demand for approaches that affirm Maaori cultural identity, incorporate te reo Maaori and maatauranga Maaori, and are embedded within whaanau and community structures.

The aim of this study was to collaboratively

develop culturally responsive T2D educational resources for Maaori communities in the Waikato region, utilising a Kaupapa Maaori participatory action research (PAR) framework. Kaupapa Maaori research prioritises mana motuhake, ensuring research is conducted by, with, and for Maaori (Smith, 2017). Participatory action research aligns seamlessly with this paradigm by recognising whaanau as the "experts of their everyday lived experiences" (Eruera, 2010, p. 1). This approach shifts the focus from traditional data extraction to a process of community-led development. By centring community voices as active co-researchers, this methodology explicitly challenges the "individualising logic" of Western research, ensuring the resulting framework and resources are grounded in agency and social change (Cornish et al., 2023; Eruera, 2010).

Methods

The research team included a range of expertise and cultural representation, including clinicians and academics, Maaori researchers (RC, AL, HN, RP, RK), two New Zealand European researchers (CB, SM), and a Pacific researcher (AA). Through a diverse composition of researchers and clinicians with expertise in Maaori health, Kaupapa Maaori methodologies, endocrinology, education, and primary care, the study was supported to collect, analyse, and present data in ways that were both culturally sensitive and clinically accurate.

Ethical approval for this study was obtained from the University of Waikato Health and Human Research Ethics Committee (HREC[Health] 2024#14) and adhered to Te Ara Tika, the Health Research Council of New Zealand's ethical framework for Maaori health research (Hudson et al., 2010).

Setting

This study was carried out within a semi-rural Waikato community, a region with a rich Maaori cultural heritage. The Waikato River and its associated traditions, including the deep cultural significance of *tuna* as a traditional food source and symbol of sustenance and resilience, provided an important contextual backdrop for this research (Takerei, 2019; Waikato Raupatu River Trust, n.d.; Waikato Tainui, n.d.). Understanding the local environment was crucial for developing resources that would genuinely resonate with the community's lived experiences and cultural values. The study utilised an established community health programme and its associated community health centre. This locality was selected because it was well known and comfortable among local residents, advancing an environment of trust and familiarity, to support open dialogue.

Participants

Purposive inclusion criteria were established to ensure a depth of lived experience and community connection. Participants were required to identify as having Maaori whakapapa and maintain links to the semi-rural Waikato community and its health centre. Additionally, participants were eligible if they were personally living with T2D or provided support as a whaanau member or friend of someone with the condition.

Participants were recruited through a multi-faceted strategy. Initial outreach involved social media advertisements on the community centre's official Facebook page. Participants already engaged in a T2D exercise programme at the community health organisation were also directly invited to participate. Finally, a snowballing strategy (Naderifar et al., 2017) was employed, through which existing participants were invited to share information about the research with others in their networks who might be interested and eligible.

Prior to their participation, potential participants received a comprehensive participant information sheet detailing the study's purpose, aims, and participants' rights. Sufficient opportunity was provided for discussions to address any concerns or questions, ensuring fully informed consent was obtained before any data collection commenced.

In total, 11 participants aged between 35 and 44 years engaged in the initial consultation phase. While recruitment was inclusive of all ages, the cohort ultimately comprised individuals aged 35–44. Prioritising this age range provided deep insights into the experiences of Maaori facing earlier T2D onset. This is an area of significant concern given the rising prevalence of youth-onset and early-life T2D documented in current national health statistics (Ministry of Health, 2023).

These participants were divided into three focus groups: one group of five (four females, one male), one group of two (two females), and one group of four (three females and one male). Furthermore, the final focus group served as a dedicated space for community review, ensuring that the resulting outputs remained grounded in the participants' original aspirations.

Procedures

The research process was inherently iterative, reflecting the principles of PAR. It involved continuous dialogue, collaboration, and cycles of reflection and action with the community. Five distinct phases were undertaken:

Phase 1—Initial community consultation (focus groups). Engagement followed a set of rangahau tikanga designed to uphold the mana of the participants and the community. Before implementation, these protocols were reviewed and confirmed as culturally safe by the project's Kaupapa Maaori expert (ATL), community group kaiwhakahaere (GR), and kaimahi (CP), ensuring alignment with Te Ara Tika ethical principles (Hudson et al., 2010). Adherence to these practices, including the opening and closing of sessions with karakia and the allocation of significant time for whakawhanaungatanga, was essential to establishing trust. Such a rigorous vetting process by a recognised authority demonstrates that the methodology was not only suitable but specifically tailored to the cultural requirements of the community.

Focus groups were conducted kanohi ki te kanohi. A Maaori researcher (RC) and a research assistant (HN) were centrally involved in directing the focus groups. Additionally, a kaimahi from the community centre (CP) was present and actively involved in the focus group process. The involvement of the kaimahi ensured a familiar presence for participants. Before commencing, participants received and had verbally reiterated the information sheet detailing the study's purpose and aims, followed by the formal process of obtaining informed consent.

Following consent, whakawhanaungatanga was undertaken, during which participants were invited to introduce themselves and share their connections. Adherence to relational processes ensured that connections were established before moving into formal data collection.

Audio recordings were made of the focus groups, which ranged from 60 to 90 minutes in duration. Concurrently, one researcher (HN) meticulously collected written notes, capturing verbal and non-verbal cues, group dynamics (such as power dynamics, engagement levels, emotions, non-verbal cues, conflict, and agreement), and relevant environmental factors.

Participants were then presented with a diverse collection of existing educational resources. These included written materials (pamphlets collected from medical and community centres), websites (e.g., Diabetes New Zealand, Heart Foundation NZ, Te Whatu Ora, HealthEd, Ministry of Health, Healthify, Toi Tangata, Diabetes Foundation Aotearoa, Health Promotion Aotearoa), and video content (e.g., from Te Korowai Hauora o Hauraki and Healthify). Providing a plethora of education modalities allowed for a comparative analysis of participant preferences regarding education delivery.

Participants were encouraged to openly discuss their opinions on the presented resources. The conversation naturally evolved from these initial discussions. The following key research questions were posed in each focus group:

- What T2D topics would you like to see included in educational resources for Maaori?
- What do you like about the provided resources [and ones you may have received or seen during your T2D journey] and what don't you like?
- If you could create your own T2D resources for Maaori, what would they look like?

As a gesture of reciprocity and to acknowledge their valuable contributions and time, participants were gifted a $30 koha. Reciprocity was further extended through the sharing of kai at the conclusion of the focus groups, reinforcing collective participation and strengthening researcher–participant relationships and engagement with the community group.

Focus group data were initially transcribed using Kaituhi transcription software. Kaituhi was chosen because of its absence of artificial intelligence (AI) components, a critical decision made to protect Maaori data sovereignty (Lovett et al., 2019; Te Mana Raraunga: Māori Data Sovereignty Network, 2023). Transcriptions were then manually checked for accuracy, accents, and colloquial terms by the research team.

The preliminary analysis was conducted by three Maaori researchers (RC, AL, HN), guided by inductive analysis approaches and Kaupapa Maaori thematic analysis. Examination involved a deep immersion in the data: each transcript was read and reread multiple times to enable thorough absorption and understanding. During this process, areas of text deemed significant to the participants' narratives and experiences were systematically coded.

The researchers (RC, AL, HN) then worked collectively to synthesise these codes, identifying and highlighting main themes that consistently emerged from the data. Throughout this analytical process, Maaori worldviews and concepts were consistently integrated, ensuring that the findings

were authentically grounded in Maaori perspectives and values. A strength-based approach was specifically adopted to highlight the inherent resilience and capabilities of Maaori communities (Smith, 2017), rather than focusing on deficits as has historically been found in research with Indigenous communities (Hyett et al., 2019).

A clinical and academic advisory group (CAAG) provided overarching governance for the project. Independence within the governance structure was maintained through a diverse membership comprising Maaori, Pacific, and non-Maaori researchers and clinicians not involved in the day-to-day data collection. While a degree of overlap existed, as some Maaori researchers (AL, RC, HN) were involved in both analysis and the advisory group, this was a deliberate choice to maintain the "insider–outsider" balance that can be present for Kaupapa Maaori research (Tiakiwai, 2015).

Integrity was further safeguarded by ensuring that the non-Maaori and Pacific members (AA, SM, CB) provided an extra lens to the review. The CAAG role was to challenge the findings from clinical and cross-cultural perspectives, ensuring that the scientific accuracy of the T2D information remained robust. Such a multilayered governance model ensured that while the research remains community led, the intellectual outputs are validated through a process of rigorous analysis.

Phase 2: Development of the *tuna* framework. The insights gained from the initial community consultations shaped the development of the Ko Tuna Anahe framework, recognising the profound significance of *tuna* to the Waikato region (Waikato Raupatu River Trust, n.d.; Williams et al., 2019). Further, *tuna* holds deep cultural significance within Maaori cosmology, artistry, carvings, song, and traditional food-gathering practices (Williams et al., 2019). With the symbolic meaning of *tuna* in mind, the research team, in close collaboration with the community, adopted *tuna* as the central metaphor for this framework.

Drawing from the whakataukii "He ika paewai anake hei tomo ki roto te hiinaki (Only eels enter my basket)" our kaumaatua (TR) adapted this traditional wisdom to "Ko Tuna anahe ki taku hiinaki", which translates to "Tuna is the only one I would want in my eel-pot." The intentional use of "anahe" instead of "anake" reflects the Waikato dialect variation, thereby ensuring linguistic and cultural resonance for the community. Applying this dialectal adaptation moves beyond a general observation to a more specific and empowering statement about *tuna*, making it stronger and culturally affirming.

The whakataukii's focus on the hiinaki gave the foundational design for the framework because within this reflective metaphor, the hiinaki extends beyond its literal meaning of a net or pot to symbolise the physical body—the body representing a vessel for holistic health and well-being. Just as the hiinaki is carefully constructed to contain

FIGURE 1 Ko Tuna Anahe framework for developing culturally responsive T2D rauemi for Maaori communities (artwork created by Georgia Latu).

the valued *tuna*, so too must the physical body be nourished to achieve well-being. This relates back to T2D, for which healthy and nutrient-rich kai is beneficial in glycaemic management.

As shown in Figure 1, the pictorial framework is visually represented by two intertwined *tuna*, symbolising the intrinsic connection between the two main themes that emerged from the focus groups: maatauranga (the pursuit of knowledge, pono, and intergenerational knowledge transfer) and whaanau aspirations (cultural identity and whaanau-centred approaches). Each "fin" within this visual metaphor represents a subtheme, highlighting how the health goals and desires of whaanau are fundamentally grounded in ancestral wisdom and the reclamation of traditional knowledge. The cyclical design of the intertwined *tuna* further emphasises the inseparable and reciprocal relationship between maatauranga and whaanau aspirations in achieving holistic well-being.

The life cycle of the *tuna* is also represented in the design, in that many species of *tuna* in Aotearoa travel to breed in the Pacific (Williams et al., 2019) and return during adolescence and adulthood. Reflected within this migratory journey is the continuous pursuit of knowledge. The *tuna*'s movement towards survival mirrors the community's own efforts to seek and strengthen the wisdom needed for the long-term health of their whaanau.

This framework, deeply grounded in the wisdom of the whakataukii and the multifaceted symbolism of the hiinaki, served as the foundation for developing the culturally responsive educational resources.

Phase 3: Resource development guided by the Ko Tuna Anahe framework. With the Ko Tuna Anahe framework firmly established, the research team proceeded to develop the T2D educational resources: a dedicated website and a quote book. Kaupapa Maaori principles were applied throughout this development process to ensure the resources were culturally appropriate, accessible, and engaging for the target audience. Weaving te ao Maaori into the resources involved:

- integrating te reo Maaori into the resource content
- utilising culturally relevant imagery and design elements that resonated with Maaori identity
- featuring stories (lived experiences) and perspectives directly from Maaori community members to enhance authenticity, familiarity and relatability
- ensuring the resources explicitly aligned with Maaori cultural values and beliefs, providing a holistic and affirming approach to health
- incorporating maatauranga Maaori—with a webpage specifically dedicated to hauora, termed 'whaanau ora', where participants discussed cultural ways they used to ensure their well-being, such as whaanau, maara kai, karakia, and connecting with the awa and whenua. On this same page are links to traditional Waikato iwi waiata, karakia, and whaanau activity books.

The development of the resources was an iterative process, in which they were shaped and reshaped by the ongoing voices of the community. Frequent collaboration ensured the resources were not just a static product but a living reflection of the whanau's aspirations and lived realities.

Phase 4: Community feedback on developed resources. Once initial versions of the website and quote book were developed, they were taken back to the community for comprehensive feedback. Crucially, this phase is congruent with the participatory nature of Kaupapa Maaori research and ensured that the resources were validated by the community they were designed to serve. Feedback was systematically gathered through facilitated discussions with community members, usability testing of the website (observing how participants navigated and interacted with the platform) and detailed review of the content and design elements of both the website and the quote book.

Participants provided feedback on various aspects, including cultural relevance, clarity of information, accessibility (e.g., ease of use, language), and overall effectiveness in communicating T2D education.

Phase 5: Resource refinement and dissemination planning. The rich and constructive feedback received from the community during Phase 4 was carefully used to make necessary revisions and finalise both the website and the quote book. Integrating these insights ensured that the resources were co-created for maximum relevance. The dissemination plan, grounded in reciprocity and benefit-sharing, focused on providing the community with accessible and sustainable resources to ensure their impact and sustainability.

Results

Two sets of findings are presented here, first for the focus groups and second for community consultation on the resource developed.

Key themes from initial community consultation

Theme 1: Maatauranga—pursuit of knowledge, truth, and intergenerational knowledge. The overarching theme of maatauranga encompassed both general and Indigenous understandings of knowledge. Participants revealed substantial gaps in their initial T2D education and knowledge provided by healthcare professionals, leading to feelings of unpreparedness and distress. The existing information gap serves as a clear indicator of systemic failure within the clinical landscape. While participants expressed a strong, inherent desire for comprehensive T2D resources, the system's inability to provide accessible information on risk factors and management has created significant barriers to the health literacy and autonomy of participants. Grounded in the pursuit of knowledge was a profound commitment to pono (honesty and real-life relevance), alongside a recognition of the critical role of intergenerational knowledge transmission. This drive was further fuelled by a clear sense of responsibility towards future generations, particularly regarding T2D prevention.

Pursuit of knowledge: Participants frequently reported feeling ill-equipped for diabetes management, a direct consequence of inadequate information provided by the healthcare practitioner at the point of diagnosis. One participant highlighted this systemic gap, noting, "Because we have no knowledge. It's like, we didn't know, and we've had diabetes for one year." This structural suppression of information frequently resulted in profound feelings of helplessness and uncertainty; as another participant observed, "If you don't have that knowledge, you don't know."

This failure to provide accessible education generated significant emotional distress. One participant described the immediate existential fear following a diagnosis unsupported by clear guidance, stating, "And straight away in my head, I thought, I'm going to die." Such experiences reveal the extent to which clinical communication gaps exacerbate psychological burdens, highlighting a critical failure of care in T2D management.

Participants expressed a strong desire for proactive knowledge acquisition. One emphasised, "I want to know my risk. I want to know the symptoms. What we can do, where we can go." The drive to seek out information demonstrates a clear desire for self-determination; however, effective management remains dependent on a system that provides information in a way that is truly accessible and meaningful for whaanau.

Participants consistently reported that inadequate information provision by healthcare providers occurred particularly in primary care. One stated, "I don't think the doctors tell us much." Denying patients comprehensive information indicates a clear demand for improved patient education within primary care settings and stronger therapeutic relationships. Furthermore, participants stressed that clear and concise communication from medical providers, avoiding medical jargon, was essential for foundational education: "Yeah, so we have to pretty much start with the basics." Patient-centred relationships were also highly valued by participants, and face-to-face interactions were preferred: "Like, I know we can research and stuff, but that's not the same as sitting with people and talking it through with them."

Beyond face-to-face interactions, participants outlined the need for multiple learning modalities. While written materials are common, strong preferences for visual and audio formats were expressed: "Because some of our whaanau we see out of the community are illiterate ... but they can see a picture."

Pono: The value of real-life examples and potential consequences of suboptimal T2D care were strongly expressed. One participant commented on the effectiveness of a video depicting the challenges faced by someone who was not given the correct education at diagnosis, which resulted in dialysis, amputations, and blindness: "[The dialysis video] was a perfect example of not putting your health first, okay, yeah, the importance of diabetes if you don't look after it, if you don't act on it." The participant also stated, "I prefer messages like that, to be honest, so that we can take it more serious, like she didn't take it serious." Incorporating such real-life narratives and potential complications of T2D, akin to public health campaigns (e.g., historical quit smoking campaigns), was considered highly effective in motivating individuals to prioritise agency in their T2D care: "When I was growing up, smoking. They had real visual pictures on cigarette packets ... that scared me, like, I wouldn't do that, I don't want that to happen to me."

Intergenerational knowledge transmission: Intergenerational knowledge transmission holds profound significance in Maaori culture. Recognising the potential genetic predisposition to T2D within whaanau, participants emphasised the critical role of educating younger generations about prevention strategies. As one participant stated, "It can be stopped at a certain generation if the previous generation before does something

about it." Distributive responsibility in education was reiterated by another participant who stressed the importance of "sharing the information with the younger generation".

Early education interventions for tamariki were identified as a crucial component of diabetes prevention. One participant noted:

> If we were to start the education at kura and all that. So that when they're young, yeah, just cos obviously like it's hard as an adult to learn all these new ways of living and eating and all the stuff when you're so used to and stuck in your old ways. Whereas if you start as a kid. Yeah, it's a lot easier to learn or dive into it.

This insight emphasises the role of intergenerational knowledge transmission in building long-term metabolic resilience. By normalising health and well-being in childhood, whaanau are better prepared to navigate the structural barriers of a colonised food environment.

Participants also highlighted the significance of traditional Maaori dietary practices. One participant shared:

> Yeah, I think education around how our ancestors used to eat and stuff like that cos I think it was very different like obviously the impact of colonialism and stuff really that took a big shift in our people. And I think that will help our whaanau be more like kinder to ourselves, you know, like yeah just unpacking all the generational trauma and how we got to this point in kinda redirecting back to how our tuupuna used to live.

The detrimental impact of intergenerational trauma, land loss and structural dispossession highlights the need to address the historical and sociocultural factors contributing to current dietary patterns and their impact on diabetes risk.

Theme 2: Whaanau aspirations—cultural identity and whaanau-centred. Reflecting the core Maaori values of collectivism and interconnectedness, the theme of whaanau aspirations encompassed participants' hopes and expectations for T2D education. This included a strong desire for resources that affirm cultural identity and actively engage the entire whaanau in prevention and management.

Cultural identity: A significant subtheme emerged that emphasised the critical role of cultural expression in improving the accessibility and acceptability of diabetes education resources for Maaori. Participants strongly advocated for the integration of Maaori language and cultural values within these materials. For example, one participant highlighted the value of using familiar Maaori phrases, suggesting that "using familiar Maaori phrase or Maaori kupu" in diabetes educational materials would be helpful. Prioritising linguistic authenticity would foster a deeper sense of resonance. This approach not only would support Maaori identity but might encourage a wider uptake of te reo Maaori as a standard practice within health promotion and the broader community.

Representation within the resources was deemed paramount. Participants expressed a strong preference for educational materials that featured relatable characters and imagery. As one participant stated, "And even the characters like they look Maaori too, you know. It was real appealing [a video showing cartoons who were Maaori], cos it's like, I can see my whaanau."

Participants further accentuated the importance of integrating broader aspects of Maaori well-being, such as karakia and whakataukii, within educational materials. As one participant stated, "You gotta create something for Maaori, being able to add in karakia. Different whakataukii that are gonna encourage them to keep going." This integration would transform clinical resources into culturally meaningful tools, in which whakataukii act as a guiding force that links ancestral knowledge to current health aspirations.

Whaanau-centred: Within Maaori communities in Aotearoa, collectivism is a foundational value, with community and whaanau being paramount in individual well-being. Participant responses explicitly outlined the importance of cultural resonance within diabetes resources. One participant highlighted the significance of visual representation, stating, "A resource for our Maaori to catch their eyes? Ohhh that's about me, that's about my whanau." Such visual and relational affirmations foster an immediate sense of relevance, encouraging deeper engagement by mirroring the lived realities of whaanau.

Storytelling emerged as another crucial element to incorporate into T2D educational resources. Maaori are generationally oratory peoples, and as such, participants expressed a strong desire for video testimonies from individuals with lived experiences of diabetes. One participant stated, "You could also do a video of people with lived experiences ... what happened to them, how they got it, what works for them and what didn't work for them." A living testament of experiences would allow for vicarious learning, with familiar faces and local champions facilitating greater engagement.

The collectivist nature of Maaori society was further evident in the prominence participants placed on whaanau-centred education. Recognising that T2D has an impact on the entire whaanau, participants advocated for educational programmes that encompass the broader family unit. One participant called for "education, not only for the one that has the illness but for the person to listen like how you just share". Another participant stressed the importance of a "whole whaanau approach, not just a me approach". These perspectives highlight the demand for diabetes educational resources that acknowledge and support the interconnectedness of whaanau within te ao Maaori.

Community feedback on the developed resources

Following the development of the website and quote book guided by the Ko Tuna Anahe framework, these resources were presented back to the community for feedback, marking a critical step in the iterative PAR process. The feedback received was invaluable in refining the resources to truly meet community needs.

Website feedback: The community provided comprehensive feedback on the website, generally expressing high levels of satisfaction. Participants praised its usability, noting its intuitive navigation and design. The clarity of information was highlighted, with many appreciating the straightforward language that avoided medical jargon, making complex T2D concepts accessible. The cultural relevance of the visuals and language was particularly commended; participants expressed a strong sense of ownership and identity through the incorporation of te reo Maaori and Maaori faces, noting that the authentic design made the resource feel specifically intended for their whaanau. Specific comments highlighted the engaging nature of the content and the ease with which they could find information pertinent to their lives. For example, the interactive elements and short video clips were well received. Areas for minor improvement included suggestions for further expanding the range of personal stories and ensuring consistent mobile responsiveness across all devices, which were later addressed in the refinement phase.

Quote book feedback: The quote book also received positive feedback. Participants found the relevance and impact of the quotes to be powerful and motivating. The authentic voices and lived experiences shared within the book fostered a strong sense of connection and validation. The overall message of resilience, community support, and proactive health management was deeply appreciated. Many felt the book served as a source of inspiration and encouragement, making T2D management feel less isolating. Suggestions for improvement focused primarily on including quotes from a broader age range of individuals and potentially offering different formats (e.g., an audio version), which were considered for future iterations.

The community feedback led directly to several significant changes and improvements in both the website and the quote book. For instance, from feedback regarding mobile accessibility, the website was further optimised for smartphone viewing. Content on specific dietary approaches was expanded to include more traditional Maaori food options, reflecting a desire for practical, culturally aligned advice. The quote book saw a reordering of some quotes to create a more narrative flow, and a glossary of te reo Maaori terms was added to enhance accessibility for all users. A rigorous feedback loop ensured the final resources were robust, effective, and truly reflective of the community's aspirations.

Discussion

The significance of the key themes

The emergence of maatauranga and whaanau aspirations as core themes holds profound implications for developing effective and culturally responsive T2D education resources for Maaori.

Maatauranga extends beyond mere scientific facts, encompassing a holistic understanding of knowledge, its pursuit, and its intergenerational transmission (Broughton et al., 2015; Mercier, 2018). The community's strong desire for accessible, honest, and comprehensive T2D information highlights a critical gap in conventional health systems. Such feedback necessitates a shift towards resources that actively acknowledge existing anxieties and historical knowledge suppression while providing practical, culturally grounded insights. The emphasis on intergenerational knowledge further signals the importance of preventative education for tamariki and the reclamation of traditional Maaori dietary practices (e.g., maara kai, mahinga kai) as pathways to improved health outcomes. Centring these traditional practices allows for a decolonising approach to health education, one that recognises historical trauma while actively restoring Indigenous dietary knowledge (Cambie & Ferguson, 2003).

The principle of pono is a central component of tikanga, mandating transparency and integrity in communication (Mead, 2016). Grounded in this

ethical requirement, participants expressed a clear preference for pono, advocating for education that does not sanitise the clinical realities of T2D complications (Valenti, 2018). While the Ko Tuna Anahe framework is intentionally strength-based, it maintains conceptual precision by framing these realities within the context of agency. In this framework, the objective of T2D management is articulated as achieving metabolic stabilisation (Riddle et al., 2022). By providing whaanau with clinical facts regarding complications like diabetic nephropathy through a culturally safe lens, the framework empowers individuals to pursue long-term glycaemic stability and proactive health management, rather than reacting to deficit fear-based communication.

Whaanau aspirations powerfully encapsulates the collectivistic nature of Maaori society. The call for resources that affirm cultural identity, through the use of te reo Maaori, culturally representative imagery, and the integration of karakia and whakataukii, demonstrates that effective health education must resonate at an innate cultural level. The strong desire for whaanau-centred approaches, including storytelling and a focus on the broader family unit, challenges the individualistic focus often found in Western healthcare models (Reweti, 2023). Collective empowerment of the entire whaanau serves as the catalyst for sustainable health improvements, shifting the paradigm from an individualised approach towards a unified shared approach.

The tuna *as a cultural metaphor*

The adoption of the *tuna* as the central metaphor for the Ko Tuna Anahe framework demonstrates the efficacy of integrating local cultural symbols into healthcare. For Waikato, *tuna* represent more than sustenance; they embody resilience and ancestral connection (Waikato Raupatu River Trust, n.d.). By selecting a symbol with profound local significance, the framework allows abstract concepts of metabolic health to be tangible and culturally grounded (Takerei, 2019).

Crucially, the framework navigates the tension between critiquing structural drivers, such as land alienation, and the immediate demands of whaanau health management. We explicitly reframe medication and dietary adjustment not as Western "compliance", but as an exercise of mana motuhake. By reclaiming traditional dietary patterns, whaanau engage in a deliberate act of resistance against colonisation.

A unique contribution of this framework is the identification of a clinical-cultural synthesis regarding the *tuna*'s biochemical properties. The ancestral wisdom of *tuna* aligns with Western pharmacology because *tuna* contains peptides that inhibit the DPP-IV enzyme (Cao et al., 2023). These enzymes mirror the mechanism of pharmaceutical DPP-4 inhibitors used to enhance physiological insulin production (Cao et al., 2023; Doupis & Veves, 2008). This finding validates Indigenous ecological knowledge within the clinical environment (Standing & Kahu, 2021).

While the framework aligns with broader national and international Indigenous healthcare models such as Two-Eyed Seeing in Canada (Hovey et al., 2017) and Whaanau Ora in Aotearoa (Boulton & Gifford, 2014), comparison to the Pilinahā framework from Hawai'i is most fitting. Both are localised, community-born models that reject deficit-based labels in favour of connections to land and ancestral wisdom (Odom et al., 2019). The Ko Tuna Anahe framework proves that centring locally resonant symbols offers a transformative path for Indigenous health, ensuring interventions are grounded in the community's own identity, maatauranga, *and* scientific knowledge.

Implications for practice and policy

Interventions arising from this research should move beyond the traditional focus of individual lifestyle modifications. Instead, health promotion must be reframed as a process of cultural reclamation and structural navigation. Practitioners should support whaanau in identifying how historical factors have influenced their current health realities, allowing the management of T2D to be seen as a proactive restoration of ancestral well-being rather than an adherence to Western clinical objectives.

This research has significant implications for both health practice and policy, particularly concerning health education for Maaori and Indigenous populations. For health practitioners, it underscores the critical need to move beyond a one-size-fits-all approach to T2D education. It advocates patient-centred communication that is culturally safe, avoids jargon, and acknowledges the role of the whaanau. It highlights the value of incorporating diverse learning modalities and embracing authentic storytelling from lived experiences.

At a policy level, this study provides a robust evidence base for the strategic investment in community-led, Kaupapa Maaori approaches to health. Policies should actively support funding mechanisms and frameworks that empower Indigenous communities to define, design, and

deliver their own health solutions. Recognising and valuing Indigenous knowledge systems must be foundational to improve health outcomes. Integrating the principles of community consultation and cultural responsiveness into national health policy is essential for addressing pervasive health inequities and fostering mana motuhake in health service delivery. Ultimately, this research demonstrates that culturally responsive approaches are not just preferable; they are fundamental to achieving equitable and sustainable health outcomes for Maaori.

Strengths, limitations and future directions

The adoption of a PAR approach, underpinned by Kaupapa Maaori principles, proved to be a powerful and transformative methodology in this study that allowed for impactful and meaningful application. A primary strength was the inherent community ownership it fostered. By actively involving the community at every stage, from identifying needs to co-designing and refining resources, the process ensured that the outputs were not merely for them, but genuinely with and of them. Employing deep engagement directly enhanced the cultural relevance of the resources, moving beyond tokenistic inclusion to authentic integration of Maaori worldviews, language, and values. The iterative nature of PAR was also a significant benefit, allowing for continuous feedback and adaptive development, ensuring the resources remained responsive to evolving community needs and preferences. A flexible approach is crucial in complex health contexts.

However, PAR also presented challenges, as is typical for highly collaborative research. Managing diverse perspectives, coordinating multiple community members and researchers, and the significant time commitment required for genuine co-creation were all factors that demanded careful navigation. The whanaungatanga fostered through the process also built lasting relationships between the research team and the community, a reciprocal benefit inherent to Kaupapa Maaori research.

Limitations included the sample size of 11 participants. While sufficient for deep qualitative inquiry and achieving data saturation within a PAR framework, it represents a specific semi-rural Waikato Maaori community. The transferability of these findings to other Maaori communities throughout Aotearoa, or to other Indigenous populations, is limited without additional localised research in other geographic locations. Such limitations stem from the distinct cultural nuances between iwi and hapū, alongside variations in regional service delivery models. In addition, the perspectives of participants (age range 35–44) may differ from those of younger or older Maaori with T2D, although our projects local and university kaumaatua (TR) was included in the consultation and development stages.

Future research could explore the long-term impact and effectiveness of the Ko Tuna Anahe resources in terms of health behaviour change and clinical outcomes. Replication of this Kaupapa Maaori PAR approach with other chronic health conditions may further validate and refine the methodology. Investigating the most effective dissemination strategies for culturally responsive digital health resources within Maaori communities would also be a valuable area of inquiry. Additionally, exploring the perspectives of healthcare providers on integrating such culturally tailored resources into routine clinical practice could identify key facilitators and barriers to wider adoption.

Conclusion

This study successfully demonstrated the profound power of a Kaupapa Maaori PAR approach in collaboratively developing culturally responsive T2D educational resources for Maaori communities in the Waikato region. By deeply embedding community voices and Maaori cultural values throughout every phase of the research, our team and community created resources that were not only medically informative but also culturally affirming, accessible, and highly relevant to the lived experiences of whaanau.

The Ko Tuna Anahe framework demonstrates that T2D education for Maaori is most effective when it acknowledges the structural legacies of colonisation while simultaneously fostering individual and collective agency. Through positioning metabolic management as an act of mana motuhake, this ensures that the pursuit of well-being, and sustained glycaemic management, is inextricably linked to the reclamation of maatauranga Maaori and ancestral identity.

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Throughout this article, the Waikato dialect's use of double vowels has been consistently employed in place of macrons. This linguistic choice reflects and honours the monumental role of the Waikato community in shaping this research, aligning with the principles of cultural responsiveness and local specificity. We extend our sincere gratitude to the participants from the Waikato community whose

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Data Availability Statement

The online educational resource, Te Pou Whirinaki o te Mate Huka, developed through this research, is publicly accessible at www.matehuka.info.

Glossary

Aotearoa	New Zealand
awa	river
hapū	subtribe
hauora	holistic well-being, health
hiinaki	eel-pot or net
iwi	tribe
kai	food
kaimahi	worker, employee, clerk, staff
kaiwhakahaere	administrator, boss, director, organiser, manager
kanohi ki te kanohi	face-to-face
karakia	incantation, prayer, ritual chants; blessing
kaumaatua	elder
Kaupapa Maaori	a transformative paradigm rooted in Maaori worldviews and epistemologies, prioritising Maaori knowledge, perspectives, and self-determination; research conducted by, with, and for Maaori
koha	gift, show of appreciation, offering
kupu	word(s)
kura	school
Maaori	the Indigenous people of Aotearoa New Zealand
maara kai	gardens, food gardens
maatauranga	traditional Maaori knowledge, knowledge, wisdom, understanding, skill
mahinga kai	garden, cultivation, food-gathering place
mana	prestige, authority, control, power, influence, status
mana motuhake	self-determination, autonomy, agency
pono	honesty, truth, authenticity
rangahau tikanga	research protocols
rauemi	resource, teaching material
tamariki	children
te ao Maaori	Maaori worldview
Te Ara Tika	Health Research Council of New Zealand's ethical framework for Maaori health research
te reo Maaori	the Maaori language
tikanga	customs and practices
tuna	eel of various species
tuupuna	ancestors
waiata	song(s)
whaanau	extended family, family group, a familiar term of address to a number of people
whaanau ora	family health/well-being
whakapapa	genealogy, ancestry, familial relationships
whakataukii	ancestral knowledge and guidance, proverb, significant saying
whakawhanaungatanga	process of establishing relationships, relating well to others; relationship building
whenua	land, country

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USING MEAD'S "FIVE TESTS" PRECEDENT APPROACH FOR GENETIC CONTROL OF RATS

*Raine Hananui**
Ocean Ripeka Mercier†
Alan King-Hunt‡

Abstract

Sir Hirini Moko Mead's Five Tests framework helps identify a te ao Māori response to contemporary challenges. One such issue that Mead confronted, more than two decades ago, was genetic modification. We applied Mead's precedent test to a genetic technology under development in Aotearoa New Zealand called single-sex offspring selection (SSOS). Single-sex offspring selection aims to control rat populations that harm native species either by producing primarily male litters or, by rendering females infertile, through a gene drive. We sought precedents for sex selection of offspring and causing infertility in Māori tradition by surveying whakataukī and 19th- and 20th-century written secondary sources containing mātauranga Māori. The search revealed examples of parents choosing the sex of their future children and of causing infertility in women and in kurī, indicating that the underlying concepts of SSOS's control methods are not entirely new to te ao Māori, even if the delivery mechanism is. The precedent test invites us to learn about and reconnect with ancestral practice, helps to conceptualise and understand the issue at hand, and helps form a Māori response to complex novel technologies.

Keywords

genetic modification, mātauranga Māori, precedent aspect, sex selection, pest control

Introduction

In 2003, Sir Hirini Moko Mead described contemporary, contentious issues such as genetic modification and xenotransplantation as "ngā ahi e ngiha mai nei: the fires that flare up" (Mead, 2003, p. 335). The "ahi" of genetic modification has been burning in Aotearoa New Zealand since the 1990s (Brankin, 2021; C. Smith, 2006), forcing Māori across the country to grapple with its potential effects on whakapapa (Reynolds, 2007), mauri (Roberts & Fairweather, 2004), tapu (Satterfield et al., 2005), kaitiakitanga, and rangatiratanga (Cram, 2005). Genetic modification can either support or damage these values (Durie, 2004;

* Waitaha, Kāti Māmoe, Kāi Tahu. Research Assistant, Te Kawa a Māui—School of Māori Studies, Victoria University of Wellington, New Zealand.
† Ngāti Porou. Professor, Te Kawa a Māui—School of Māori Studies, Victoria University of Wellington, New Zealand. Email: ocean.mercier@vuw.ac.nz
‡ Ngāti Hauā. Kairangahau Māori, Te Kawa a Māui—School of Māori Studies, Victoria University of Wellington, New Zealand.

Hudson et al., 2019), depending on who controls it, who benefits, and how it is used (Durie, 2004; King-Hunt, 2023; Roberts & Fairweather, 2004).

Mead's (2003) statement that "the current debate on genetic modification is a matter of some concern" (p. 343) remains true over 20 years later as advancements in gene editing enable genetic modification to flare up in new forms, such as in pest control (Dearden et al., 2018; McFarlane et al., 2023). Gene editing is a type of genetic modification that allows scientists to alter DNA more precisely and efficiently than was possible with earlier forms of genetic modification (Wang & Doudna, 2023), and it has been proposed as a possible method to reduce the fertility of invasive species (Royal Society Te Apārangi, 2019). Further fuelling the fire is the overhaul and relaxation of Aotearoa's gene technology regulation, which will make it easier to release genetically modified or edited organisms outside of the laboratory (Collins, 2024; New Zealand Parliament, 2024). The rekindled fire of genetic modification cannot be put out—only responded to.

It is important that Māori are able to make informed decisions on new forms of genetic modification by "engag[ing] with tikanga Māori and its knowledge base, mātauranga Māori" (Mead, 2003, p. 335). Mead (2003) provides a framework to help with this by describing five tests that can be used to form "a Māori viewpoint, or a Māori position" (p. 336) on ngā ahi e ngiha mai nei: the tapu aspect, the mauri aspect, the take-utu-ea test, the precedent aspect, and the principles aspect. Mauri, tapu, and other tikanga Māori principles have been discussed in the context of genetic modification across the literature (e.g., Hudson et al., 2019; Roberts & Fairweather, 2004; Satterfield et al., 2005) and take-utu-ea used for biotechnological pest control has been discussed by Palmer et al. (2020). We chose to focus on the precedent aspect (hereafter precedent test) as it remains an area not yet thoroughly examined in the literature in the context of genetic modification, and because out of the five tests, it is most suited for literature-based research.

Of the precedent test, Mead (2003) writes:

> When confronted with a new "fire" an obvious response is to look for precedents in the culture. Is there some event in our traditions that might help us understand the issue and help frame a response to it? .... from a Māori perspective the question is whether there is a whakapapa to which the new event can be linked, or whether there is a tauira, or model, in our traditions. (pp. 343–344)

A whakapapa in this context could be thought of as a kind of conceptual genealogy (Royal, 1998). While ahi-like genetic modifications may appear to be entirely new, they are built upon established ideas, values, and practices that have been developed over centuries (Munn, 2024). The precedent test directs us to search our culture and traditions for relevant tauira of mātauranga and tikanga Māori which can aid in understanding ngā ahi e ngiha mai nei. Traditions might also reveal how the ideas underpinning the issue under consideration have been approached by tūpuna, providing precedents for how one can respond to them in new contexts (Mead, 2003; Munn, 2024).

The whakataukī "titiro ki muri kia whakatika a mua (look to the past to proceed into the future)" (Riley, 2020, p. 821) illustrates the essence of the precedent test, which is flexible and can be applied to many different contemporary challenges in different ways. This versatility can be seen in the wide range of issues the precedent test has been used or suggested for, like invertebrate pest control (Mercier et al., 2022), artificial intelligence (Munn, 2024), pre-birth genetic testing (Henaghan & Tipene-Matua, 2006), representation of iwi members outside their tribal area (Carter, 2006), library collection policies (Banks, 2023), and data sovereignty (Taiuru, 2023).

Pest control

Taonga species and the ecosystems they are a part of are foundational to Māori culture, identity, and practices (Mead, 2003). Introduced animal pests in Aotearoa, such as mammalian predators and *Vespula* wasps, harm native biodiversity by competing with and directly preying and feeding on taonga species (Brockerhoff et al., 2010; Goldson et al., 2015; Innes et al., 2010). For Māori, who have an inherited responsibility to care for the environment, the issue of pests and their control is of significant concern. Māori rangatiratanga over whenua and taonga, guaranteed to hapū by Te Tiriti o Waitangi, needs to be at the heart of addressing the threat of pests (Palmer et al., 2020).

It is important to recognise that the term pest is context dependent. A species that is considered a pest in one situation may be valued in another; for instance, the kiore (Pacific rat, *Rattus exulans*) introduced by Māori is both a taonga with whakapapa and considered an ecological pest (Roberts et al., 2004; Wehi et al., 2021). Traditionally, Māori both controlled and made productive use of "pesty" species, situating them within whakapapa and whakataukī (Mercier et al., 2022).

Gene drives for pest control

In this article, we consider how Mead's precedent test can be used to help understand a new genetic pest control tool under development in Aotearoa that aims to harness a gene drive. A gene drive uses a "selfish" gene that increases the probability it will be inherited by the next generation to more than the usual 50%, "driving" itself throughout the population over time until most of the population has received the gene (Bier, 2022; Esvelt et al., 2014). Pest populations could be reduced over time using a gene drive to distort the sex ratio (Prowse et al., 2019; Schliekelman et al., 2005) or to bias the inheritance of genes linked to deleterious traits such as female (Gierus et al., 2022) or male infertility (Lester et al., 2023). In Aotearoa, gene drive has been suggested as a non-lethal, species-specific, and self-perpetuating option to control introduced pests such as rodents, possums, stoats (Dearden et al., 2018; Royal Society Te Apārangi, 2019), and *Vespula* wasps (Lester et al., 2020) at the landscape scale.

Single-sex offspring selection (SSOS) is a gene drive that could control Norway rats (*Rattus norvegicus*) and ship rats (*Rattus rattus*), which were both introduced to Aotearoa during the European contact period and are significant contributors to the decline of native species (Bell et al., 2016; Russell & Innes, 2021). Kiore, due to their status as a taonga for some iwi and current limited distribution in Aotearoa, are not a target of SSOS. Single-sex offspring selection was under early laboratory development at AgResearch Limited in 2022–2025 as part of the Tactical Genetic Control of Rats (TGCR) project, coordinated and funded by Genomics Aotearoa and Predator Free 2050 Limited. Our research falls under the TGCR project and contributes to its aim of understanding how mātauranga Māori applies to genetic predator control.

Single-sex offspring selection aims to reduce the rat population over generations by distorting the sex ratio in favour of males. A secondary option is to render 50% of females infertile. Over time, both approaches should result in the number of reproductive females dropping, leading to population decline or even eradication (McFarlane et al., 2018; Schliekelman et al., 2005).

In the main approach, SSOS would distort the sex ratio by manipulating the process of sex determination, which in rats, humans, and other mammals is controlled by the X and Y chromosomes. During reproduction, the mother (XX) contributes a single X chromosome through her egg, while the father (XY) contributes either an X or a Y chromosome through his sperm. There is an equal chance that the offspring will be male (XY) or female (XX) under normal Mendelian inheritance.

Single-sex offspring selection would change the inheritance rules in favour of male offspring by using gene editing to artificially combine the rat Y chromosome with a natural gene drive in mice called the *t*-haplotype. The *t*-haplotype makes sperm carrying it and anything linked to it to move faster than non-carrier sperm in the race to fertilise eggs (Bauer et al., 2005; Lindholm et al., 2016). In linking the *t*-haplotype to the Y chromosome, SSOS would increase the percentage of eggs fertilised by Y chromosome–bearing sperm to over 50% and potentially up to 99%, ensuring most offspring are male. Those males, having inherited the *t*-haplotype with the Y chromosome, would then father primarily male offspring through the same mechanism.

For the few females that an SSOS male might father, a potential contingency considered under the TGCR project is to use gene editing to knock out, or disable, the female fertility gene *Nobox*. Half of the few female rats fathered by SSOS males would carry two copies of this knockout gene under Mendelian inheritance and would thus be infertile.

At the time the TGCR project finished in 2025, SSOS was in the very early stages of laboratory development. Years of further work would be needed to determine whether SSOS is scientifically feasible, whether its effects can be contained to prevent negative impacts on non-target populations overseas, and whether legislation and public opinion would ever enable its release (Belcher et al., 2024; Palmer et al., 2022). However, even if it is scientifically achievable, SSOS and similar technologies, as both a form of genetic modification and a potential tool to mitigate the impacts of introduced pests on taonga species, have implications for kaitiakitanga, whakapapa, mauri, tapu, and rangatiratanga. We used the precedent test to investigate whether there are any historical tauira that can help in understanding and responding to SSOS, asking, Are there precedents for sex selection of offspring or causing infertility in Māori traditions?

Methods

Rather than being prescriptive in his description of the precedent test, Mead (2003) provides an example in the form of the question of genetic modification and turns to ngā kōrero tuku iho for precedents. Ngā kōrero tuku iho such as

pūrākau, whakataukī, whakapapa, and karakia form crucial sources of mātauranga and tikanga Māori and convey the actions, worldviews, societal norms, and values of tūpuna (Lee, 2009; Marsden & Henare, 1992; Mercier et al., 2022). Mead discusses pūrākau of tūpuna, like Māui, changing their own form or the forms of others to beings such as birds and mountains, as well as whakapapa that includes the creation of both biological and non-biological beings. Mead (2003) then links tradition with genetic modification through the shared idea of changing and creating new forms, writing, "scientists are like demigods who are able to create new forms of life or transform one life form into another" (p. 344). By focusing on ideas rather than literal details, Mead is able to find potential precedents in tradition for a contemporary ahi. Mead does not specify whether and how one should apply precedents found to the issue at hand; rather, he leaves it up to the reader, recognising that how any of his five tests are used will differ depending on the person and their situation.

Informed by Mead's example, we began by pinpointing underlying concepts in SSOS for which there might be precedents in ngā kōrero tuku iho. The primary ideas we identified underlying SSOS were sex selection of offspring, causing infertility, pest control, manipulation of inheritance probabilities, perpetual change to whakapapa, and the crossing of genes between species. Mead's precedent test has already been considered by Mercier et al. (2022) in the context of invertebrate pests and pest control. Here, we focused on sex selection of offspring and causing infertility, as these concepts underpin the two approaches of SSOS. We then established a set of questions to guide our search for precedents for these two concepts:

- How were sexes in flora and fauna understood in traditional Māori society?
- Was one sex ever preferred over others in people or plants and animals?
- Are there any accounts in which one sex was selected for in the context of reproduction?
- Was infertility ever desired, and if so, were there practices to reduce or remove fertility?

We drafted a list of keywords that related to the above questions, adding to them as we researched. Below is a list of these keywords, paired when appropriate with the word "Māori" or species-specific names:

> Female, male, female/male child, wahine, tāne, women, men, gender, uha, sexes, infertile, childless, barren, sterile, sterilisation, castrate, conceive, conception, reproduction, pregnancy, birth, fertilise, offspring, breed, cultivate, litter, husbandry, mahinga kai, kurī, Māori dog

Using the list of keywords as search terms, we examined written secondary sources containing ngā kōrero tuku iho, particularly 19th- and 20th-century texts available in the Te Herenga Waka—Victoria University of Wellington library and online. The New Zealand Electronic Text Collection and early editions of *The Journal of the Polynesian Society* (JPS) were significant databases. We also searched whakataukī contained in Mead and Grove (2003) and Riley (2020). Due to time, language, and knowledge constraints, we did not canvass sources available only in te reo Māori, nor non-written sources such as whakairo. We collated relevant information in excerpt and note form and used EndNote for bibliographical details, then analysed the gathered tikanga and mātauranga Māori for potential precedents for sex selection of offspring and causing infertility. We then compared the precedents to SSOS with context in mind.

For this research, we use a binary male–female framework and refer to sex and gender interchangeably to accommodate the comparison of manipulating sexes in rats with approaches to sex and gender recorded in ngā kōrero tuku iho. We acknowledge that this does not reflect the complex relationships between sex and gender seen in both te ao Pākehā and te ao Māori, nor account for gender diversity, which is an emerging area of discussion in Māori scholarship (Berryman-Kamp, 2024).

One challenge to using the precedent test is the fragmented recording and loss of intergenerational transmission of mātauranga Māori due to colonisation (Mead, 2003). Often, ngā kōrero tuku iho survives only in the work of Eurocentric ethnographers, who selectively recorded and (re) interpreted mātauranga Māori through their own patriarchal, reductionist, colonial lens (Pihama, 2020; L. T. Smith, 2021). Unfortunately, the majority of relevant ngā kōrero tuku iho available to us for this research were contained in the work of ethnographers, particularly that of Elsdon Best, whose influence in today's understandings of traditional Māori society is pervasive (Holman, 2008). Ethnographers such as Best diminished the mana of wāhine Māori (Kern, 2024; Pihama, 2020; Pihama et al., 2021) and imposed rigid concepts

of gender roles and identities (Berryman-Kamp, 2024; Mitchell & Olsen-Reeder, 2021) onto te ao Māori by applying their own misogynistic frameworks to ngā kōrero tuku iho.

A tension thus exists in using the precedent test for issues where much of the available ngā kōrero tuku iho resides within ethnographic accounts. It is beyond the scope of this article to discuss in depth the complexities of the role ethnographic work plays in understanding how our tūpuna lived, but we note that Mead (2003) himself cites pūrākau and whakapapa recorded by Best in his discussion on the precedent test, indicating that precedents drawn from ethnographic work can be valuable if considered critically.

Results

Sex selection of offspring in flora and fauna

Birds, mammals, fish, and trees were traditionally perceived by Māori as possessing distinct male and female sexes (Beattie, 2009; Best, 1941, 1977; Mead & Grove, 2003, p. 237; H. W. Williams, 1906) and were sometimes given sex-specific names (Beattie, 2009; Best, 1941; H. W. Williams, 1906). No clear precedent for sex selection of offspring was uncovered for flora or fauna, although a potential example exists in tūī. Best (1934) states that only male tūī, called tākaha or tute (H. W. Williams, 1906, p. 200), were trained to talk. Young tūī were taken from nests for this purpose (Best, 1941), but as Oporo Paerata of Te Karaka told Best (1977), the sexes of tūī chicks were difficult to determine, so it is uncertain whether only male chicks were removed from nests or whether both sexes were taken and sorted when older. We were unable to determine whether tūī were bred in captivity in traditional Māori society.

Sex selection of offspring in people

The first human was created female by the atua in a pūrākau describing the origin of humanity. There are numerous versions of this pūrākau, but the essence is as follows: the sons of Papatūānuku wished to produce a mortal people that resembled themselves to inhabit the world. They determined that as they were all male, they required the uha, or female element, for the creation of the ira tangata to be successful (Best, 1923). They sought the uha in the 12 heavens among the female inhabitants, but couplings between the sons of Papatūānuku and female atua resulted only in offspring that possessed ira atua, not ira tangata. Tāne, the atua of forests who is usually described as the main seeker of the uha (Best, 1923, 1924; Hīroa, 1949; White, 1887), fathered many offspring in these attempts to produce the ira tangata (Best, 1923, 1924).

After a long, fruitless quest, Tāne and his brothers realised that the uha could not be found in the 12 heavens. Eventually, Papatūānuku directed her sons to Kurawaka and told them that the uha required to create ira tangata could be found there in her fertile red soil (Tikao, 2020; White, 1887). From Papatūānuku's soil, Tāne moulded a female human form. Tāne's brothers contributed various parts of the human body, including the female sexual organs (Hīroa, 1949; S. P. Smith, 1922; White, 1887). In most accounts, it is Tāne who breathed life into the earth-sculpted form, and the woman Hine-ahu-one awakened with a sneeze as the first human being.

In this version of the creation of humanity, it is the atua who selected for sex when forming Hine-ahu-one. Sex selection, however, did not seem to be restricted to atua. We found multiple examples of practices used by humans to select the sex of their future children, usually as part of fertility rites (termed "whakatō tamariki" by Best, 1906) to aid women who were struggling to conceive. Most of the following examples come from hapū and iwi of the central and eastern North Island.

Plants played a role in several conception rites involving sex selection. To increase fertility and the chances the future child would be male, during karakia karamū bark and leaves were held over a woman seeking help to conceive (Tikao, 2020). In another conception rite, a tohunga would cut the shape of a human figure into a leaf, marking sexual organs that matched the sex desired by the parents. The leaf would then be placed onto the mother's torso while karakia were recited, then kept by the tohunga until labour, when it was placed under her pillow (Best, 1941, 1975). Best (1906) records a fertility karakia recited by a tohunga over a bunch of kāretu that had been handled by the woman requesting assistance to increase her fertility. The wording of the karakia differed depending on the desired sex. For the conception of a son, the child was dedicated to Tūmatauenga, while for females, the child was dedicated instead to Hine-te-iwaiwa.

According to Best (1906) and Tregear (1904), a hīnau tree at Ruatāhuna called Te Iho o Kataka contained the iho of the tohunga Tāne-atua's daughter Kataka. Tāne-atua gave the tree the power to cause women to conceive (Best, 1906; Tregear, 1904). A wahine would embrace the tree on the eastern side if she wished to have a male child and on the western side for a female (Best, 1906; Tregear, 1904). A tohunga would recite a karakia as she did so (Best, 1906). Similarly, bark

or twigs from the eastern branch of the tapu tree Te Hunahuna-a-Pou taken by the husband and placed under his wife before intimate activity resulted in a male child, while material from the western branch resulted in a daughter (Best, 1906). The association of the female element with the west and the male with the east is also seen in an opening ceremony for the kiore trapping season (Downes, 1926).

Mitira (1972) describes how Tonoa-ki-Aua, an ancestor of the hapū Te Whānau a Taupara, sought help from her taniwha ancestors so that her child would be a son, as desired by her people. Her tūpuna advised her to avoid contact with rivers entirely, and to use only special wells or springs for drinking and bathing. She followed these instructions, and as a result, she had a male child, who was named Tama-i-uia. Mitira (1972) translates this name as "a son inquired after".

Other whakatō tamariki methods involving sex selection we found in our research include piki whenua, when a woman who wished to have a child of a specific sex would stand over the placenta of a newborn of that sex for a time (Best, 1906; Mākereti, 1938), and the use of carved figures representing either a male or female child in fertility rites (Heuer, 1969).

Some records claim that male children were generally preferred over female children, as they would become warriors and continue their father's family line (Best, 1941; Heuer, 1969; Mākereti, 1938). A whakataukī recorded in Mead and Grove (2003) contains the response of Waitapu II to her husband Te Rangiita, who was angered she birthed no sons, only daughters. She replied, "He aha koa, kai te tuhera tonu te awa i Nukuhau … What of that, the river is always open at Nukuhau", and went back to her people (p. 62). A further three whakataukī in Mead and Grove (2003) recall a similar situation involving Rākeiti, who faced the same complaints from her husband Pikiao (p. 292) or from her father-in-law, depending on the whakataukī. In the different versions of the narrative, either Rākeiti (p. 72) or Pikiao (p. 388) gave a similar response to that of Waitapu II.

Mākereti (Maggie) Papakura, a Māori ethnographer, commented in her book *The Old Time Māori*, "It was a great blow to a tangata rangatira not to have a son to carry on his kawai (line)" (p. 81), although she also asserts that children of both sexes were welcomed (Mākereti, 1938). While Heuer (1969) states that sons were preferred, she also comments that daughters were embraced for their ability to contribute to alliances between iwi, while an oriori sung to a wooden figure representing a child by Hine-kiore, a childless woman left behind in war, appears to convey the wish for a daughter rather than a son (Downes, 1936).

While these records may give the impression that sons were generally preferred over daughters, it is important to recognise the influence of ethnographic patriarchal bias in how ngā kōrero tuku iho relating to gender was recorded and presented. Mana wāhine scholarship provides a counter-narrative to the ethnographic framing of Māori society as misogynistic, instead asserting the mana of wāhine (Kern, 2024; Pihama, 2020) and highlighting how wāhine and tāne were considered equal and in dynamic balance (Sharman, 2019; Stewart, 2021). This balance can be seen in Papatūānuku and Ranginui, the ancestral parents in some traditions of all that exists today (Sharman, 2019; Stewart, 2021), and in the creation of humanity, which required both female and male essences; it could not be done with one alone (Reed & Calman, 2021; Sharman, 2019).

Causing infertility

We discovered several instances of causing infertility in tradition. In humans, karakia would be recited over a woman to prevent pregnancy in a ceremony called taupā (Best, 1914, 1975), also referred to as tuapa (Best, 1941; Mākereti, 1938), whakapā (Best, 1906) or kokoti-uru (Best, 1975, p. 13). A stone was sometimes included to symbolise infertility (Best, 1941, 1975). The ceremony was rarely employed, according to Best (1906), although he states that Paora Horomata of Tūhoe was apparently well known for performing it. Best suggests that the karakia Horomata used was a part of Hauhauism rather than a pre-European rite. The ceremony as practised by Horomata was done when the mother was giving birth and involved Horomata casting blood she had passed into a small fire while reciting karakia (Best, 1906). Taupā is generally discussed in these sources as being used for women who had already borne children.

There is also a reported instance of taupā being used to ensure male-only descent. Huiarei underwent taupā to guarantee she would have no daughters after giving birth to her first child, her son Ruarangi (Best, 1914, 1975).

One example of causing infertility in animals was found in kurī, which were introduced to Aotearoa by the ancestors of Māori in the late 14th century (Anderson & Clark, 2001). While information on kurī husbandry is scarce, it is

recorded that they were kept in villages and bred in captivity (Beattie, 2009; J. Williams, 2012). In 1920, Te Kahupuku from Nelson informed James Herries Beattie that male kurī pups were whakapoka, to "fatten them up for food" (Beattie, 2009, p. 510). Teone Taare Tikao of Kāi Tahu also told Beattie that kurī were whakapoka but said it did not affect how kurī were to eat and that he "did not think [whakapoka] was an ancient custom" (p. 351). J. Williams (2012) states that male pups which exhibited favourable attributes such as fur length would be set aside for mating with females while the rest would be castrated. In contrast to Tikao, J. Williams (2012) asserts that whakapoka was a traditional practice.

Discussion

Our results indicate that the concepts of selecting the sex of offspring and of causing infertility are not foreign to te ao Māori. Sex selection of offspring has a whakapapa in Māori tradition that stretches back to the atua Tāne's creation of the first human, the woman Hine-ahu-one. The multiple methods used by human parents to predetermine the sex of their future children suggest that in certain circumstances it was a socially acceptable practice that was not restricted to the domain of atua. Despite the importance of reproduction in te ao Māori (Henaghan & Tipene-Matua, 2006; Mākereti, 1938; Rarere, 2022), there are also precedents for causing infertility in the whakapoka of male kurī pups and the use of taupā for women who wished to prevent further pregnancy. Taupā is also referred to as kokoti-uru in Best (1975, p. 13) and is likely the origin of the modern usage of kokoti-uru in medicine for sterilisation (He Kupenga Hao i te Reo, 2025; Moorfield, 2025).

How do these results relate to SSOS? A comparison could be made between the aim of the main approach of SSOS to produce male offspring and the desire of some tūpuna to have male children. Parallels could also be drawn between the timing of sex selection in SSOS, which occurs before fertilisation, and the timing in examples of sex selection of future children in tradition, which usually happened before conception as part of fertility rites.

Considering the context of these precedents provides further information with which to make informed decisions on SSOS. As stated above, sex selection in people most often occurred during conception rites and so was tied with continuing whakapapa, increasing fertility, and creating new life. While the sex selection approach of SSOS does not seek to impact the fertility of individuals, it does aim to *reduce* the reproductive success of the rat population, and thus its abundance, over time. However, reducing the rat population will in turn protect the mauri and whakapapa of some taonga species, such as tīeke. In relation to precedents for causing infertility, it is important to recognise that taupā is usually discussed in the context of women who have already continued their whakapapa by having children and want no more, whereas the infertility approach of SSOS would prevent female rats or pests from being able to reproduce at all. Whakapoka of male kurī pups presumably occurred before they fathered pups themselves and so may be a clearer precedent.

We did not discover any clear examples in tradition of Māori predetermining the sex of plant or animal offspring. The lack of clear precedent in animals prompts the question, Can the cases of sex selection and causing infertility in human ancestors be a tauira for introduced European animals? Likewise, can the castration of *male* kurī pups be a model for the rendering of *female* rats infertile from birth? These questions and the contextual nature of our examples of sex selection and causing infertility in Māori tradition underline the complexity of using tauira from the past as precedents to inform present issues.

The precedent test does not provide a singular, definitive response to the issue under consideration. While there are tauira in tradition for the sex selection of offspring and causing infertility, key elements of SSOS, it cannot be said that these form a precedent for SSOS itself, as this technology and its underlying concepts have their own unique context. How our results might be used to understand and respond to SSOS, and indeed what precedents are uncovered in the first place, will differ depending on the individual, whānau, or group, shaped by their own values and what mātauranga they have access to. We have presented these results indicating that traditional Māori society did practise sex selection of offspring and cause infertility in certain contexts as an example of how the precedent test can be applied to contemporary challenges and as a resource to be used alongside other information when evaluating and forming a Māori perspective on SSOS and similar genetic technologies that might arise in the future.

An interesting aspect of Mead's (2003) discussion on genetic modification is his focus on the creation aspects of the technology rather than on the risks:

> Genetic [modification] is concerned with the creation of new elements or new characteristics in

> existing life forms. The sorts of changes scientists are bringing about through the utilising of genes from other life forms could result one day in the creation of new life forms. (p. 344)

If successful, SSOS would create a new form of rat and eventually a new form of our environment where taonga species are less threatened by rats. What could be achieved if we approach the ahi of genetic modification and of pests not through a lens of destruction but through a lens of creation, kaitiakitanga, and tikanga? Mead's emphasis on creation invites us to move from a risk and destruction-based assessment of genetic modification to a more holistic view of the implications of genetic modification for our tikanga. Durie (2004) suggests moving the debate on genetic modification from a risk paradigm to a paradigm of potential, in which the "essential question is not so much whether Māori values will be compromised by [genetic modification] research, but how Māori values and concepts can provide a basis for assessing the relevance and potential benefits of research" (p. 24). From this perspective, the ahi of genetic technologies like SSOS presents not only a challenge but also an opportunity to "sharpen" our tikanga in new contexts (Mead, 2003, p. 335).

Conclusion

At first glance, SSOS appears to be completely foreign to te ao Māori, concerned as it is with reducing the number of pest rats by permanently altering their DNA and combining it with genes of another pest species, mice. By applying Mead's precedent test to SSOS, we discovered that while SSOS might be novel, the ideas of sex selection of offspring and causing infertility underpinning its two approaches to controlling pests are not. Analysing ngā kōrero tuku iho led us to examples in traditional Māori society of sex selection of future children, the use of taupā for women who wished to prevent further pregnancy, and whakapoka of male kurī pups. Considering the context of the precedents and the similarities and differences between them and SSOS created the opportunity to more deeply examine SSOS. While our examples of sex selection and causing infertility in tradition do not form precedents for SSOS itself, they do illustrate that even the most novel technologies do not spring from nothing; rather, their underlying ideas have a whakapapa that we can investigate to further our understanding.

The ongoing change from a precautionary to enabling regulatory environment for gene technologies, coupled with the approaching Predator Free 2050 deadline, make it more likely that SSOS and similar gene technologies could one day be fully developed and considered for environmental release in Aotearoa. Discourse on gene technologies is often future-focused and dominated by scientific and economic considerations but, as Māori, we cannot make decisions based only on information from te ao Pākehā. It is crucial that if the question of trialling or releasing SSOS or other gene technologies is posed in the future, Māori are "in front and influential" (Brankin, 2021, p. 55) and able to respond in ways that are shaped by and reflect our own mātauranga, values, and aspirations, not only those of others. Mead's precedent test offers us a versatile framework to assess and understand complex technologies from our own worldview, ensuring we are better able to exercise our rangatiratanga in the face of the ahi of gene technology at our doorstep.

Glossary

ahi	fire, issue, opportunity
Aotearoa	New Zealand
atua	ancestor with continuing influence, god
hapū	kinship group, clan
hīnau	*Elaeocarpus dentatus*
Hine-ahu-one	the first human and first woman
Hine-te-iwaiwa	atua of weaving and childbirth
iho	umbilical cord
ira atua	supernatural life
ira tangata	human essence
iwi	extended kinship group, place-specific tribe
Kāi Tahu	Ngāi Tahu, an iwi of the South Island
kaitiakitanga	guardianship
karakia	incantation, to recite ritual chants
karamū	*Coprosma robusta*
kāretu	*Hierochloe redolens*
kiore	Pacific rat, *Rattus exulans*
kokoti-uru	a traditional rite to prevent pregnancy
kurī	Māori dog, Polynesian dog
mahinga kai	garden
mana	prestige, status, authority, influence, integrity; honour, respect

mātauranga Māori	Māori knowledge, wisdom, ways of knowing
mauri	energy, life force
ngā ahi e ngiha mai nei	the fires that flare up; contemporary issues that challenge Māori values and thinking
ngā kōrero tuku iho	traditions, oral history
oriori	lullaby
Papatūānuku	atua of the earth, Mother Earth
piki	to stand
pūrākau	narrative, story
rangatira	a Māori leader
rangatiratanga	self-determination
tākaha	male tūī
take-utu-ea	principle of cause, reciprocation, balance
Tāne	atua of the forests
tāne	male, man
tangata	human, individual
taniwha	water spirit
taonga	cultural treasure, resource
tapu	sacred, state of restriction
tauira	model, precedent
taupā	a traditional rite to prevent pregnancy
te ao Māori	the Māori world(view)
te ao Pākehā	the Western world(view)
Te Tiriti o Waitangi	the Treaty of Waitangi
Te Whānau a Taupara	a hapū of the Gisborne iwi Te Aitanga a Māhaki
tīeke	saddleback, *Philesturnus rufusater* and *Philesturnus carunculatus*
tikanga	protocols, customs
tohunga	skilled person; expert
tuapa	a traditional rite to prevent pregnancy
Tūhoe	an iwi of the Bay of Plenty
tūī	tui, *Prosthemadera novaeseelandiae*
Tūmatauenga	atua of war and humans
tūpuna	ancestors
tute	male tūī
uha	uwha, female element
wahine	woman, female
wāhine	women, females
whakairo	carving
whakapā	a traditional rite to prevent pregnancy
whakapapa	genealogy, folk taxonomy
whakapoka	castration, to castrate
whakataukī	ancestral saying, proverb
whakatō tamariki	lit. "child implanting", a ceremony to help a woman conceive
whānau	family
whenua	placenta, land

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INDIGENOUS SMALL HOME LIVING

What makes small homes FAAB (functional, accessible, affordable, buildable) for Māori?

*Fiona Cram**
Anna Adcock†
Kisa Basabas‡
Kushla Porter§
Irirākau Tawa||

Abstract

This study explored whether functional, accessible, affordable, buildable (FAAB) small homes (45–70 m²) can meet the needs and aspirations of whānau Māori. Seventeen participants shared their experiences and design preferences through interviews and interactive activities. Analysis was informed by Te Whare Tapa Whā (Durie, 1985), a Māori model of wellbeing that recognises the interconnectedness of spiritual, emotional, physical, and whānau dimensions. Participants emphasised the importance of whānau-centred design, connection to whenua, cultural expression, and accessibility across life stages. Small homes were seen as offering affordable, flexible solutions, particularly within papakāinga contexts. While not a universal solution, small homes can contribute to Māori housing aspirations when led by Māori design processes and grounded in Māori values such as manaakitanga, whanaungatanga, and rangatiratanga. This research underscores the potential of Indigenous-led housing innovation to enhance wellbeing, belonging, and intergenerational resilience for Māori communities.

Keywords

accessible, affordable, functional, housing, small homes

* Ngāti Pāhauwera. Director, Katoa Ltd, Auckland, New Zealand. Email: fionac@katoa.net.nz
† Ngāti Mutunga. Researcher, Te Tātai Hauora o Hine—National Centre for Women's Health Research Aotearoa, Te Herenga Waka—Victoria University of Wellington, Wellington, New Zealand.
‡ Independent researcher, Wellington, New Zealand.
§ Te Arawa, Ngāti Kahungunu. Independent Kaupapa Māori researcher, Rotorua, New Zealand.
|| Tūhoe. Independent Kaupapa Māori researcher and community advocate, Bay of Plenty, New Zealand.

Introduction

For Māori, the concept of home can go beyond a single, physical dwelling typically described as a house, as a notion of home carries cultural and relational meanings that extend well beyond the material structure of a dwelling (R. A. Kearns, 2006). Home may encompass spaces of cultural gathering or whenua tūpuna within a tribal rohe (Rewi & Higgins, 2015). In many cases, home may also refer to more than one location—such as an urban residence and an ancestral home connected to tribal identity (Moeke-Maxwell et al., 2015). Māori aspirations for housing and home are not only cultural preferences; they are underpinned by te Tiriti o Waitangi obligations and Indigenous rights frameworks such as the United Nations Declaration on the Rights of Indigenous Peoples, which affirm the right of Māori to live on our lands and in accordance with our values (Arbury & Cram, 2023; United Nations, 2007).

In this study, we asked whether a small home could suit whānau Māori. If it could, then what design considerations are needed to ensure the best possible fit to enable a small dwelling to be culturally responsive and, most of all, a home? This introduction explores culturally responsive housing and whether smaller houses offer a solution for whānau Māori, particularly given their growing popularity in a housing system that marginalises low- and middle-income Māori households (Mitchell et al., 2025). We then ask what makes these small homes accessible and functional for Māori, before describing the present study.

Culturally responsive housing

Understanding Māori housing needs, priorities, and aspirations requires an appreciation of the cultural meaning and significance of home. In te ao Māori, all things possess a wairua and a mauri (Barlow, 1991). Whānau homes are therefore both physical dwellings and spiritual spaces. Housing is often also genealogically and culturally connected with the land (Waldegrave et al., 2006), with this relationship reflected in many whakataukī that speak of land as a tūrangawaewae and of Māori as kaitiaki of the land for future generations (Dignan, 2017; Edwards, 2010). In his research on positive ageing among Māori, Will Edwards (2010) concluded that the concept of a "home place" is "less about the provision of physical shelter and comfort, and more about cultural links to a physical domain that reinforces cultural identity and a sense of security" (p. 266).

Manaakitanga—expressed through generosity, hospitality, and care for others—also shapes identity and belonging. Māori housing decisions are often influenced by a desire to care for and accommodate extended whānau, including kaumātua, in ways that reflect respect and responsibility (Boulton et al., 2022; Cram & Munro, 2020). As a participant in Waldegrave et al.'s (2006) research explained, an ideal home is one designed to include and support children, grandchildren, and elders, particularly as they age and require additional care (p. 101). Culturally responsive housing is therefore inherently intergenerational, designed to meet present whānau needs and safeguard whakapapa and wellbeing across generations. For many Māori, fulfilling these cultural and relational obligations can take precedence over the condition of the house itself, with some choosing to remain in or return to substandard housing so they can maintain whānau ties and connection to whenua tūpuna (Cram et al., 2024).

In this way, housing for Māori is a source of ontological security—that is, a place where people are able to "feel in control of their environment [and are] free from surveillance, free to be themselves and at ease in the deepest psychological sense" (Saunders, 1990, p. 361). This is housing that supports and facilitates wellbeing (Hadjiyanni et al., 2012) rather than detracting from it (Campbell et al., 2022). For example, Māori informants in a study by Cram (2020) described home as defined by the love, comfort, and sense of security fostered by their whānau. While common values underpin many Māori housing preferences, there is also diversity in how these are expressed across whānau, hapū, and iwi, and between urban and rural settings (Boulton et al., 2022).

Māori access to quality housing

Unfortunately, housing that nurtures the sense of belonging and security described above is often out of reach for whānau. Māori face a unique and compounding set of challenges in accessing affordable housing that are rooted in colonisation, historical dispossession, collective land tenure, systemic financial exclusion, and persistent socioeconomic inequities (Arbury & Cram, 2023; Boulton et al., 2022; Mitchell et al., 2025). In the mid-1970s, the proportion of Māori households living in owner-occupied homes outweighed the proportion who lived in rented accommodation. By the 2023 Census, just 27.5% of Māori owned or partly owned a house ("Waitangi Day 2025", 2025).

While ontological security can be found in rental accommodation (A. Kearns et al., 2000), there are not enough legislative guardrails in

Aotearoa New Zealand to ensure this (Berry et al., 2017; Stats NZ, 2021). Māori are also more likely to live in housing that is overcrowded, poorly insulated, or in disrepair, which contributes to negative health outcomes and further entrenches inequity (Howden-Chapman et al., 2022). What Helena Barwick said in 1991 is still relevant today: Māori cannot count on their rental accommodation being a "protection from physical adversity … a place of safety and comfort" (p. 40). Economists Shamubeel and Selena Eaqub have argued that the housing market needs to be rebalanced if renters are to have access to secure and quality housing (Eaqub & Eaqub, 2016). In addition, the cost of rental accommodation increases year on year, cutting into household budgets. For example, in the 12 months to the June 2024 quarter, average rents for Māori households increased 5.2% (Stats NZ, 2024), with many households spending more than 40% of their income on housing (Stats NZ, 2025b) and reporting that their household disposable income is "only just enough" or "not enough" (Stats NZ, 2025a).

Rising housing costs and land prices have made smaller homes a more affordable home ownership option as they can enable whānau to live close together and potentially on whānau land, establishing an intergenerational living context (see Box 1). The coalition government has recently made it easier to build small standalone dwellings of up to 70 square metres without resource consent. Associate Finance Minister Shane Jones stated in 2025, "In the Far North I saw how extended family often live together at the same property. Changing the rules to make it easier to build more family accommodation allows generational living at an affordable price" (Bishop et al., 2025). This change is likely to be welcomed by iwi, hapū, and Māori organisations that are leading housing initiatives grounded in cultural values—strengthening rangatiratanga in the housing space (Potter, 2022; Reddy et al., 2022).

Accessible and functional homes

While smaller dwellings must meet the Building Code (Bishop et al., 2025), the legislation that sets out the performance requirements of new builds excludes accessibility and functionality (James et al., 2018). In other words, the Universal Design and accessibility requirements introduced by Lifemark (n.d.), a local not-for-profit organisation, in 2012 exceed the current Building Code requirements. This is, however, changing as the criticality of accessibility and functionality, particularly for older people, has been more widely recognised by government agencies (Office for Seniors, 2019).

New builds by Manaaki Tairāwhiti, an iwi-led partnership in the Tairāwhiti region focused on improving social services, have a Lifemark 3-star rating (Campbell et al., 2022). These dwellings are therefore usable, adaptable, accessible, and safe for disabled and elderly residents (Lifemark, n.d.). Manaaki Tairāwhiti also "adopts kaupapa Māori urban design principles in planning our urban areas and where our people want to live ... Māori architectural principles are a core part of housing design, enabling Māori to live well in and be proud of their homes" (Campbell et al., 2022, p. 13). Small dwellings built by the Tāmaki Regeneration Company for emergency housing have a Lifemark 3- or 4-star rating. The dwellings, which are managed by Island Child Charitable Trust, are viewed as successful by residents (Hancock, 2022).

Having housing that supports good living for tangata whaikaha Māori and their whānau is essential. One in four Māori experience disability, compared with fewer than one in six non-Māori

BOX 1. Whānau tiny home

Dr Truely Harding and Mahue Dewes embraced the tiny home lifestyle to stay close to whānau while securing an affordable, functional space of their own. After struggling to find a traditional home that fit their needs, they opted to place a custom-built 12-metre-by-3-metre whare on Harding's parents' land in Northland. Designed for their growing whānau, the home balances practicality and comfort, featuring smart storage solutions and a covered deck that serves as an outdoor living area. The move has not only strengthened their connection to te ao Māori and sustainable living but has also fostered a more mindful, whānau-centred lifestyle (Klein Nixon, 2024). Their story illustrates how small homes can uphold whānau values, strengthen ties to whenua, and offer culturally grounded solutions for contemporary Māori housing needs.

(King, 2019). Among Māori aged 45–64, the prevalence rises to more than two in five, and for those over 65, the prevalence is three in five, with 63% of disabled Māori over 65 reporting multiple impairments (King, 2019). It is therefore important to know if smaller homes can potentially better support tangata whaikaha Māori by enabling growth and development of the young, the highest level of function in mid-life, and independence and connectedness in older life (Saville-Smith et al., 2007). While whānau are positive about small emergency housing they stay in for up to three months (Hancock, 2022), committing to a small home as a long-term or permanent option is a different scenario.

In summary, ensuring that small dwellings are not only affordable but also functional, accessible, and culturally grounded is vital to meeting the diverse needs of Māori, especially tangata whaikaha Māori. The challenge and opportunity lie in designing small homes that go beyond compliance to truly support wellbeing across the life course. This means listening to Māori voices, recognising the broader impacts of colonisation, and embedding cultural values and aspirations into design and policy. Given these national developments and design considerations, we set out to explore how whānau Māori view small homes that are FAAB—functional, accessible, affordable, and buildable.

The present study

This study explored whānau Māori views FAAB small homes, defined as being around 45–70 m² in size. The study was a qualitative Kaupapa Māori inquiry (by, with, for Māori), ensuring that Māori voices, experiences, and aspirations shaped every stage of the research. Three early career researchers were also supported to undertake interviews with whānau. In talking with whānau, we wanted to know whether FAAB small homes are acceptable and what design considerations are important. We asked participants to reflect on the potential of these homes to support wellbeing across the life course and to share their thoughts on what would make such a house feel like a home. Participants were also invited to engage in a hypothetical redesign of a small home's interior, offering insights into what they would prioritise or change to better align with their values, needs, and aspirations.

This Kaupapa Māori study reflected Māori ontological, epistemological, axiological and methodological assumptions that privilege a Māori worldview that is relational (Cram & Adcock, 2022). This methodology was selected because of its alignment with the study's aim to centre whānau Māori perspectives, values, and aspirations in housing design. Kaupapa Māori research upholds Indigenous sovereignty and ensures research is accountable to whānau, hapū, and iwi (L. T. Smith, 2021). Kaupapa Māori research seeks to understand Māori worldviews and lived realities, as well as deconstruct historical, social, economic, political, and cultural determinants of Māori wellbeing (G. H. Smith, 2012; World Health Organization, 1997).

Method

Seventeen participants—many with lived experience of disability, housing stress, or community-based housing initiatives—shared their views through in-depth interviews that included both kōrero and hands-on design activities. These conversations, shaped by whakawhanaungatanga and supported by koha, aimed to surface not just opinions but aspirations. Participants were invited to reconfigure internal layouts, evaluate floorplans, and reflect on place, cultural meaning, and practical functionality. Through this process, the study captured both imagined possibilities and grounded realities to inform future housing design, policy, and practice.

In-depth interviews were conducted, either in-person or over Zoom depending on participants' preference, by three interviewers—two Māori and one non-Māori (whose connection to the kaupapa stemmed from having a Māori partner and children). Following rituals of encounter (e.g., whakawhanaungatanga, karakia), participants were invited to participate in the study, and their informed consent was obtained. The interviews ranged from 25 to 55 minutes in length, and were semistructured around five components:

1. Looking at two small, accessible home designs (50 m² and 73.7 m²) and discussing if and how they might work for whānau.
2. Watching five minutes of a clip showing an example of a small apartment conversion in Paris and discussing use of space and design (what is possible in small spaces) and what might work for whānau Māori.
3. Inviting participants to share their ideas of an internal layout for a small house, using a blank footprint and cutouts or screenshots of furniture/furnishings.
4. Discussion of the importance of place—where participants ideally wanted to be located and why, and whether a FAAB small home could work for them.

5. A final check-in to ensure participants' demographic details were collected and finishing-up the interview by asking if the participants had anything else they felt we should know about.

With participants' agreement, the interviews were audio recorded and transcribed verbatim, and photographs/screenshots were taken of the completed activity. Participants each received a koha of a $100 grocery voucher in appreciation of their time and sharing. Ethics approval for this study was granted by the Aotearoa Research Ethics Committee (AREC23_60).

Participants

Participants were recruited through the interviewers' networks, including contacts from previous studies. While the sample size was small and some interviews were conducted over Zoom, we are confident the study has generated valuable insights into Māori perspectives on small home living.

Two interviewers interviewed six participants each, while the third interviewer interviewed five participants. The 17 participants ranged in age from 15 to 63 years, with an average age of 36 years (*SD* = 13.1 years). Fourteen wāhine and three tāne were interviewed. This diversity of participants ensured a broad range of experiences, values, and needs were reflected in the findings.

Analysis

Interview transcripts were analysed thematically, drawing on inductive coding while guided by an established Māori wellbeing framework (Braun & Clarke, 2019). This entailed reading, rereading, and coding the transcripts for an emergent conceptual framework, themes, and subthemes. Following initial coding, we trialled Te Whare Tapa Whā as a coding framework. This Māori wellbeing model, first developed by Sir Mason Durie (1985), conceptualises health as an interdependent balance of four dimensions: te taha wairua, te taha hinengaro, te taha tinana, and te taha whānau. As participants described what made a small home feel functional, supportive, or aspirational, their insights consistently aligned with these four interconnected dimensions. This prompted us to structure our findings using Te Whare Tapa Whā, which illuminated how whānau Māori evaluate housing not merely for shelter but for its ability to sustain whānau relationships, spiritual grounding, emotional ease, and physical accessibility. Participants' kōrero enriches the results described below. The first letter of a participant's pseudonym indicates their age group (A = under 30, K = 30–45 years, M = 46 and over). The tāne were Anaru, Kātene and Mikaere.

Results

Whānau Māori participants' kōrero on the potential of FAAB small homes is shared through a Te Whare Tapa Whā lens, with their insights speaking to the holistic nature of home as a site of whānau wellbeing—not just shelter, but a space for connection, care, identity, and futureproofing.

1. Whānau: Collective living, manaakitanga, and whanaungatanga

For participants, a home was first and foremost a place for whānau. Small homes were therefore seen as needing to support whānau living collectively, caring for mokopuna, and gathering together. The ability of whānau to enact manaakitanga, offering hospitality to extended whānau and visitors, was central.

> I feel like it's definitely the people that make a space home. Like this to me, like does it make me feel any way because I'm just looking at a layout in a house. Whereas it wouldn't be the stuff inside the house that made me happy, it will be the people and the memories and the experiences and the things that the house is capable of creating, rather than the house itself. Because I don't actually need a house to be happy, rather that I needed just a place for people. (Anahera)

> It's really important … whānau—whanaungatanga and manaakitanga. That's like the coming together of family, of our whānau. That's what I was raised on as well as that's what I saw. Actually, we might just put the sliding door here. Wouldn't that be cool to have the sliding door here? Just out and it's open. Then there's trees—beautiful. (Kowhai)

Several participants expressed concern that small dwellings would struggle to accommodate these whānau ways of living. Some, like Aroha, said a small dwelling was best suited for just a single occupant or a couple, although others like Anaru thought they could make it work if they really had to: "This will be my dream room till I have kids or something, dream house until I have kids, and then it will be dumb." Others described the unsuitability of a small dwelling for their multigenerational whānau. Marika, who lived with her three tamariki and eight mokopuna, said:

> I don't believe that the structure of tiny homes can accommodate that, and therefore it doesn't suit me. … I don't like the idea of being boxed in. As I said before, there isn't enough room. We're Māori. We think of whānau whānui, and that doesn't work for me.

At the same time, others saw potential in small homes as starter homes or transitional living spaces, particularly for smaller nuclear whānau or as part of a larger papakāinga: "Back home, we're looking at papakāinga too, but a lot of people can't build the big whares, but a tiny home is a good place to start" (Mei). Overall, participants did not define a home solely by its physical size but by its capacity to nurture whānau wellbeing.

2. Tinana: Functionality, accessibility, and comfort

Physical functionality and accessibility were seen as non-negotiable because small homes needed to accommodate whānau across life stages and abilities. Participants emphasised that a small home needed to be physically functional for diverse whānau needs, including accessibility for kaumātua, larger whānau members, and disabled whānau. Key functional features mentioned included step-free access (ramps, wide doorways), spacious bathrooms, flexible storage solutions, and internal layouts that enabled flow and avoided congestion.

> That's another thing I'd have to look at is the space. Can I fit down the [hallway]? Because we're voluptuous maidens ... My age is [also] a big factor at the moment because as I've gotten older, I've noticed that things aren't working the same as they used to 20 or 30 years ago ... So, that's the biggest obstacle at the moment. (Mei)

> I dislike how small the bathroom is. I wish it was bigger … It's not really accessible, it's not as accessible for me … [It] might be a bit small for getting around in a wheelchair when it's needed. (Anaru)

Designing for adaptability and the creative use of space were recurring themes. Participants balanced the importance of providing tamariki with their own space with realities of co-sleeping, multigenerational living, and the practicalities of making small spaces work for large whānau. Anahera commented:

> I feel like for the smaller one, having the one bed is fine. I grew up co-sleeping. I think it's very beneficial to wellbeing. I think that she could sleep in my bed well into her adolescence, that wouldn't be a problem. And there's so much space in this communal space that she could do so much with, rather than doing it in the bedroom, like she'll have this half and I'd have that half.

Participants who adapted the space to retain bedrooms talked about floating beds and bunk beds, pocket doors, and reducing the size of bedrooms so they could have more living space. They also described how open-plan living could support whanaungatanga, with spaces that could shift between intimate whānau use and larger gatherings. Kaia described this as "the whole marae effect".

> Well, we'd probably make our living space a bit more smaller just so that we can have tamariki in each room, that's kind of around the same length and width of ia rūma. (Kiri)

> On our left we have an open space of our kitchen, a nice island. I love island tables, I just feel like it gives it more of a family feel and I always love that ... We all could be sitting … having kōreros, noho tahi and, ki ahau, ko te mea nui i roto i taku whare he whakauru mai i te ao Māori … te ao Māori e kōrerorero, he whakawhanaunga, he noho tahi, he kai tahi, wērā momo mea. (Areta)

Participants also discussed cleanability and clutter, seeing small spaces as both an opportunity and a challenge. Kaia shared:

> Having a smaller space is easier to keep ... Being a single mum with three toddlers, even though they have a hundred toys, it's easier to maintain their toys in a smaller space than it is in a bigger space.

Warmth, energy efficiency and natural light were also critical considerations:

> Warm yeah. Like double-glazed windows is a must now. We have double-glazed windows. When you go from this to anywhere else it's cold. (Ana)

> So my design is based around a northern facing area ... You want the sun to be in your kitchen and living area and to a degree some bedrooms if you can because those are the living areas where people are most of the day and you don't wanna be sitting in a lounge or a kitchen facing south in the dark when that's your living area. (Kiri)

Even with the opportunity to reorganise internal spaces, some participants still viewed small homes

as only good for very small whānau. For example, Aria said, "They would work for individuals, like sole people, but not for little families." Overall, participants valued homes that could evolve with their whānau, balancing simplicity with practicality and accessibility.

3. Wairua: Connection to place, tūrangawaewae, and the whenua

The spiritual dimension of home was deeply felt in participants' kōrero about place. For many, aspirations to return to ancestral lands and establish papakāinga were central, even if, as in Karena's case, they were put off by whānau disagreements about the whenua. This was about being able to live on their own whenua.

> I would love to move back to [name of place] one day where I had a bit of growing up there. I've moved around so much but I just want a place where I can settle down now with my family, it's growing. We would love a papakāinga or just somewhere where we can always stay and have no worries. Have our gardens, our kai growing and animals. Yeah, and just feeling safe in our own whare and own whenua. (Adriane)

Like those thinking about papakāinga, other participants emphasised that beyond the house itself, surroundings, environment and community were vital for their wellbeing. For both Kaia and Kahukura, this was about living in a place they loved.

> Being in [name of place] and surrounded by the moana brings peace. Being in [there] amongst all of that freshness brings serenity. (Kaia)

> I love living in [name of place] ... Just like the community. I grew up here as a child, and I love how my kids are growing up here as children. It's not too far from the city. (Kahukura)

For urban whānau, connection to the whenua was often balanced with practicalities of mahi, schooling, and amenities. If moving to a small home meant moving to another suburb or city, they were less enthusiastic about it as an option.

> [The ideal] place to have this whare would be in [name of place]. Mahi and it's accessible, it's near to my home. (Areta)

> I think it's different now because the children are settled. They haven't moved. That's a barrier. I would love to move. I don't think I could. The barrier is knowing that my children are settled and safe. They've got their father's family not far. Their school is here and everything is very familiar. To actually up and leave that I suppose would be a hard thing to do. (Kowhai)

Living in an urban environment could also be about retaining some privacy and distance from neighbours, although Aria also described being drawn to return back to her rural homeplace:

> Not too close to my neighbours. There's big gaps between me and my neighbours. I wouldn't want to open my curtain and see my neighbour in their house, especially in my backyard. Area wise, no, I'm not really fussed.

Overall, participants saw housing as a site of identity, belonging, and security, reinforcing the need for design approaches that honour whakapapa and wairua.

4. Hinengaro: Emotional wellbeing, simplicity, and privacy

Participants reflected on the emotional dimensions of small home living, including how space impacts mental wellbeing, privacy and stress. Downsizing to a smaller home was often viewed positively, as a way to simplify life and focus on what mattered. For some, downsizing meant living without their children, although they still felt obliged to provide housing for them.

> I think a lot of us need to downsize anyway. Some of the stuff that we accumulate. (Karena)

> We're pretty much, yeah, like just being real minimal. That's the cool realistic. Trying to use natural resources where we can. (Mikaere)

Other participants who owned their own homes, like Adriane, were wanting to retain them as futureproofing for the next generation: "I'm not going to be around all the time and I want somewhere stable for them where they can feel at home and not have to worry about what they're going to do when they're older."

Participants also noted the potential of not having privacy in a small home, particularly if it was crowded or spaces had to be shared. Ana talked about the importance of their current whare providing for separation and privacy:

> Living with another family you don't really want to be in each other's face all day every day. So we

> can be down here and they can be up there, or vice-versa. We can still have some kind of separatism.

Some participants valued having designated quiet spaces within small homes for retreat and relaxation: "My space is just my own little sanctuary" (Makere).

Safety was a common theme, including fencing for tamariki, concerns about neighbourhoods, and the importance of feeling secure at home. Aroha, for example, did not feel safe in her recently renovated Kāinga Ora house as it had been broken into. For some, like Anaru, safety also had a cultural aspect whereby facilities should be separated, with the bathroom and laundry located away from living areas. Others, like Kātene, could see the practical sense of them being co-located:

> I do actually like the way that the kitchen is well away from the bathroom area, I do like that. It's blocked off by the hallway. (Anaru)

> The laundry and the bathroom is shared, eh? So, the laundry and the bathroom are all in the same place, which I think makes sense. I think because all that stuff's wet-related, so it makes sense to put it all in the bathroom/laundry area. (Kātene)

Overall, small homes were not inherently problematic for participants; rather, their success depended on thoughtful, whānau-centred design that reflected Māori values and ways of living.

Discussion

This study examined whether FAAB small homes can support the diverse and intergenerational needs of whānau Māori. Participants' kōrero revealed that a home is not just a shelter, but a space where cultural values, spiritual grounding, emotional safety, and collective wellbeing must coexist. The four dimensions of Te Whare Tapa Whā (Durie, 1985)—wairua, hinengaro, tinana, and whānau—provided a holistic frame for understanding what makes a small home viable and meaningful for Māori.

While small homes offer potential pathways to affordable and flexible living, their design must centre Māori values and lived realities to be viable long-term options. Housing for Māori should therefore be more than simply a dwelling; it should be responsive to occupants' cultural values, needs, priorities, and aspirations (Hadjiyanni, 2005). In other words, housing should allow and support whānau Māori to "maintain connections with their own cultural and organisational forms" (Habibis et al., 2013, p. 16). This call for culturally responsive housing is inclusive of, but so much more than, housing being available, affordable, accessible, and quality/habitable (Human Rights Commission, 2010, 2021).

Participants reaffirmed that, for Māori, home is a relational concept, inseparable from whānau, whakapapa, and place (Cram, 2020; Rewi & Higgins, 2015). Small homes that neglect the collective nature of Māori living—such as whānau whānui gatherings, care for tamariki and kaumātua, and hosting manuhiri—risk undermining their cultural appropriateness. This finding aligns with those of Habibis et al. (2013), who argue that housing must enable Indigenous families to maintain their own cultural and organisational forms.

At the same time, participants recognised small homes as potential stepping stones for rangatahi and single parents, or as components within larger papakāinga developments. This reflects emerging papakāinga models that integrate small dwellings with shared communal facilities, balancing affordability with cultural imperatives of whanaungatanga and manaakitanga (Campbell et al., 2022). Further research is needed about if and how small homes can be integrated effectively within papakāinga developments. This includes understanding governance models, shared communal infrastructure (kitchens, ablutions, gathering spaces), and how multiple small dwellings can collectively fulfil whānau living aspirations while addressing affordability and land use complexities.

Physical functionality and accessibility were non-negotiable for participants. Features like wide doorways, step-free entries, adaptable layouts, and spacious bathrooms were essential—particularly given the higher rates of disability among Māori across all life stages (King, 2019). These design elements, consistent with Lifemark Universal Design standards (James et al., 2018), are not luxury upgrades but core enablers of hauora. Participants also highlighted the importance of warmth, dry air, and energy efficiency—features fundamental to whānau wellbeing and equity yet too often treated as optional extras in mainstream housing (Howden-Chapman et al., 2022).

Wairua and connection to whenua were also recurring themes. For many participants, aspirations to return to ancestral lands were tempered by barriers such as fragmented land ownership, financing challenges, and bureaucratic processes. These challenges are well documented (Arbury & Cram, 2023) and reflect the enduring impacts of colonisation on Māori housing aspirations. Urban design that weaves te taiao, communal areas,

and Māori aesthetics into infill housing can also serve as a form of cultural reconnection. Whether rural or urban, the tūrangawaewae potential of small homes depends on their ability to uphold whakapapa, wairua, and collective identity. This aligns with Edwards's (2010) concept of the "home place" as less about shelter and more about cultural and genealogical ties that nurture identity and belonging. Papakāinga developments and urban infill projects that integrate green space, communal areas, and cultural design principles offer promising pathways for whānau to reconnect with their tūrangawaewae.

Participants' reflections on downsizing and minimalistic living were nuanced. While many embraced the opportunity to live simply and reduce material clutter, concerns about privacy, crowding, and emotional wellbeing were also voiced. The design of small homes must therefore balance open, communal spaces with areas that allow for solitude and retreat. Saunders's (1990) concept of ontological security is useful here—a home must provide more than shelter; it must be a site of psychological ease, where whānau can feel safe, in control, and at peace. For Māori, this includes being able to uphold manaakitanga, protect privacy, and maintain autonomy in everyday living. Participants' desire for flexibility—fold-out beds, modular storage, dual-use rooms—demonstrates the active shaping of space to sustain wellbeing. In this way, small homes must be understood not just as built forms but as living environments shaped by Māori values and lived experience. When homes allow whānau to feel secure, connected, and in control, they become vessels of mana motuhake.

Methodological considerations

The use of a Kaupapa Māori methodology was well aligned with the study's aims of centring Māori responses to small home living. Our whakawhanaungatanga approach built trust and allowed participants to talk about domestic and intimate living spaces and share their lived experiences. The hands-on design activities (floorplan puzzles, space planning, and reflection on video prompts) engaged participants in envisioning their own solutions.

Conclusion

Participants' kōrero, framed through Te Whare Tapa Whā, highlighted that a house is more than a shelter: it is a space that supports whānau connections, sustains wellbeing, and embodies whakapapa and wairua. The Kaupapa Māori methodology not only elicited these insights but demonstrated that whānau are experts in defining what home needs to be. Our conclusion from this study is that to transform small homes into meaningful, sustainable housing solutions for Māori, policy and design must move from consulting Māori to working alongside Māori as leaders in housing design.

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Glossary

hapū	subtribe
hauora	health, wellbeing
ia rūma	each room
iwi	tribe
kai	food
Kāinga Ora	Homes and Communities (government community housing provider)
kai tahi	eating together
kaitiaki	custodian, steward
karakia	prayer
kaumātua	elders
kaupapa	topic
Kaupapa Māori	a "by Māori, for Māori, with Māori" approach to research
koha	gift/s
kōrero	talk
kōreros, noho tahi and, ki ahau,	talking, sitting together, and, to me,
ko te mea nui i roto i taku whare	the most important thing in my home
he whakauru mai i te ao Māori …	is bringing the Māori world in …
te ao Māori e kōrerorero, he	the world of conversation,
whakawhanaunga, he noho tahi,	connection, being together,
he kai tahi, wērā momo mea	sharing food, and those kinds of things
mahi	work
mana	status, prestige
mana motuhake	self-determination
manaakitanga	hospitality, generosity
manuhiri	guests

Māori	Indigenous peoples of Aotearoa
marae	open area in front of a meeting house
mauri	life force
moana	ocean
mokopuna	grandchildren
papakāinga	village, home base
rangatahi	youth
rangatiratanga	self-determination, sovereignty
rohe	area, region
rūma	room (within a house)
taiao	natural environment
Tairāwhiti	region comprising the north-eastern corner of the North Island
tamariki	children
tāne	men
tangata whaikaha Māori	disabled Māori
te ao Māori	the Māori world
te taha hinengaro	the mental and emotional dimension
te taha tinana	the physical dimension
te taha wairua	the spiritual dimension
te taha whānau	the relational/family dimension
te Tiriti o Waitangi	the Treaty of Waitangi
tūpuna	ancestors
tūrangawaewae	place to stand
wāhine	women
wairua	spiritual essence
whakapapa	genealogy
whakataukī	traditional saying/s
whakawhanaungatanga	process of establishing relationships
whānau	extended family
whānau whānui	relations
whanaungatanga	relationship, kinship
whare	house
whenua	land
whenua tūpuna	ancestral land

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PRISONER VOTING RIGHTS AND WĀHINE MĀORI

An exploration of the relationship between wāhine Māori and the state

*Ella Morgan**

Abstract

In 2010, the passing of the Electoral (Disqualification of Sentenced Prisoners) Amendment Act removed voting rights for all prisoners, regardless of sentence length. A decade later, prisoners serving sentences of less than three years were re-enfranchised. Research and public discourse have highlighted the disproportionate effects of prisoner disenfranchisement for Māori, given persistent overrepresentation of Māori in prison. However, less attention has focused on the specific effects of disenfranchisement for wāhine Māori in prison. This article adopts Māori-centred and Mana Wahine lenses to analyse (1) the content of semi-structured interviews with two key informants and (2) parliamentary readings of the 2010 Electoral (Disqualification of Sentenced Prisoners) Amendment Bill and 2020 Electoral (Registration of Sentenced Prisoners) Amendment Bill. It explores how 21st-century prisoner disenfranchisement has uniquely impacted wāhine Māori and reflects broader patterns regarding marginalisation of wāhine by the state. Ultimately, disenfranchisement of wāhine contributes further to their marginalisation and has widespread effects on whānau Māori, and policy has failed to consider the experiences of wāhine Māori.

Keywords

Mana Wahine, Māori, prisoner disenfranchisement, wāhine Māori

Introduction

Over time, colonisation has had ongoing effects for wāhine Māori. Wāhine Māori have experienced a drastic change in social position due to the effects of sexism, racism, and the imposition of Pākehā social values, underpinned by the dynamics of several intersecting systems such as colonisation, patriarchy, white supremacy, Christianity, and the dominance of Eurocentric political and legal systems in Aotearoa New Zealand. Wāhine Māori are now severely overrepresented in the Aotearoa women's prison population. Despite Māori constituting only 17.1% of the general population, Māori make up 52.6% of all prisoners (Department of Corrections, 2025; Stats NZ, 2024). In the women's prison population, this figure is over 60%, highlighting an alarming inequity (Office of the Inspectorate, 2021). While a persistent

* Ngāti Wehi Wehi, Ngāti Raukawa, Ngāti Tukorehe. PhD Candidate, Te Herenga Waka—Victoria University of Wellington, Wellington, New Zealand. Email: ella.morgan@vuw.ac.nz

overrepresentation of wāhine Māori exists, an intersectional analysis is largely absent from state understandings (Quince, 2010). This absence is reflected across justice policy, where the specific cultural and gender-related needs of wāhine Māori are not met (Office of the Inspectorate, 2021).

A similar invisibility of wāhine Māori is observed regarding prisoner voting rights policies. Policies of prisoner disenfranchisement in Aotearoa can be linked back to the English concept of "civil death", in which offending is considered punishable by deprivation of voting rights (Pereira, 2008). Disenfranchisement of prisoners through laws barring them from registering to vote has long been the status quo in Aotearoa (Gavey, 2014). However, 2010 saw the first major legislative change to prisoner voting rights since 1993 (Geddis, 2011). The passing of the 2010 Electoral (Disqualification of Sentenced Prisoners) Amendment Act saw a shift from disenfranchisement of prisoners serving prison sentences of three years or longer to blanket disenfranchisement of all prisoners (Geddis, 2011). A decade later, however, the 2020 Electoral (Registration of Sentenced Prisoners) Amendment Act re-enfranchised prisoners serving sentences less than three years (New Zealand Law Society, 2020). In the same year, a Waitangi Tribunal (2020) report on Māori prisoners' voting rights drew attention to the disproportionate impact that voting disqualification has on Māori.

Compared with non-Māori, Māori were 11.4 times more likely to be removed from the electoral roll in 2018 (Waitangi Tribunal, 2020). However, how this has distinctly affected wāhine Māori remains largely unexplored. State discourses fail to recognise the unique experiences of wāhine Māori, and how they are affected by policy in different ways to tāne Māori and Pākehā women. Additionally, there is an absence of research and public attention in this area. Given that men constitute a large majority of prisoners in Aotearoa and globally, policies that address those in prison are often constructed around colonial, patriarchal, and heteronormative norms (Adelberg & Currie, 1987; Department of Corrections, 2021).

This article uses Māori-centred and Mana Wahine lenses to argue that wāhine Māori are impacted by prisoner disenfranchisement in ways that cannot be explained by the current literature on prisoner voting rights. State framing has marginalised the voices and experiences of wāhine Māori, and this theme is reflected in policy. The roles of wāhine Māori as central pillars of whānau and intergenerational knowledge bearers are left unacknowledged by the state in prisoner voting rights policies. This works to reinforce the ongoing invisibility of wāhine Māori.

The marginalisation of wāhine Māori

Gender relations within te ao Māori can be generally characterised by balance and complementarity (Cadigan, 2012). All people form important parts of the collective group, taking on responsibilities that allow communities to function and thrive (Cadigan, 2012). Wāhine Māori and tāne Māori have traditionally been considered complementary to each other, and the roles of both are respected as important parts of the collective whole (Jahnke, 2019; Mikaere, 1994).

The inherent value of wāhine within Māori ways of thinking and being can be seen within spiritual narratives, where wāhine represent powerful figures with large influence over the world. Atua wāhine are often present in multiple forms of Māori storytelling, demonstrating the centrality of women (Yates-Smith, 2003). Whenua is referred to as Papatūānuku, the Earth Mother, who is a central figure in Māori spirituality (Royal, 2007). The word "whenua" can also refer to the placenta, reflecting the belief that all life comes from the womb of Papatūānuku (Royal, 2007). Ultimately, these representations echo the importance of wāhine Māori within Māori knowledge systems.

Crown actions over time have resulted in the marginalisation and subordination of wāhine Māori. Though various definitions of marginalisation exist, it can broadly be understood as a process where the privileging of a dominant group in society occurs, and other groups are socially excluded and pushed to the margins (Hall, 1999; Hall et al., 1994). The marginalised group is constructed as the socially subordinate "other" to the dominant group, and as non-conforming to the dominant group's norms (Foucault, 1961/1964). The position of wāhine Māori pre-colonisation differed drastically from British assumptions about women's roles; wāhine Māori assumed significant positions of power, holding complementary roles to those of men (Mikaere, 1994). Wāhine served as spiritual leaders, military strategists, and central political figures (Mikaere, 1994). The introduction of British values underpinned by systems of colonialism, patriarchy, white supremacy, and Christianity undermined the position of wāhine Māori, and dispossession from land and processes of urbanisation were destructive to the whānau unit, shifting power into the hands of men (Mikaere, 1994). Over time, various state practices created barriers to wāhine Māori representation within institutions of power. Despite this, wāhine Māori

have continually worked to make their voice heard throughout history and have been at the forefront of various social movements (Mikaere, 1994; Waitere & Johnston, 2009).

Methodologies and methods

Kaupapa Māori research

This research employs elements of a Kaupapa Māori research methodology. Kaupapa Māori research is predicated on Māori values and knowledge, and is concerned with "the struggle for autonomy over our own cultural well-being" (G. H. Smith, 1992, p. 3). It is research that is "by Māori, for Māori and with Māori", in which Māori control the design of research (L. T. Smith, 2015, p. 47). This present study was conducted by a Māori student and supervised by a Māori supervisor, with Māori participants serving as sources of knowledge. However, these factors are not enough to categorise this research as Kaupapa Māori research. Rather, this study is more accurately labelled "Māori-centred" because it aims to produce "research that is primarily of benefit to the Māori community and for which the researcher is primarily accountable to that community" and incorporates elements of Kaupapa Māori research (Cram, 1997).

Mana Wahine

This research examines an issue of importance for Māori, and investigates the relationship between wāhine Māori and the state. Therefore, this research is important for wāhine Māori and incorporates elements of Mana Wahine. Mana Wahine "explicitly examines the intersection of being Māori and female" (Simmonds, 2011, p. 11) and differs from intersectionality as it represents "an extension of Kaupapa Māori theory" (p. 11) that validates both Māori knowledges and the knowledges of wāhine Māori. Mana Wahine seeks to centre the experiences of wāhine Māori and define the position of wāhine Māori in their own words (Pihama, 2001; Simmonds, 2011).

A Mana Wāhine lens is utilised within this research to deconstruct the relationship between wāhine Māori and the state, and to examine how wāhine Māori are affected by prisoner voting rights policies. In order to understand the implications of the removal of voting rights for wāhine Māori in prison, ideally wāhine Māori with experiences of incarceration and disenfranchisement would be interviewed. This would align with a Mana Wahine approach; the narratives and experiences of wāhine Māori should be central in Mana Wahine research (Pihama, 2001; Simmonds, 2011). However, because this project was conducted as part of a master's thesis, it was determined the logistical and ethical matters associated with either interviewing women in prison or finding women with experiences of prison would be too large. Wāhine Māori with specialised expertise on the incarceration of wāhine Māori were therefore included in this research as interview participants, serving as sources of knowledge.

Interviews with key informants

Originally, five semi-structured interviews with key informants who had experience and knowledge in the areas of wāhine Māori in prison and/or Māori women's political participation were planned for August–September 2021. In August 2021, the country entered a nationwide lockdown due to the COVID-19 pandemic, and Auckland ultimately ended up in various stages of lockdown for over three months. Interviews were originally intended to be held kanohi ki te kanohi; however, due to the lockdown interviews were held online via Zoom. Interviews were chosen as a data collection method due to the paucity of existing research on this topic.

Over 25 potential participants were invited to participate in the project; however, only two interviews, which lasted between 45 and 50 minutes, were ultimately conducted. It is likely that this can be attributed to challenges related to the COVID-19 pandemic and its flow-on effects, meaning that many potential participants may not have had the available time to commit to an interview.

The two interview participants were Professor Tracey McIntosh (Ngāi Tūhoe), MNZM, who has expertise regarding the incarceration of Māori, Indigenous peoples, and Māori women and girls; and Professor Khylee Quince (Ngāpuhi, Te Roroa, Ngāti Porou, Ngāti Kahungunu), who has expertise in criminal law and Māori legal issues. The research project received ethical approval by the University of Auckland Human Participants Ethics Committee on 28 July 2021 (reference UAHPEC23047).

Analysis of parliamentary bill readings

Parliamentary readings of the 2010 Electoral (Disqualification of Sentenced Prisoners) Amendment Bill and the 2020 Electoral (Registration of Sentenced Prisoners) Amendment Bill were obtained from the New Zealand Parliament website. These were included in the data to be analysed as they reflect the views of parliamentarians, as actors of the state, on issues of prisoner voting rights.

Thematic analysis of the data

Braun and Clarke's (2013) reflexive thematic analysis was used in order to analyse the readings of both the 2010 and 2020 bills and key informant interviews. This approach involves coding the data, grouping of codes into themes, and then developing themes and subthemes.

Findings

Implications of disenfranchisement on whānau and knowledge transmission

One key impact of prisoner disenfranchisement for Māori is the effect on the intergenerational transfer of knowledge. Wāhine have long been central to the transferral of knowledge between generations. George et al. (2019) state that wāhine Māori can be seen as pou tokomanawa of their whānau, role models, teachers, and nurturers. Similarly, Ruwhiu (2009) emphasises the important role of wāhine Māori as "whare tangata (procreators) and as whare mātauranga (repositories of knowledge)" within iwi, hapū, and whānau, stating that over time wāhine Māori have passed knowledge down through generations in a multitude of ways as primary carers of children (p. 2). Interview participant Tracey McIntosh, in speaking about the role that wāhine Māori play in their whānau and communities, noted:

> We look at the intergenerational transfer of knowledge, of wealth in the broader sense of understanding wealth, we see how significant women are ... Women play an important role in terms of that intergenerational transfer, both of things that are very positive and of things that are very negative.

Wāhine Māori have always held an important role as mothers, nurturers, and creators (Yates-Smith, 2003). This role can be traced back to Papatūānuku, from which all life originates (Yates-Smith, 2003). Interview participant Khylee Quince highlighted some of the roles of wāhine Māori in te ao Māori as being "te whare tangata, the protectors of whakapapa, the protectors of tamariki and rangatahi Māori, protectors of mātauranga Māori", reinforcing the centrality of wāhine Māori to whānau.

The Waitangi Tribunal's (2020) investigation into Māori prisoner voting rights found that prisoner disqualification likely had ripple effects for an individual's whānau and communities. For imprisoned wāhine Māori, this effect may be amplified. Voting behaviour research has identified that turnout is heavily influenced by family, and that voting or non-voting often occurs across family groups (Akee et al., 2018; Glaser, 1959). Voting is also considered a habit-forming behaviour, and participation in voting, especially at a young age, is likely to predict future participation (Cutts et al., 2009; Dinas, 2012; Gerber et al., 2003). International literature also finds that disenfranchisement can feed further non-voting in a disenfranchised person's family and social networks (McLeod et al., 2003; Verba et al., 1995; White, 2019). Given the effect of all these factors on voting behaviour, and the centrality of wāhine Māori in the whānau, it is likely that disenfranchisement of wāhine Māori has effects on voting beyond the incarcerated woman herself. As McIntosh alluded to above, wāhine Māori play a central role in the transmission of both positive and negative elements. The removal of the vote is yet another marker of wider exclusion from mainstream society that wāhine Māori face in prison, a pattern which has the potential to be transferred to others within a woman's whānau and community. However, wāhine Māori have significant impacts on those around them, which presents a potential to use enfranchisement as means of increasing voter turnout, not only for incarcerated wāhine, but also for whānau Māori.

Further marginalisation through disenfranchisement

When assessing the impact of disenfranchisement for wāhine in prison, it is important to note that wāhine Māori in prison often come from experiences of extreme disadvantage and marginalisation. The interview participants both highlighted that enrolling on the electoral roll and voting are not likely to be priorities for wāhine Māori in prison due to disconnection and marginalisation. By removing voting rights from those already marginalised, this serves to deepen this disconnection, producing further marginalisation.

In Aotearoa, disenfranchisement has traditionally been premised on a social contractarian argument—that offending is essentially a violation of the social contract and that disenfranchisement is a consequence of this. However, if an imprisoned woman is already experiencing disadvantage or marginalisation, it may be questioned whether the removal of voting rights has any relevance as a consequence. McIntosh stated:

> When you disenfranchise it usually is just an indicator, or even a symbolic marker, of far greater levels of disenfranchisement. The vast majority of women that I work with would not be on the electoral roll. And so that would be when they're

> on the outside. The loss of connection, the loss of the sense that this would make any difference in your life at all.

McIntosh suggested that actions of civic engagement such as voting are likely absent from the lives of wāhine Māori in prison due to coming "under much higher levels of surveillance and securitization than other people":

> They don't want to be on anything. All of their interactions with the state have shown them that when the state knows about them, things go badly for them ... I think it speaks to when you're under that level of scrutiny and surveillance by the state, the electoral roll, you'd rather be off every roll.

Galicki (2018) similarly found that the costs of voting for individuals from lower socioeconomic groups, young voters, and migrants in Aotearoa were more often intangible and psychological costs. These concerns were often shaped by negative experiences of the state (Galicki, 2018). Wāhine Māori have been severely impacted by state actions, which have included disruption to Māori social organisation and the whānau unit, over-policing and surveillance of their communities, the disproportionate uplift of tamariki Māori by the state, and abuse in state care (Mayron, 2021; Mikaere, 1994; Savage et al., 2021; Te Whaiti & Roguski, 1998). These experiences may feed into mistrust of the state, subsequently causing enrolment and voting to be perceived negatively.

Easton (2009) argues that the right to vote is especially important for prisoners in the symbolic and rehabilitative senses. The act of voting reinforces that the voter has a political voice, promotes social inclusion, and acts as an important symbolic marker of citizenship (Easton, 2009). Conversely, exclusion from voting further marginalises prisoners from public consciousness (Easton, 2009). Geddis (2011) showed how the removal of voting rights reflects the assumption that a prisoner is excluded from the social contract while in prison, an assumption that is at odds with rehabilitative purposes of imprisonment. For wāhine Māori in prison, who have likely already experienced marginalisation, disenfranchisement may have significant symbolic meaning. The removal of the right to vote may denote further social exclusion of imprisoned wāhine Māori, reproducing the effects of colonisation for wāhine Māori, such as systemic marginalisation and exclusion.

Barriers to re-enrolment on the electoral roll

Many women in prison are mothers to children. The Office of the Inspectorate (2021), which is part of the Department of Corrections and works to ensure that all prisoners are treated in a way that is fair, safe, secure, and humane, has estimated that approximately 29% of women in Aotearoa prisons in 2013 had a direct parenting role prior to entering prison. However, "this is likely to underestimate the number of children women are concerned with" (p. 15), suggesting a much wider network of maternal and caregiving responsibilities.

A long-term overrepresentation of wāhine Māori in prison persists, with wāhine Māori recently making up more than 60% of the total women's prison population, which currently sits at 849 (Department of Corrections, 2026). Meanwhile, the Ministry of Justice (2026) recently reported that wāhine Māori make up 71% of women sentenced to imprisonment. In her landmark study *Invisible Children*, Gordon (2009) found that 87% of women prisoners had children. Given that the majority of these are wāhine Māori, this figure is particularly concerning for whānau. The Office of the Inspectorate (2021) found that "connections with family and whānau heavily influenced women's lives in prison" (p. 4).

Many women continue to manage households while serving their sentence in prison (Office of the Inspectorate, 2021). This factor is not unique to Aotearoa, with global literature on imprisoned women aligning with this finding (see, e.g., Chamberlen, 2018; Mies, 2014). Additionally, organising childcare upon entry into prison has been identified as a significant cause of stress for imprisoned women (Office of the Inspectorate, 2021). In her interview, Quince emphasised the differences between men and women's experiences of prison, and the management of their outside households:

> One of the major distinctions between the way men serve their prison sentences and women serve their prison sentences, is that men serve their prison sentences and the women on the outside maintain their lives for them … For women, they lose everything. They lose the children, the man pisses off, so they lose their tenancy, they lose their address, the children go off to Oranga Tamariki [New Zealand Ministry for Children] or a whānau placement … So the impact of imprisonment is more impactful and serious for women than it is for men, no matter what colour they are, because they lose everything. So their priorities, it's going

> to be easier for a man, he'll go back [out of prison] and he'll have everything still lined up for him, he will have visits during his term of imprisonment, women do not. So he could have space in that for thinking about things like registering to vote, whereas women, literally the first thing they do is they have to and sort out MSD [Ministry of Social Development] and Oranga Tamariki.

Quince highlights here how women may face unique stressors during their prison sentences and post-release. A study of women in Aotearoa who served sentences in prison and then went on to reoffend similarly found that the unique pressures they face upon release can affect their likelihood of reoffending (Bevan & Wehipeihana, 2015). These include economic pressure; a lack of pro-social support networks and services in the communities that women return to post-release; and relationship pressures that may lead to offending with, or to provide for, partners and whānau (Bevan & Wehipeihana, 2015). Notably, identity played a key role in reoffending; gender identity is heavily tied to their relationships as partners and mothers, and women often prioritise the needs of others regardless of the detrimental personal effects it may have (Bevan & Wehipeihana, 2015).

In its investigation into the voting of Māori prisoners, the Waitangi Tribunal (2020) found that the "overwhelming nature of prison release" served as a barrier to re-enrolment on the electoral roll (p. 22). Organising employment, accommodation, and financial support is likely to be prioritised above re-enrolment immediately post-release (Waitangi Tribunal, 2020). Another potential barrier is the lack of a long-term address, as an address needs to be provided in order to re-enrol (Waitangi Tribunal, 2020).

Given that men and women generally have vastly different experiences of imprisonment and release, it is likely that disenfranchisement will have unique consequences for women. Additionally, other obligations that all prisoners must fulfil upon release, such as securing accommodation and employment, organising finances, and reconnecting with whānau, may make the task of re-enrolling less of a priority (Waitangi Tribunal, 2020). This effect may be more pronounced for wāhine Māori, who may be concerned with whānau and tamariki post-release.

Policy construction around male norms

In regard to justice, state policies are often constructed around colonial, patriarchal, and heteronormative norms. Men make up the overwhelming majority of criminalised people internationally and in Aotearoa (Adelberg & Currie, 1987; Quince, 2010). As a result, women are often considered "too few to count" within justice policy and overlooked (Adelberg & Currie, 1987). The ongoing marginalisation of wāhine Māori by the state has led to wāhine Māori being largely invisible in both justice policy and policies that affect prisoner voting rights.

In her interview, Quince echoed the concept of women offenders being too few to count, and noted that wāhine Māori are a "subset of that subset". Justice systems around the world are necessarily focused on addressing male offenders and are designed around male norms (Adelberg & Currie, 1987), meaning they fail to fully accommodate the needs of imprisoned women.

In its Women's Strategy 2017–2021, the Department of Corrections (2021) acknowledged that women in prison have unique experiences leading to offending and imprisonment that differ from those of men. It also acknowledged that the specific needs of women, and in particular wāhine Māori, in Aotearoa prisons have not been adequately met. While the Department of Corrections has in recent times worked to develop more culturally specific support for Māori generally in prison, in the past two decades such support has been lacking for wāhine Māori as the provision of Māori Focus Units, for example, has often been limited to men's prisons (Department of Corrections, n.d., 2021).

Additionally, treatment of wāhine in the care of the Department of Corrections has disregarded the inherent mana and tapu of wāhine Māori. Up until a policy change in 2021, in some cases women prisoners were handcuffed while giving birth, ignoring the importance and respect that should be shown to wāhine as te whare tangata in accordance with Māori understandings of gender (Johnsen, 2021).

Analysis of parliamentary readings of the 2010 Electoral (Disqualification of Sentenced Prisoners) Amendment Bill and the 2020 Electoral (Registration of Sentenced Prisoners) Amendment Bill demonstrates how prisoners are often represented as both male and Māori. The occurrence of gendered language when discussing those that would be enfranchised or disenfranchised was high; in many instances male pronouns and descriptors were exclusively used. Such discussion, which was common in the readings of both bills, characterises those affected by prisoner voting rights as solely male, and reflects the male focus in prison-related policy.

The construction of policy around male Māori norms is also reflected further by the use of anecdotal tales of criminal offending by MPs from both the National and the Labour Parties in readings of the 2020 bill. Narratives of criminal offending almost always involved a male Māori perpetrator. While the stories told reflect the lived experience of individuals who have been to prison, and these experiences should not be invalidated, there was an absence of any mention of the experiences of wāhine Māori, or the experiences of women in prison at all, reflecting the male-focused nature of state discourses regarding justice and imprisonment.

Quince highlighted in her interview how prisoner voting rights policies reflect a reinforcement of the invisibility of wāhine Māori in state responses to offending and incarceration:

> The voting right framework, is it a reflection of general Crown responses, and characterization of wāhine Māori generally ... This is a study in intersectionality, that wāhine Māori are characterised, as all minority women are, as not men and not white women … Crown policy tends to be constructed around male-ness or Pākehā-ness, which means that we are never accounted for. Whether you're talking about welfare policy, education, health housing, you name it, there will be a general policy, and then there will be an add-on for Māori, but there's hardly ever an add-on for women and there's hardly ever an add-on for wāhine Māori. And yet, neither of those big categories account for the position and life experiences of wāhine Māori.

The absence of discussion of wāhine Māori as a group affected by changes to prisoner voting rights, as well as the focus on offenders as Māori and male, once again mirrors the state's framing of wāhine Māori.

State focus on individualism

This research argues that one effect of the disenfranchisement of wāhine Māori in prison may be broader disenfranchisement of whānau Māori. The state frames voting rights as an individual concern, and disenfranchisement as a result of violation of social contract, which further disregards the roles wāhine Māori fulfil. The individualisation of the importance of voting rights fails to recognise the ripple effects that the disenfranchisement of any prisoner, but particularly wāhine Māori prisoners, has for the whānau of the imprisoned person.

In her interview, McIntosh highlighted how in many instances the state now recognises the impacts of colonisation on wāhine Māori, but responses have not adequately addressed those impacts and have been framed in individualist ways:

> One of the real issues, and I think we see that with all state policy, is that you constantly individualise the issues ... I think people recognise the impact, they might not recognise the disproportionate impact. But that largely, is constantly then moved into, how do you support this woman, that woman, rather than thinking about the types of strategies and policies that you need to have in place that will collectively work to restore the mana of women within the broader society.

Essentially, policies that attempt to address issues with an individual focus have failed to address the collective experiences of wāhine Māori. Analysis of readings of the 2010 and 2020 bills shows a focus on imprisonment and disenfranchisement as an individual issue, related to individual rights. In the second reading of the 2010 Electoral (Disqualification of Sentenced Prisoners) Amendment Bill, for example, former National MP Jo Goodhew stated:

> This bill makes it clear that our democratic rights as citizens include obligations to obey the law. People who break the law and are sentenced to prison have not met those obligations, and while they are in prison they should lose their right to vote. (New Zealand Parliament, 2010)

Such rhetoric, which was continually present in readings of both bills, links back to the concept of civil death, in which perceived breaches of the social contract through offending are punishable by removal of the voting right (Pereira, 2008). These arguments individualise actions and experiences such as offending, incarceration, and voting. This framing is problematic for a number of reasons. First, it is reminiscent of explanations of criminal behaviour as related to individual pathology. A clear pattern of the individualisation of Māori offending has been observed in the 21st century, with successive governments suggesting that high rates of Māori offending can be explained by the high prevalence of social and environmental "risk factors" in the lives of offenders (Department of Corrections, 2007; Doone, 2000). Such approaches fail to recognise that the overrepresentation of Māori in some social indicators is heavily related to how colonisation has ongoing destructive effects for the whānau unit, including

dispossession of Māori from their whenua and economic base (Mihaere, 2015; Mikaere, 1994; Stanley & Mihaere, 2018). In readings of the 2020 bill that re-enfranchised those sentenced to less than three years in prison, a key argument of those opposing was the need for social investment in the lives of those at risk of offending, rather than enfranchisement of those in prison, reflecting once again an approach that individualises the causes of offending. In one example, National MP Dan Bidois stated his opposition to the 2020 bill thus:

> Another aspect of the debate that's raised is around how we can help Māori. Well, how we can help Māori that are in our prison system is to teach them not to offend in the first place ... We've got to keep these Māori in education, training, or employment to give them a sense of a better life, a life without crime, a life without breaking law, and that is the way we will keep these people out of our prison systems. (New Zealand Parliament, 2020b)

Such an approach not only frames the causes and consequences of offending for the offender as an individual concern but also disregards the importance of wāhine Māori in the context of their whānau and communities. This article has highlighted how the effects of incarceration and disenfranchisement are not limited to the individual.

Parliamentary readings of the 2010 and 2020 bills show little consideration of the effects of the removal of prisoner voting rights for the whānau of those in prison, and an absence of any consideration of the important roles that wāhine Māori play. One of the only mentions of potential effects of prisoner voting rights on whānau came from Green Party co-leader Marama Davidson in regard to the 2020 bill:

> When we distance and further diminish and further dehumanise people in prisons, we are not just distancing them; we are distancing their whānau who are living in our communities today. We are sending a strong message, not just to that person in prison but to that whole whānau, that their life too is worthy of being dehumanised, is worthy of not having access to engage in democracy. (New Zealand Parliament, 2020a)

Beyond this, effects of disenfranchisement on whānau were absent from readings of the 2010 and 2020 bills. Additionally, no consideration of the significant role that wāhine Māori play as bearers of knowledge was evident. This reflects a general tendency by the state to disregard the important roles that wāhine Māori take on in their whānau and communities.

Looking to the future

Very limited research exists that focuses specifically on wāhine Māori regarding prisoner voting rights in Aotearoa, and so further research is needed in order to develop a more in-depth understanding of this issue. However, the findings of this article serve as a starting point for further discussion. Overall, the invisibility of wāhine Māori in state discourses surrounding prisoner voting rights highlights a need to ensure that the future effects of policy for wāhine Māori specifically are considered. Future policy and initiatives that target prisoner voting rights need to take into account the broader context of the lives of wāhine Māori before, during, and after their sentence. Wāhine Māori may face considerable barriers to enrolling on the electoral roll and voting in elections, and so more work is needed to understand their needs and experiences. Additionally, it has been well-established by several Māori scholars that Kaupapa Māori approaches can effectively tackle issues that impact Māori, as these approaches are better placed to understand and meet the needs of Māori (Jackson, 1988; L. T. Smith, 2012). Development of prisoner voting rights initiatives, such as civics education within prisons, that are by Māori, for Māori is an area that should be explored further.

Conclusion

Wāhine Māori occupy a unique position that can be better understood through examining how multiple intersecting factors such as colonisation, disruption of Māori social organisation, and the imposition of Pākehā values related to gender have impacted them. The way in which prisoner voting rights policies affect wāhine Māori cannot be understood through male-focused or Pākehā-centric analyses of prisoner disenfranchisement, but these are the analyses that have dominated state discourses relating to all prisoners. This fact reflects the ongoing ignoring of wāhine Māori by the state, which is a hallmark of the relationship between wāhine Māori and the state. In order to meet the needs of wāhine Māori in prison and effectively enable their participation in state politics, an explicit focus on wāhine Māori in relation to the prisoner voting rights issue is necessary, and further research and discussion is needed in this area.

Glossary

Aotearoa	Māori name for New Zealand; lit. "land of the long white cloud"
atua wāhine	female deities
hapū	subtribe
iwi	iwi
kanohi ki te kanohi	face to face
Kaupapa Māori	research and practice grounded in Māori principles and te ao Māori
mana	inherent status and sacred authority
Mana Wahine	extension of Kaupapa Māori theory centring women's agency and status
Māori	Indigenous peoples of Aotearoa New Zealand
mātauranga Māori	Māori knowledge
Pākehā	New Zealanders of European descent
Papatūānuku	Earth Mother
pou tokomanawa	centre pole supporting the ridge pole of a meeting house
rangatahi	young people, youth
tamariki	children
tāne	men
tapu	inherent sanctity and inviolability (of wāhine)
te ao Māori	the Māori worldview
te whare tangata	the womb; lit. "the house of humanity"
wāhine	women
whakapapa	genealogy; layered relational ordering connecting people, land, and entities
whānau	family; collective group connected through relationships and purpose
whenua	land

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TOWARDS DESTIGMATISING GAMBLING HARMS IN AOTEAROA NEW ZEALAND

*Christine Ngā Hau Elers**
Emma Tibble-Gotz†
Alyrra Aron‡
Vanessa Hammond§

Abstract

This narrative review examines the intersection of gambling harms and stigma among Māori, Pacific peoples, Asian communities and youth in Aotearoa New Zealand. The literature shows that stigma is shaped less by individual behaviour than by structural factors such as colonisation, socio-economic inequities, migration pressures and the concentration of pokies in low-income communities. We identify how stigma is experienced within each population and how it influences help-seeking, highlighting the central role of identity, cultural obligations and collective wellbeing. The review synthesises culturally grounded strategies for destigmatisation and emphasises the importance of community-led approaches by lived experience. A key finding is the uneven distribution of research across priority populations: Māori receive the least contemporary research despite experiencing the highest rates of gambling harm. By weaving these insights together, the review informs the development of equitable, culturally aligned initiatives to reduce gambling harm in Aotearoa.

Keywords

Aotearoa New Zealand, Asian, gambling harms, Māori, Pacific, stigma and destigmatisation, youth

Introduction

In 2020, approximately 65,000 people aged 16 years and over were at moderate or high risk of experiencing gambling harms in Aotearoa New Zealand (Te Hiringa Hauora, 2020). An additional 119,000 people were at low risk but would experience gambling harms during their lifetimes, and approximately 183,000 adults

* Ngāti Kauwhata, Ngāti Raukawa, Ngāti Hauā, Ngāti Hīkairo, Ngāti Maniapoto, Rangitāne me Ngāti Kahungunu ki Wairarapa, Kai Tahu. Senior Researcher, Health Promotion, National Public Health Service, Health NZ | Te Whatu Ora, Aotearoa New Zealand. Email: christine.elers@tewhatuora.govt.nz
† Ngāti Whakaue, Te Whānau-ā-Apanui, Ngāti Porou, Ngāti Tuwharetoa. Research Assistant, Health Promotion, National Public Health Service, Health New Zealand | Te Whatu Ora, Aotearoa New Zealand.
‡ Researcher, Health Promotion, National Public Health Service, Health New Zealand | Te Whatu Ora, Aotearoa New Zealand.
§ Senior Analyst, Health Promotion, National Public Health Service, Health New Zealand | Te Whatu Ora, Aotearoa New Zealand.

experienced second-hand gambling harms in the wider family or household. Non-casino gambling machines (pokies) are the most harmful modes of gambling. Although there has been a decline in licensed pokie venues and pokie machines since the late 1990s, total gambling expenditure (i.e., player losses) continues to increase. The highest recorded annual total gambling expenditure was $2.624 billion for pokies, Lotto, TAB NZ and casinos in 2020–2021 (Ministry of Health, 2022).

Māori, Pacific peoples, Asian communities and youth (the priority populations for this research) are disproportionately impacted by gambling harms (Ministry of Health, 2022). Māori and Pacific peoples face systemic barriers that contribute to elevated levels of vulnerability to gambling-related harms. Historical injustices, socio-economic disparities, limited access to resources and cultural marginalisation are among the factors exacerbating the prevalence of gambling harms (Rockloff et al., 2021). Pokies are highly concentrated in lower socio-economic areas, where many Māori and Pacific peoples live (Palmer, 2014).

The current study

This article contributes a unique analysis of gambling harm stigma by bringing together, for the first time, literature across Māori, Pacific, Asian and youth populations in Aotearoa. While prior studies have examined groups largely in isolation, this review intentionally reads across populations to identify shared structural drivers of stigma and the relational ways harm is experienced and responded to. A central contribution of this paper is making visible inequities in the research landscape itself. Despite experiencing the highest rates of gambling harm, Māori have received the least contemporary research investment, constraining the development of culturally aligned responses. Similar gaps are evident within Pacific and Asian research, where some ethnic groups dominate the evidence base while others remain under-represented, and where youth perspectives are often embedded within broader adult analyses. By weaving together lived experience, Indigenous knowledge systems and public health literature, this review extends existing scholarship beyond description to identify new directions for equitable, culturally grounded destigmatisation initiatives in Aotearoa.

While the priority populations examined were predetermined through national commissioning frameworks, this review contributes a cross-population analysis that makes visible shared structural drivers of stigma and inequities in the research landscape itself.

This narrative literature review therefore synthesises published literature to understand how stigma is perceived in the context of gambling harms among the priority populations and its effects on help-seeking. We also examine the strategies used to reduce stigma for each priority population, with the intention of informing future destigmatisation initiatives. A thematic analysis is presented for each population group, supported by tables summarising key characteristics of the included studies.

Methods and reflexive positioning

The priority populations examined in this review (Māori, Pacific peoples, Asian communities and youth) were predetermined through national commissioning and policy settings. Our role was not to define priority populations, but to critically examine how stigma and gambling harm are understood, researched and addressed within and across these groups.

Our research team comprises two Māori authors (one of whom identified as youth at the time of writing), one Asian author and one European author, each bringing different cultural standpoints, lived experiences and professional commitments to this work. These positionalities shape how we interpret stigma, equity and help-seeking and how we attend to power, voice and representation within the literature. While we have proximity to some of the communities discussed, we also acknowledge distance and heterogeneity within each population. We therefore approach this review with reflexive awareness, drawing on Kaupapa Māori principles, lived experience and equity focused public health perspectives, while remaining attentive to whose knowledge is foregrounded, whose is absent and how structural conditions shape both harm and the evidence base.

We drew on the Te Hiringa Hauora Research framework, which guides best-practice health promotion research in Aotearoa (Ratima & Wikaire, 2021). The framework brings together mātauranga Māori and Western science to generate new knowledge in health promotion contexts. Literature was identified using key search terms during May 2023, from various national and international database searches, including the Ministry of Health gambling publications website from 2008 to 2023. Sixty-three potentially relevant articles were initially reviewed. One of the main criteria was that the studies needed to involve participants with lived experiences of gambling-related harm; secondary analyses of existing datasets were excluded. One additional

study published in 2007 was included due to its importance for Māori. In total, 22 studies with primary lived experience data were included in the final analysis.

Findings

Māori

Māori comprise approximately 17% of New Zealand's population (Stats NZ, 2023), and continue to face significant disparities across health, socio-economic and cultural domains due to ongoing colonisation processes (Morrison & Wilson, 2015). These inequities are reflected in gambling harm. Data from the Health and Lifestyles Survey 2020 show that Māori are 3.13 times more likely to experience moderate or problem gambling than non-Māori and non-Pacific peoples (Te Hiringa Hauora, 2020). These harms erode whānau wealth, diminish social capital, and negatively impact health and wellbeing (Rockloff et al., 2021).

Stigma associated with gambling harm has been described through concepts such as whakamā, wairua harm, and damage to mana and mauri, all of which act as barriers to help-seeking (Dyall, 2007; Herd, 2018). Destigmatising gambling harm requires a collective orientation to wellbeing that aligns with Whānau Ora principles. Levy (2015) advocates for a strengths-based approach, emphasising whānau capabilities to achieve aspirations, while Morrison and Boulton (2013) highlight the importance of Māori identity and cultural values and early detection strategies embedded within whānau settings.

Culturally informed solutions are consistently stressed. Palmer's (2014) evaluation of seven gambling-related projects found that Māori in low socio-economic communities carry a disproportionate burden of harm, noting that twice as many pokies are located in these communities than in wealthier areas. Palmer also questioned the relevance of international measurement tools for Māori and reinforced the importance of interventions grounded in mātauranga Māori.

At the same time, gambling can hold positive cultural functions, for example, fundraising for marae or community events when carried out within tikanga frameworks (Wātene et al., 2007). Effective harm reduction strategies must go beyond individual behaviour change to include whānau and marae or kaupapa-based initiatives tailored to specific regional and cultural needs.

The literature demonstrates that gambling harm cannot be separated from the wider impacts of colonisation, socio-economic deprivation and the erosion of cultural structures that support whānau wellbeing. Stigma is deeply intertwined with whakamā, mana and wairua, and is experienced collectively across whānau, not only individually. There is a strong preference for culturally grounded responses based on mātauranga Māori, tikanga and whānau-centred approaches. However, there is a notable absence of recent, Māori-led research intervention design. These gaps constrain national destigmatisation efforts and risk perpetuating approaches that do not align with Māori values or lived realities. Overall, the literature signals the need for kaupapa Māori research leadership, regionally tailored strategies and harm reduction models that uphold mana and build on whānau strengths.

Despite being the most at-risk group, out of the four priority population groups, Māori are the least represented in recent research and evaluation in gambling harm (Ministry of Health, 2022). Prioritising Māori-led initiatives and culturally relevant solutions, consistent with te Tiriti o Waitangi obligations, is critical to addressing gambling harm and supporting whānau and communities. Relevant literature about Māori is outlined in Table 1.

Pacific communities

Pacific peoples are the fourth largest ethnic group in Aotearoa, representing diverse cultures and a shared emphasis on collectivism, family responsibilities and community contribution (Tautolo et al., 2020). The majority of Pacific peoples in Aotearoa were born locally (New Zealand Human Rights Commission, 2020). Cultural identity and wellbeing are often expressed through gift-giving to family, church and community (Kolandai-Matchett et al., 2017), and gambling can sometimes be motivated by obligations to fundraise for churches or support community initiatives (Urale et al., 2015).

In the Pacific Islands, gambling is rare, but in Aotearoa, it occurs in predominantly deprived areas, disproportionately affecting Pacific peoples (Wheeler et al., 2006). Pacific peoples are 2.56 times more likely to experience gambling harms than non-Pacific and non-Māori (Te Hiringa Hauora, 2020). Gambling intersects with cultural norms like gift-giving, amplifying financial risks. Concerns about a possible connection between gaming and gambling impacting Pacific youth and families have also been raised (Taufa et al., 2021).

Some Pacific peoples differentiate positive gambling (e.g., church raffles) from harmful commercial gambling. Positive gambling is seen as benefiting the community, while commercial

TABLE 1 Characteristics of the gambling studies in Māori populations

Study	Priority population	Research approach	Method	Participant demographics			Other key characteristics
				N total	Age	Gender	
Herd (2018)	Māori and youth	Kaupapa Māori	Focus groups and one interview	*N* = 22	16–24	F = 15, M = 7	
Levy (2015)	Māori	Kaupapa Māori	Nine community focus groups, nine whānau photovoice focus groups and two community wānanga	*N* = 130	Not stated	F = 88, M = 42	
Morrison & Wilson (2015)	Māori women	Kaupapa Māori	60-minute semi-structured interviews grounded in tikanga Māori	*N* = 35 out of 41	30–59	F = 41	Problem Gambling 3 screening tool utilised
Dyall et al. (2009)	Māori	Small sample qualitative research design	Five interviews (3 × 1:1 interviews and 2 × 1:2 interviews)	*N* = 7	Not stated	Not stated	
Morrison (2008)	Māori women	Kaupapa Māori and naturalistic	Interviews	*N* = 46	20–60+	F = 20	Service providers = 10 Partners/ whānau = 16
Wātene et al. (2007)	Māori	Kaupapa Māori	31 focus group discussions and one interview	*N* = 194	16+	Collected but not specified	

gambling is linked to addiction and financial stress (Urale et al., 2015). Migration, stress relief, social interaction and meeting cultural obligations drive Pacific gambling (Bellringer et al., 2013; Fehoko et al., 2023).

Shame is a significant barrier to seeking help, and Tongan and Samoan communities note its role in avoiding services or gambling altogether (Bellringer et al., 2013; Nosa et al., 2023). Some Pacific peoples prefer non-Pacific service providers to avoid shaming family names.

Pacific communities emphasise ownership of wellbeing and leading decisions affecting their lives (Ministry for Pacific Peoples, 2022). Harm prevention must consider Pacific peoples' use of gambling to meet social and financial obligations (Urale et al., 2015). Churches and trusted cultural conduits like the faikava are critical spaces for delivering gambling harm messages (Fehoko et al., 2022).

Across the Pacific literature, gambling harm is deeply connected to Pacific peoples' collective cultural obligations and migration experiences, and the structural inequities shaping life in Aotearoa. Stigma is experienced through notions of shame that extend beyond the individual to the wider āiga, often preventing early help-seeking and sometimes guiding people towards non-Pacific services to protect family reputation. The studies emphasise that gambling is not inherently harmful in Pacific communities because church raffles, community fundraising and gift-giving practices are seen as positive, but harm escalates when commercial gambling intersects with financial stress, settlement pressures and cultural obligations. Talanoa-based research consistently highlights the importance of churches, faikava spaces, family networks and community leadership in shaping solutions. Yet, despite rich cultural knowledge, Pacific-led research and interventions remain uneven across ethnic groups, with Tongan male perspectives dominating recent studies. Collectively, the literature points to the need for Pacific-designed and Pacific-led destigmatisation initiatives that

TABLE 2 Characteristics of the gambling studies in Pacific communities

Study	Priority population	Research approach	Method	Participant demographics			Other key characteristics
				N total	Age	Gender	
Fehoko et al. (2022, 2023)	Tongan males	Phenomenological approach	Talanoa	*N* = 46	20s–70s	M	Mātu'a = 28 To'utupu = 18
Nosa et al. (2023)	Pacific addiction service providers	Thematic analysis	One-on-one semi-structured interviews	*N* = 8	Not stated	M = 3, F = 5	
Taufa et al. (2021)	Pacific youth	Kakala and talanoa	Seven focus groups and a survey	FG: *N* = 75 Survey: *N* = 828	FG: 16–25 Survey:16–30	FG: M = 47 M = 28 Survey: M = 652 (292 Pacific) F = 162 (102 Pacific) (Other Pacific = 6)	FG: Samoan = 44, Tongan = 19, Cook Island Māori = 6, Niuean = 5, Fijian = 1 Survey: Pacific = 402, non-Māori, non-Pacific = 426
Kolandai-Matchett et al. (2017)	Pacific professionals and problem gambling treatment service staff		Focus groups	*N* = 34			Professionals = 26, Pacific problem gambling treatment service staff = 8
Urale et al. (2015)	Pacific families and communities	Thematic analysis	Focus groups, semi-structured discussions	*N* = 9 = 97	18–6–65	F = 6 = 65, M = 3 = 32	Groups of gamblers and non-gamblers = 9=9, Group of church leaders = 1 = 1, Group of gambling treatment providers = 1 = 1, Group of gambling venue staff = 1 = 1; Overseen by an external Pacific advisory group of problem gambling service staff;
Bellringer et al. (2013)	Pacific families and communities	Grounded theory approach	Phase 2: 12 focus groups and 16 semi-structured interviews with Samoan, Tongan and Cook Island participants	Phase 2, *N* = 9 = 97	Phase 2: 18–6–65+	Phase 2: Specified but not clear	

acknowledge collectivism, enhance financial and cultural wellbeing, and respond to the diverse realities of Pacific families in Aotearoa. Table 2 includes the literature findings for Pacific peoples.

Youth

Youth gambling is a significant public health issue in Aotearoa, where around 1.6 million people are under 25 years old, and Māori and Pacific populations have notably young median ages (Ministry for Pacific Peoples, 2020; Stats NZ, 2024). The Youth'19 survey found that over one-third of secondary school students had gambled, mostly with friends or family, and 10% expressed a desire to reduce their gambling (Archer et al., 2021). Barriers to help include difficulty accessing services, and recommendations include providing support online, by phone, and in schools and communities. Adults reaching out proactively, rather than waiting for youth to seek help, is essential.

Taufa et al. (2021) examined links between gaming and gambling among Pacific youth, identifying harmful behaviours and the need for regulation to align with the Gambling Act 2003 and the minimising gambling harm strategy. Pacific youth emphasised the importance of discussions to identify these links and called for monitoring of violent game content.

Māori youth in a 2018 study stressed the need for social marketing campaigns to include youth perspectives, be non-judgemental and involve whānau (Herd, 2018). Current campaigns fail to resonate with youth, who want solutions that reflect their lived experiences and cultural contexts.

Studies such as the Pacific Islands Families Study (in the 2017–2018 survey wave) found gambling to be a primarily social activity occurring with family (49.2%) or friends (47.7%). Only a small proportion sought help from adults, preferring friends instead. The Youth'12 survey identified disproportionate gambling harm risks for Māori, Pacific and Asian male students, as well as those in low socio-economic areas (Rossen et al., 2016).

The youth literature shows that gambling harm for young people is strongly shaped by social environments, whānau dynamics and broader structural determinants, including deprivation, exposure to pokies in low-income areas, and the growing convergence of gaming and gambling. Stigma operates differently for youth than for adults. It is expressed through fear of judgement, reluctance to involve adults and a preference for peer support rather than formal services. A consistent theme is that current harm minimisation and social marketing approaches do not resonate with youth because they overlook the realities of digital life, cultural identity and whānau relationships. Māori and Pacific youth, in particular, call for solutions that reflect their lived experiences, avoid moralising messages and include their voices in campaign design. The literature also reveals significant gaps, including limited youth-specific research within Asian communities and an absence of studies examining gender, sexuality or disability-related differences. Overall, the youth evidence highlights the need for culturally grounded, co-designed and relational approaches that address both gambling and wider wellbeing challenges. Table 3 sets out a summary of literature related to youth.

Asian communities

In Aotearoa, 15.1% of the population identifies as Asian and Asian Family Services estimated 71,736 are high-risk gamblers, over half of whom are from the Indian community (Zhu, 2021). Despite this, there is limited research on gambling harms specific to Indian communities. Stigma remains a significant barrier to help-seeking: 78% of Asian communities perceive greater societal stigma around excessive gambling compared with recreational gambling. However, lack of awareness about gambling harms (49.3%) and limited knowledge of services (46.7%) are also key barriers (Zhu, 2021).

For many Asian families, gambling is a response to immigration stress, including isolation, language barriers and employment challenges (Ho, Feng, & Prasad, 2022; Tse et al., 2012). The disconnect between expectations of a better life in Aotearoa and the struggles of resettlement often drive individuals towards gambling as a coping mechanism (Palmer du Preez et al., 2020).

Self-stigmatisation among Asians who gamble often manifests as disappointment (35.5%), guilt (27.8%) and a perceived lack of self-control (27%) (Zhu, 2021). Shame and fear of "loss of face" discourage help-seeking, affecting not only the gambler but also their family (45.5%).

Research highlights the importance of reconnecting with "natural life", encompassing balanced lifestyles and harmonious relationships, as a pathway to healing for Asian gamblers (Zhang et al., 2022). Peer and professional support, along with family involvement, are crucial. Strengthening culturally aligned support systems and offering linguistically diverse services can reduce stigma and encourage help-seeking (Ho, Feng, & Prasad, 2022; Palmer du Preez et al., 2020).

A recent intervention involved co-designing resources with Asian participants who had lived

TABLE 3 Characteristics of the gambling studies in youth populations

Study	Priority population	Research approach	Method	Participant demographics			Other key characteristics
				N total	Age	Gender	
Fehoko et al. (2022)	Tongan males	Phenomenological approach	Talanoa	No of youth = 18	18–30s	M	To'utupu = 18 of 46 participants
Ho, Feng, & Prasad (2022)	Chinese, Korean, Indian, Cambodian, Filipino, Indonesian, Japanese, Malaysian, Sri Lankan	A stepped care approach to deliver early interventions	Online survey and an evaluation	No of youth = 59	15–30	Not stated for youth	Youth = 59 of 305 participants
Archer et al. (2021)	Youth		Cross-sectional self-administered survey	*N* = 5,876	12–18	F = 3,296 M = 2,580	
Taufa et al. (2021)	Pacific youth	Kakala framework and talanoa	Mixed methods. Focus groups and a survey	*N* = 75 FG *N* = 828 Survey	FG 16–25; Survey 16–30	FG 37 = F, 63 = M; Survey 162 = F, 653 = M, 13 = Prefer not to say/Other	Focus group: Samoan = 44, Tongan = 19, Cook Island Māori = 6, Niuean = 5, Fijian = 1 Survey: Pacific = 402, non-Māori, non-Pacific = 426
Herd (2018)	Māori youth	Kaupapa Māori	Seven focus groups and one individual interview	*N* = 22	16–24	F = 15 M = 7	
Rossen et al. (2016)	Youth (European, Māori, Pacific, Asian, Middle Eastern/Latin American/ African, Other)		Youth'12 survey	*N* = 1,890 of 8,500 gambled in the last 12 months *N* = 804 who gambled in the last 4 weeks	<15–>16	Gambled in the last 12 months—F = 978, M = 911 Gambled in the last 4 weeks—F = 363, M = 440	Gambled in the last 12 months: NZ European = 916, Māori = 375, Pacific = 264, Asian = 221, Other = 113 Gambled in the last 4 weeks: NZ European = 335, Māori = 180, Pacific = 142, Asian = 91, Other = 55
Li & Tse (2015)	Chinese international students in Aotearoa	Strengths-based, non-labelling, narrative approach	Two interviews each	*N* = 15	20–41. Average age = 25.7 years	F = 5, M = 10	Average length of stay in Aotearoa was 3.9 years
Bellringer et al. (2013)	Pacific families and communities—youth included	Grounded theory approach	Phase 2: 12 focus groups and 15 semi-structured interviews with Samoan, Tongan and Cook Island participants	*N* = 18 youth in the focus groups and *N* = 3 youth in the semi-structured interviews	18–24	Not clear	Significant others were included but it is not clear how many were associated with the youth

experience of gambling harm (Ho, Feng, & Prasad, 2022). Outputs included multilingual videos and messages promoting awareness and help-seeking. An online survey indicated that 73% of respondents had lived experience, demonstrating the effectiveness of culturally tailored approaches to destigmatisation as a broader approach to overall wellbeing improvement.

Across the Asian literature, gambling harm emerges at the intersection of migration experiences, social isolation, cultural expectations and limited awareness of available support. Stigma is strongly shaped by concerns about "loss of face", and shame is often internalised, discouraging individuals and families from seeking help until harm becomes severe. The studies highlight that gambling is frequently used as a coping mechanism in response to settlement challenges, including language barriers, employment pressures, and the dissonance between migration expectations and lived realities in Aotearoa. Despite the diversity of Asian communities, a consistent theme is the value placed on harmony, balance and "natural life", suggesting that wellbeing-oriented, culturally aligned approaches are more effective than problem-focused messaging. Recent co-designed initiatives show promise but remain limited relative to the size and diversity of Asian populations, with Indian communities particularly under-represented despite high levels of risk. These findings capture the need for multilingual services, family-inclusive approaches and Asian-led research that reflects diverse migration histories and spiritual, cultural and linguistic contexts. Relevant literature is included in Table 4.

Discussion

This narrative review brings together literature across Māori, Pacific, Asian and youth populations to examine how gambling harm and stigma are experienced, interpreted and addressed. Across Māori, Pacific, Asian and youth populations, the literature shows that gambling harm and stigma are shaped far more by structural and relational forces than by individual behaviour. The evidence demonstrates that inequities created through colonisation, the clustering of pokies in low-income communities, migration pressures, language barriers and digital environments of exposure are central to the development of harm. These underlying conditions create environments where gambling becomes a response to stress, disconnection, financial pressure or settlement challenges, rather than a standalone behaviour. In each population, stigma is intertwined with these broader determinants, reinforcing a sense that gambling harm is a personal failing rather than a reflection of systemic inequity.

A relational pattern also emerges across all groups: help-seeking is rarely an individual decision. For Māori, concepts such as whakamā, mana and wairua shape how harm is understood and whether support feels safe. For Pacific communities, stigma is deeply collective; shame affects the wider āiga, shaping how and when people seek help or whether they avoid Pacific services to protect their family name. Asian communities describe stigma through the concept of "loss of face", in which harm threatens family honour and social standing. Youth, meanwhile, fear judgement from adults and prefer peer-based support, signalling that stigma manifests as a threat to belonging. These relational expressions of stigma highlight that responses must be collective, not individualised, and must engage trusted family, cultural and community systems.

Another strong thread is the role of identity, culture and belonging. Across studies, stigma was not simply embarrassment about gambling but a deeper disruption to identity and relational wellbeing. Māori describe harm as affecting mauri, wairua and mana; Pacific communities link harm to cultural and religious obligations; Asian families frame it as a disruption to harmony and expectations of success; and youth experience it as a threat to their social identity and sense of agency. These identity-based impacts suggest that destigmatisation efforts must go beyond awareness or education campaigns to address cultural, spiritual and relational aspects of wellbeing.

The literature also converges on the importance of culturally grounded solutions. Māori-led approaches based on mātauranga Māori, tikanga and whānau-centred practices are widely preferred. Pacific communities emphasise talanoa, church engagement, faikava spaces and collective ownership of wellbeing. Asian populations highlight the need for multilingual resources, family-inclusive strategies and approaches that reflect diverse migration histories and spiritual traditions. Youth emphasise non-judgemental, digitally relevant, co-designed initiatives that reflect their lived realities. These preferences illustrate that destigmatisation cannot be generic. It must be rooted in cultural knowledge systems and be co-designed with the communities most affected.

A further finding is the significant inequity in research investment. Māori have the highest rates of gambling harm yet are the least represented

TABLE 4 Characteristics of the gambling studies in Asian communities

Study	Priority population	Research approach	Method	Participant demographics			Other key characteristics
				N total	Age	Gender	
Zhang et al. (2022)	Recent Chinese migrants to Aotearoa	Hermeneutic, phenomenological approach	Semi-structured in-depth interviews, recruited via a purposeful sampling method	*N* = 16	20+	Not stated	Gamblers = 8, Affected family members = 8
Ho, Feng, Prasad, et al. (2022)	Chinese and South Asian migrants and international students	Part 1: Narrative Part 2: Co-design approach Part 3: Online survey using key platforms	Part 1: Support group programme Part 2: Workshops Part 3: Evaluation online survey	*N* = 6 Parts 1 and 2 *N* = 239 Part 3	Parts 1 and 2: 20–65	Parts 1 and 2: M = 4, F = 2	
Ho, Feng, & Prasad (2022)	Chinese, Korean, Indian, Cambodian, Filipino, Indonesian, Japanese, Malaysian, Sri Lankan	A stepped care approach	Online survey and an evaluation	*N* = 305 Part 1 *N* = 20, Part 2	15–79	Part 1, M = 131, F = 173	Chinese = 136, Korean = 115, Indian = 32, Other = 22 (Cambodian, Filipino, Indonesian, Japanese, Malaysian and Sri Lankan). Online survey with Asian participants from two GP clinics.
Zhu (2021)	Asian communities	Online survey	Quota sampling	*N* = 705	18+	M = 348, F = 357	Chinese = 244 Indian = 236 Filipino = 72 Korean = 35 Japanese = 18 Sri Lankan = 17 Vietnamese = 10 Cambodian = 10 Asian other = 64
Li & Tse (2015)	Chinese international students in Aotearoa	Strengths-based, non-labelling, narrative approach to intervention	Two interviews each with a six-month gap in between	*N* = 15	20–41. Average age is 25.7 years	Not stated	
Tse et al. (2012)	Māori, Pacific, Chinese and NZ Europeans	Public health approach	Qualitative focus groups and interviews	*N* = 131	Not stated	Not stated	Māori = 30, Pacific = 58, Chinese = 27, NZ European = 16

in contemporary research. Pacific research is unevenly distributed across ethnic groups, with gaps for Samoan, Cook Islands, Fijian and Tokelau communities. Although research focused on Asian communities has increased in recent years, attention remains uneven across subgroups, with Indian communities receiving limited focus despite being identified as a high-risk group. Youth research often appears as sub-analyses within wider ethnic studies, making it difficult to understand the distinct experiences of Māori, Pacific, Asian or migrant youth. These gaps highlight the urgent need for investment in Māori-led, Pacific-led and Asian-led research that reflects the diversity of experiences across communities.

Finally, the literature consistently shows that gambling is rarely experienced as an isolated issue. It intersects with broader challenges such as economic hardship, migration stress, identity disruption, family responsibilities, grief, mental health issues and social disconnection. For this reason, communities across all groups emphasise holistic approaches that support wider wellbeing rather than campaigns focused only on gambling. This points to a national need for destigmatisation efforts that strengthen identity, support family resilience and connect people to culturally anchored pathways of healing and support. Destigmatisation strategies therefore need to strengthen protective cultural practices, engage whānau and communities, and respond to the wider wellbeing challenges that sit alongside gambling harm.

A critical implication of this synthesis is the need to rebalance research investment. Despite experiencing the highest rates of gambling harm, Māori are the least represented in available contemporary research, limiting the system's capacity to design effective, culturally aligned responses. Gaps were also identified for several Pacific and Asian subgroups, as well as for youth whose experiences are often subsumed within broader ethnic analyses. Addressing these inequities is essential for developing responsive, evidence-informed interventions that resonate with the lived realities of diverse communities in Aotearoa.

This review extends existing scholarship by making visible the shared structural drivers of stigma and the relational ways in which gambling harm is experienced across communities. Our synthesis shows that meaningful destigmatisation will not come from individual-focused campaigns, but from Indigenous and culturally grounded approaches that uphold mana and build on whānau strengths.

Strengths and limitations

A key strength of this review is its orientation as a narrative literature review, which is well suited to synthesising diverse forms of evidence and privileging lived experience. Narrative reviews enable a more interpretive, contextually grounded approach than systematic or solely quantitative reviews, allowing us to centre Indigenous knowledge systems, community perspectives and qualitative insights. In line with this orientation, we prioritised Aotearoa literature grounded in the lived experiences of priority populations and down-weighted quantitative or Western-framed analyses that did not reflect the cultural contexts of Māori, Pacific peoples, Asian communities or youth. This approach enabled each population group to be afforded its own space within the review, with tailored summary tables. By doing so, we consciously departed from traditional Western literature review models to privilege culturally grounded perspectives on gambling harm and stigma. We acknowledge that despite an extensive search strategy, some relevant studies, particularly grey literature or community-led reports may not have been captured.

Our synthesis is also shaped by the limitations of the studies included. Several had small sample sizes or limited representation within their population groups, such as research focused solely on men, tertiary students or single ethnic subgroups. We noted these limitations when interpreting individual studies. In some cases, ethnicity was reported only at a high level, particularly within Pacific and Asian research, limiting the ability to distinguish variation within diverse communities. These gaps highlight the need for more comprehensive, culturally specific and community-led research to strengthen the evidence base moving forward.

Conclusion

To reduce gambling harm in Aotearoa, future initiatives must centre Māori leadership and ensure equitable distribution of research and service resources. Effective destigmatisation requires approaches that reflect the diversity within priority populations and that actively involve whānau and collectives in all stages of design and delivery. Priority populations should be supported to lead decisions affecting their own wellbeing, working through trusted cultural and community-based services. Youth-focused responses must be holistic, recognising the multiple challenges young people navigate alongside gambling harm. Co-design with people who have lived experience is essential for

relevance and impact, alongside the development of best-practice tools and robust evaluation frameworks. Strengthening research that foregrounds lived experience, particularly for groups currently under-represented, will be critical for shaping responsive, culturally grounded and effective strategies moving forward.

Glossary

āiga	family
Aotearoa	New Zealand
faikava	in the context of this paper it is a Tongan gathering practice or group where kava is shared
hauora	holistic health, vigour
kakala	Pacific research framework
kaupapa	guiding principles
Kaupapa Māori	Māori approach
mana	spiritual power, charisma
Māori	Indigenous people of Aotearoa
marae	tribal meeting grounds
mātauranga Māori	Māori knowledge
mātu'a	elders
mauri	life force, vital essence
talanoa	Pacific research methodology and method
te Tiriti o Waitangi	the Treaty of Waitangi, although both documents are fundamentally different
tikanga Māori	a system of Māori values and practices
tō'utupu	youth
wairua	spirit, soul, feeling
wānanga	deliberations
whakamā	embarrassed, ashamed, shy
whānau	family unit
Whānau Ora	whānau-centred approach to wellbeing

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TIHEI MAURI ORA—BREATHING MAURI INTO THE LIVES OF RANGATAHI MĀORI WHO OFFEND WITH LIVED EXPERIENCE OF TRAUMA

*Tania Cliffe-Tautari**
Luke Fitzmaurice-Brown†
Roseanna Baker‡

Abstract

The New Zealand Government is planning to establish youth justice military-style academies through legislation. Public critique argues they are essentially boot camps, and research shows that these approaches can negatively impact young people who have experienced trauma. This article shares insights from a project funded by Ngā Pae o te Māramatanga investigating trauma in rangatahi Māori engaged in serious youth offending. This study explored the perspectives of Kaupapa Māori community-based social workers, youth workers and organisational leaders (n = 11) working with rangatahi Māori who appeared in the youth court for offending. Findings show that mauri and wairua concepts resonate more with professionals working in kaupapa Māori social services than Western trauma-informed concepts. Second, rangatahi Māori use self-protective measures to mask trauma experiences, which are sometimes misunderstood and misinterpreted as defiance. Third, disruptors of trauma and healing pathways are ecologically, relationally and culturally bound. We recommend the use of holistic Kaupapa Māori trauma-informed interventions with rangatahi Māori involved in the youth justice system.

Keywords

Māori youth, mauri, social services, trauma, trauma-informed, youth offending

* Te Arawa, Ngāi Tahu. Senior Lecturer, Faculty of Arts and Education, Waipapa Taumata Rau | The University of Auckland, Auckland, New Zealand. Email: tania.cliffe@auckland.ac.nz

† Te Aupōuri. Senior Lecturer, Faculty of Law, Te Herenga Waka | Victoria University of Wellington, Wellington, New Zealand. Email: luke.fitzmaurice-brown@vuw.ac.nz

‡ Ngāti Whātua, Ngāpuhi. PhD candidate, Faculty of Arts and Education, Waipapa Taumata Rau | The University of Auckland, Auckland, New Zealand. Email: roseanna.baker@auckland.ac.nz

Introduction

Youth offending is a complex societal problem, and the causes of offending are often linked to a range of other variables, such as social, health, education and economic factors. With adolescence being a time of risk-taking, youth may engage in offending, but for most youth, their offending is unlikely to be serious and will not usually continue into adult offending (Moffitt, 1993). For a small group of youth, their offending will be more persistent and develop into serious offending that takes them towards a trajectory of adult incarceration (Moffitt, 1993). It is therefore important that we both understand and respond to the drivers of serious youth offending, with the intention of preventing it where possible and intervening appropriately when it occurs.

Trauma is a known risk factor linked to youth offending, as are adverse childhood experiences. However, little research exists in Aotearoa New Zealand that seeks to determine how trauma impacts rangatahi Māori who commit serious offences. Rangatahi Māori are significantly overrepresented in the youth court appearance statistics (7.3 times higher than non-Māori) and are more likely to be sentenced in court for offending behaviours (Ministry of Justice, 2026). Understanding how trauma impacts rangatahi Māori should be a priority to inform social policy, as government policy decisions may affect rangatahi Māori well-being, entrench offending behaviours and shape lifelong outcomes (Cliffe-Tautari, 2021; Gluckman, 2018). In this article, we argue that Kaupapa Māori research evidence is critical to understanding the experiences of rangatahi Māori who offend. Part of that evidence, as this article discusses, should be the experiences of frontline youth and social workers who are working with these groups of rangatahi.

Currently in Aotearoa New Zealand, the government is pursuing policy and legislative changes that will impact rangatahi Māori engaged with the youth justice system. At the time of writing this article, the Oranga Tamariki (Responding to Serious Youth Offending) Amendment Bill (the Bill) is before Parliament. The Bill proposes a change in Aotearoa's youth justice legislation, providing for a military-style academy (commonly referred to as boot camps) as an available order in the youth court. Minister for Children Karen Chhour (2024) stated that these programmes will also be "trauma-informed". However, we argue (as have many others) that this label is inappropriate and the proposed approach could harm rangatahi Māori who have experienced trauma and will do little to curb their offending behaviours.

National and international research has evidence that boot camps do not work in reducing recidivism in youth who offend (Gluckman, 2018). Recent evidence from the Royal Commission of Inquiry into Historical Abuse in State Care and Faith-Based Institutions (2024) has detailed the negative impacts of boot camps in the lives of survivors. According to our findings from professionals who work closely with rangatahi Māori, a boot camp approach would be both detrimental and ineffective.

Drawing on empirical findings from a project supported by the Ngā Pae o te Māramatanga Matakitenga research fund, our study investigated trauma in the lives of rangatahi Māori engaged with the youth justice system. Study 1 of the broader research project included a systematic literature and policy review of Māori youth justice. Study 2 had two parts. Part 1 (discussed in this article) included findings from a one-day wānanga with social workers, youth workers and organisational leaders working in Kaupapa Māori social services (n = 11). Part 2 of Study 2 involved interviews with Māori youth who had been apprehended for serious youth offending (n = 5). Study 3 analysed the findings from Study 1 and Study 2 and more recent social policy and legislative responses to Kaupapa Māori approaches to trauma-informed care in youth justice and social service settings. The aim of Study 3 was to identify gaps and make policy and legislative recommendations in line with te ao Māori perspectives.

In this article, we share findings from one of three separate studies (Study 2), which is based on wānanga with community-based youth workers, social workers and organisational leaders (n = 11) working in Kaupapa Māori social services with rangatahi Māori whose offending was serious enough to be prosecuted in court. Study 2 Part 1 is part of a broader project that examines the trauma experiences of rangatahi Māori involved with the youth justice system to answer the overarching research question: How does trauma impact rangatahi involved with the youth justice system, and how can their experiences and Māori approaches to trauma-informed care shape youth justice law and policy?

This article first canvasses the literature about trauma and trauma-informed care. Māori notions of trauma, as aligned with wairua and mauri, as underpinning concepts to the project, are discussed next, before the findings are presented. These findings include three key insights. First, culturally

grounded concepts such as mauri and wairua may resonate more with these professionals than Western definitions of trauma. Second, rangatahi Māori often mask their lived experiences, including experiences of trauma, and this may be misunderstood as defiance. Third, the disruptors of trauma are ecologically, culturally and relationally bound. The participants who are practitioners shared how whanaungatanga as cultivated relationships, aroha and kōrero are pathways to healing. This article concludes with a brief discussion on Māori youth offending and trauma-informed care (TIC) in youth justice and social service settings in line with current legislation and policy reforms.

Understanding trauma

Western clinical definitions of trauma primarily emphasise the individual experience based on a single event. The American Psychiatric Association (n.d.) provide the following definition of trauma:

> Trauma is an emotional response to a terrible event like an accident, crime, natural disaster, physical or emotional abuse, neglect, experiencing or witnessing violence, death of a loved one, war, and more. Immediately after the event, shock and denial are typical.

Chronic and collective trauma experiences of Māori and Indigenous peoples are not necessarily included or understood in traditional Western-based TIC. Individualistic clinical definitions, for example, do not accommodate experiences of historical trauma resulting from colonial practices, which have impacted Indigenous populations worldwide (Wirihana & Smith, 2014).

Indigenous scholars have argued that trauma extends beyond an individual's emotional response and reflects the enduring impact of colonisation and collective experiences of trauma. Trauma may be experienced directly or vicariously as secondary trauma (Wirihana & Smith, 2014). Collective Indigenous experiences of trauma are not limited to physical and emotional abuse but also include historical, intergenerational and spiritual forms (wairua) of trauma. Ruwhiu (2017) therefore argues that wairua "should be a forefront consideration" in assessing whānau well-being in social work practice (p. 102). Alongside other Māori and Indigenous academics, we argue that clinical models of trauma need to be bridged with Indigenous knowledges to ensure trauma care is culturally responsive and transformative (Pihama et al., 2020). To make this paradigm shift, culturally determined definitions such as historical trauma need to be explored and better understood.

Historical trauma has multiple origins evident across biological, psychological and sociological domains (Sotero, 2006). Unlike Western trauma theory, which focuses primarily on post-traumatic stress disorder, historical trauma encompasses broader socio-historical impacts on Indigenous peoples across successive generations (Reid et al., 2014). Brave Heart (2003), who coined the term *historical trauma*, has defined it as "cumulative emotional and psychological wounding, over the lifespan and across generations, emanating from massive group trauma experiences" (p. 7). Historical trauma has three defining features: it arises from traumatic events, a specific population collectively experiences it and it persists across multiple generations (Mohatt et al., 2014). Colonisation has had a traumatic impact on Indigenous and Māori peoples; its impacts continue to affect everyday experiences (Reid et al., 2014; Wirihana & Smith, 2014).

In considering a Māori-specific complexity to trauma, the understanding of historical trauma is linked to whakapapa. For Māori, non-human entities such as whenua, awa, moana, whakairo and reo are all relations depicted in whakapapa, and therefore harm to these entities can affect Māori people themselves. Whakapapa can be recognised as "genealogical knowledge and storytelling which tell us about the world and our existence within it" (Royal, 2009, p. 70). Understanding our intergenerational relationships to place and the disruptions caused by colonisation is critically important to understanding the present-day trauma realities for rangatahi and whānau Māori.

Intergenerational trauma and historical trauma are also deeply interconnected, both reflecting the transmission of trauma across generations. Brave Heart (2000) argues that they share features of collective trauma, unresolved grief and loss. Reid et al. (2014) argue:

> What keeps the trauma of colonization alive [across generations] are the fundamental societal-level structural and systemic changes brought about by the process of colonization foremost among these being the loss of economic and political power and the loss of culture and traditional ways of life wrought by the loss of land. (p. 526)

Studies have also made links between epigenetics and trauma inflicted on Indigenous communities, where exposure to historical trauma may manifest

as physical illnesses (Walters et al., 2011). Without approaches that honour Māori and Indigenous knowledge and practices, trauma continues to be transferred across generations. As trauma manifests across biological, psychological, sociological, economic and spiritual domains, further research is needed to explore its full impact on Māori. This study specifically examined how trauma for rangatahi Māori who offend is connected to Māori notions of well-being, particularly mauri.

Māori notions of well-being

Māori well-being models are essential to informing TIC support for rangatahi Māori who offend and have experienced trauma. Key models acknowledge that wairua, mauri and hauora are critical to Māori well-being, and these feature in numerous Māori Health models (see Durie, 1994; Mataira, 1989; Pere, 1991; Pohatu, 2011; Waretini-Karena, 2014). Durie (2003) suggests that wairua should be a key domain in Indigenous-led TIC, and this is evidenced in his Paiheretia model. Here, Durie (2003) emphasises that relational and holistic well-being and collective experiences of harm require collective healing through te taha whānau as social well-being. The Mana Kaitiakitanga model (Penehira, 2011) positions mouri and hau as central underpinning tenets that act as fundamental dimensions of Māori well-being. Through hauora as holistic health and mouri ora, this model highlights Māori well-being as manifested through hau āio as breath of life, hau whenua as breath of land, hau moana as breath of sea, hau tāngata as breath of humanity. He Kākano Ahau framework (Waretini-Karena, 2014) merges four preconceived models to address intergenerational trauma through healing pathways embedded in mātauranga Māori (Pihama et al., 2020). The models and frameworks listed above are only a few examples of Māori well-being scholarship affirming the deep interconnection between hauora, mauri and wairua, and holistic views shaped by cultural and ecological ties.

In this study, we drew predominantly on the notion of mauri, given its holistic and complex nature, grounded in the physical, spiritual, mental and relational. Mauri, as a concept in te reo Māori, has many layers of meaning, which are aligned with te ao Māori perspectives and tikanga Māori. Mauri can refer to life force, vitality, spark, essence or ethos and energy shifting within and between people, place, animate and inanimate objects, encompassing physical, spiritual and psychological states (Marsden, 2003). Māori knowing informs the what, how and why facets that shape and influence one's mauri. Mauri can inhibit and bind all things, including emotions and states of well-being (Pohatu, 2011). Mauri thus permeates Māori culture, te reo Māori, knowledge, thinking and the manifestations of those aspects in relationships, emotions and behaviours.

In this study, we drew on Pohatu's (2011) explanation of mauri as described in three states. The first state they describe as mauri moe, which literally translates as a sleeping or dormant state in which potential exists. In the state of mauri moe, there could be low energy and the person's engagement may be minimal. Pohatu (2011) suggests that there is potential in this state, but there needs to be an awakening or support to thrive. The second state can be described as mauri oho, which translates as an awakening state. In mauri oho, there could be more initiation to engage, and an emerging consciousness and readiness for growth and learning may manifest. The final state is mauri ora, which is described as a state of well-being and vitality. In this state, energy is possibly high where positive engagement is evident, and a sense of empowerment and purpose is achieved, reflecting flourishing, active, positive participation and engagement. Pohatu (2011) states that mauri manifests through these three distinctive and interrelated states, which are never static and are constantly evolving. The states of mauri provided a useful framework for this project as we were interested in trauma impacts on rangatahi Māori who offend and how services may initiate culturally grounded, trauma-informed approaches to support them.

Trauma-informed care

Trauma-informed care is a systematic response in service provision to meet the needs of people who have experienced trauma. Practices grounded in TIC acknowledge what has happened to a person and focus on the coping mechanisms and behaviours that stem from trauma (Pihama et al., 2020). TIC recognises the pervasive impact of trauma on individuals and emphasises safety, trust and empowerment in all interactions to understand how trauma shapes behaviour and responses. Ideally, TIC will avoid retraumatising practices by prioritising empathy, transparency and support, creating a safe space where individuals feel seen and respected, and have agency. In practice, this may mean adjusting services and interactions to support healing and resilience, always respecting the dignity and unique journey of each person.

The Western notion of TIC, however, must be challenged to ensure that trauma is not only

viewed as more than a one-off event but also seen as something that can be cumulative across generations and grounded in notions of colonisation and historical trauma (Pihama et al., 2020). In a study with 150 professionals working in Kaupapa Māori TIC, Smith et al. (2019) found that Māori social service providers tended to seek collaborative and holistic approaches in which cultural knowledge and practices were adopted to reframe the concepts and discourses of trauma held in the field. The reconsideration of trauma through an Indigenous and Māori framework was encouraged, which included alternative ways through which relational notions and care strategies were adopted, to adapt and transform Westernised practice models (Smith et al., 2019).

Many Māori providers are already working from within culturally grounded trauma-informed practices that involve whānau, communities, healers and practitioners who have long drawn from mātauranga, te reo Māori and tikanga Māori (Pihama et al., 2014, 2020; Wirihana & Smith, 2014). Research about Māori notions of TIC and cultural approaches is steadily developing; however, there exists a gap in understanding TIC for rangatahi Māori who offend, who often come with complex trauma experiences within health, education and justice systems. This project aims to address this research gap for rangatahi Māori engaged in the youth justice system.

Methods

This study sought the perspectives of 11 kaimahi who are professionals working within Kaupapa Māori social services. Participants were selected because of their close professional relationships and expertise in working with rangatahi Māori who commit serious youth offending. The participants included youth workers, social workers and organisational leaders working with rangatahi Māori in supported bail and other youth justice programmes, or they were working alongside young people who have justice or care and protection backgrounds.

Kaupapa Māori theory underpinned this study. Kaupapa Māori centralises and privileges mātauranga Māori notions of methodological practice within a te ao Māori lens. Here, the research is grounded in Māori ways of knowing and being and is carried out by Māori, with Māori, for the benefit of Māori (Smith, 2012). The research team in this project are Māori, as are most of the participants.

Within this study, wānanga was selected as a preferred method because it is a Māori preferred way of learning and sharing knowledge. The term wānanga, both traditionally and contemporarily, has multiple definitions. Wānanga is a dynamic living tradition that has developed across generations and is used within and beyond Māori communities in multiple ways (Mahuika & Mahuika, 2020). Grounded in Māori principles of kanohi ki te kanohi, wānanga can be seen as both a traditional Māori practice and a research method. Wānanga "encourage deep contemplation and deliberation over a considerable period to allow the group to ruminate on, contest, and consider specific ideas and concepts" (Korohere Ngapo, as cited in Mahuika & Mahuika, 2020, p. 373).

The reflexivity of wānanga aided us as Māori researchers of this study with hearing the voice of the participants so that the findings could be "translated into real-world positive outcomes for Indigenous [particularly rangatahi Māori] communities" (Smith et al., 2019, p. 1). As wānanga are a traditional method of Māori knowledge transmission (Mahuika & Mahuika, 2020), this study provided an opportunity for co-construction with participants, who were invited to contribute to discussions and to co-construct meaning about trauma and how it impacts rangatahi Māori engaged in the youth justice system.

In a one-day wānanga, we explored the views of the participants to distil their understanding of trauma, to determine whether trauma or trauma-informed practices were being used and whether notions of mauri resonated with them as an effective tool for their work (and potentially a more effective tool than non-Māori approaches to TIC). A key for this wānanga was to explore what kaimahi participants working with rangatahi Māori apprehended for offending, understood about trauma, the impacts of trauma and TIC.

Because Kaupapa Māori underpinned this project, we were interested in exploring these topics from within a Māori well-being lens. We were also interested in understanding their views on what conditions were needed to support the flourishing of mauri ora in rangatahi Māori who offend.

To ensure we met research ethical expectations, this study was approved by the University of Auckland Human Participants Ethics Committee (UAHPEC 24469). Thematic analysis was employed to analyse the data, drawing on Braun and Clarke's (2006) six stages of thematic analysis: (1) familiarising ourselves with the data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) reporting the themes. Specifically, inductive

thematic analysis was conducted. We first identified semantic themes and then drew connections between the inductive findings and the semantic. An inductive data analysis approach was chosen as it is more suited to Kaupapa Māori research, allowing for holistic understandings to emerge from the data and allowing the voice of participants to shape the emerging themes, emphasising participant-driven data. The following section discusses three key insights from the themes and the wānanga with the participants (n = 11). The first is the importance of understanding trauma from within a te ao Māori lens.

The resonance of mauri versus trauma

The resonance of the words mauri and trauma was an overarching theme that emerged in discussions with the participants. For most participants, trauma was defined as a Western term associated with triggers, behaviours and emotions. When asked to describe what trauma might look like and how it might present, the participants discussed the links between trauma and emotional responses, stress and psychological distress (such as anxiety). One participant spoke about trauma affecting psychological well-being, which led to impulsive behaviours. They said that trauma was based on "trigger points that trigger that anxiety, and they [rangatahi] just react without thinking". Another participant described both actual and perceived trauma events as being rooted in fear. They said, "I see it [trauma] as a fear instilled in someone from something, whether it be something physical or something mental."

While the participants understood what was clinically meant by the terms trauma and trauma-informed, Western definitions sat somewhat awkwardly for them. For most participants, there was a disconnect with the word trauma because they felt that it only singled out the psychological impacts on a person, which did not include the impact of trauma on a person's wairua or the impacts of trauma in Māori as a group.

Collective experiences of trauma were described as resulting from colonisation and the historical and intergenerational trauma that Māori have endured through loss of land, language and cultural identity. One participant said:

> Our people, we have suffered through colonisation. I mean we still suffer trauma, intergenerational trauma from what our tūpuna had to go through and the impact that colonisation has had on them and now the impact that it is still having on us to this day and in our modern day.

This comment illuminates the impacts of historical trauma, which is still felt today in whānau across generations. Another participant said that modern collective structures, such as gangs, were the result of trauma:

> Gangs are an example of collective trauma in one form or another and being how they express themselves and exactly how the young fellas are expressing themselves today. Their trauma is openly expressing their frustration and anger, and the sad thing about it is they don't care who it is impacting, and it is almost like self-imploding because it is impacting our kids.

This participant's comment suggests that some whānau do not have the needed skills to cope with trauma, and by implication, this can affect rangatahi Māori. This point aligns with previous research that suggested that whānau may struggle to address rangatahi Māori trauma, as they are caught in their own trauma cycles (Cliffe-Tautari, 2021). Effectively addressing trauma in rangatahi Māori who offend necessitates a holistic trauma-informed approach that is ecological and relational, consistent with Māori frameworks of well-being in which whānau well-being is considered as well (Cliffe-Tautari, 2021; Durie, 2001).

While there was a disconnect for the participants with the Western definitions of the word trauma, when mauri was discussed, it made much more sense to the participants in describing how trauma impacts the holistic needs of a person's state of being. Mauri appeared to resonate more as it drew on the holistic understanding of Māori ways of knowing and the significance of our connection to the whenua, to humanity and to wairua.

The participants had a shared understanding that mauri is something we are born with, and it is felt in our environment. One participant said:

> Mauri is what makes us individually different because we are gifted that mauri at birth, and so we all have a different mauri, and maybe trauma strips us from that mauri. But I keep going back to being Māori, we have those things like feeling the power of the moana and of the ngāhere, and stuff is because they have a great mauri, and it can help.

Mauri is thus not fixed and is shared. We are always being impacted positively or negatively, whether it be by the environment, trauma or unseen forces. The participant responses in this theme illustrate that trauma must be defined for different cultural contexts, including for rangatahi

Māori. Considering culture in relation to trauma is important as "culture affects trauma symptoms, health care experiences and, subsequently, the provision of trauma-informed care" (Reeves, 2015, p. 706). Cultural points of reference are different depending on whose culture is being discussed.

Connections to te taiao have a positive impact on a person's mauri. Participants expressed that definitions of trauma for Māori were thus better understood through a te ao Māori lens, such as within the concept of mauri, as it could encompass factors grounded in the historical, collective and spiritual, while also acknowledging the ecological ties Māori have to the whenua. Creating safe spaces in trauma-informed practices and acknowledging mauri and wairua elements should thus be considered fundamental to any intervention, programme or activity with rangatahi Māori who have offended and have trauma backgrounds. The next key insight from the wānanga highlights the importance of recognising how trauma may be expressed in rangatahi Māori who offend.

Self-protective measures to mask trauma

Rangatahi Māori involved in the justice system can often mask emotional pain, psychological trauma and suffering. Participants discussed how rangatahi Māori may present with shielding behaviours such as fear, sadness and anger, which can sometimes be misunderstood as antisocial behaviours. These emotions were described as more likely a response to trauma. Many of the participants had experienced trauma themselves, so they understood that shielding behaviours were a form of self-protection. Participants recounted how they themselves understood trauma responses as they too would "cover their fear" (masking) as children and described feeling "scared" as children, but that outside the home, such as at school, they put on a false bravado so that they were seen as "f**king not scared" (shielding). Other research with rangatahi Māori who offend has found that defiance and resistance can be a positive mechanism and a way that rangatahi take control of and navigate challenges in their surroundings (Cliffe-Tautari, 2021, 2024). Recognising and deciphering what negative rangatahi Māori behaviours represent is imperative.

Rangatahi Māori may not have the necessary psycho-social skills to address or share that they are experiencing trauma. One participant said, "They [rangatahi] don't have the tools because our [their] parents had the trauma too, they haven't got the tools to pass down, you know, so that is why it is intergenerational." Here the impact of historical and intergenerational trauma can be "cumulative emotional and psychological wounding across generations" (Brave Heart, 2005, p. 4). Negative behaviours may be a result of experiences in a vacuum of intergenerational cycles of trauma, which can have ongoing detrimental impacts on rangatahi and whānau Māori. One participant said:

> I think the suppression of trauma too is very impactful to our whānau, you know, in terms of people not dealing with their trauma and then that is where the vent out in anger comes into play and the alcoholism and all these other sorts of, I call them suppressions of the trauma … They are just trying to suppress that [trauma] and not deal with it.

While it is important to recognise that trauma is intergenerational, to determine that trauma is located only within individual rangatahi or single whānau units is to negate the conditions that created historical trauma that have also impacted Māori as a collective (George et al., 2014).

Central to trauma-informed approaches with rangatahi Māori is understanding how trauma affects the overall mauri, well-being and mood(s) of rangatahi. One participant acknowledged that when the mauri of rangatahi Māori is impacted and there is low energy and low mood, they may shut down to any support as a form of self-protection:

> In terms of relationships, how do we connect with that mauri of others when talking about those who have been hurt and those who are experiencing or have experienced things? They have shut those doors because it keeps them safe in that space.

These findings suggest that professionals who are attuned to both wairua and mauri and have a first-hand experience of trauma can positively influence rangatahi in their own healing journeys. One participant said:

> In my mahi because I've walked it, I can see the same patterns being run in rangatahi, which enables me to better understand, and I can identify with this young fullah. I can reciprocate the same energy because I have an understanding personally about what he is going through, then I can actually communicate with him and engage and get him to engage with me—how does that look? by actually talking about it.

When rangatahi Māori have negative childhood or life experiences or find themselves caught

in the cycles of intergenerational trauma, or adverse childhood experiences, connections to people and place can be at the centre of what makes it traumatic for them. Trauma can thus be ecologically situated. An important inverse discussed in the next section is how healing, too, can be ecologically bound.

Disruptors of trauma—ecologies of aroha, whanaungatanga and kōrero

In the wānanga, participants discussed how TIC with rangatahi Māori who offend should include healing pathways that lead to mauri ora. Three key ecologies elaborated on here are whanaungatanga, aroha and kōrero as talking therapies.

Whanaungatanga in this study is defined as having and cultivating strong relationships that provide the gateway to important conversations, which can lead rangatahi and whānau Māori into healing spaces. One participant said:

> So, when we are working with the rangatahi, if they are acting in a certain way or something happens, we pick up on those symptoms. We have the capacity to address it, to them or help them identify it [signs of trauma], because a lot of our rangatahi and even our whānau don't understand it. But for us if we have a better understanding of it, so we can pick it up because we have that relationship. We can actually touch on the subject and say, "Hey have you heard about, you know, do you know much about anxiety or depression or anything like that?" and it might open up that conversation and start the kōrero about it. Unless you can identify it, you are not going to be able to have that conversation.

This quotation illustrates how whanaungatanga is the backbone to cultivating influential relationships and working with rangatahi Māori who have trauma backgrounds. Whanaungatanga enables practitioners to become a conduit to help rangatahi Māori navigate the impacts of trauma in their lives. In another study, with six social workers, a positive rapport was deemed critical and essential to working with rangatahi (Mooney, 2012). In Pihama et al.'s (2020) study, whanaungatanga enabled collectivism, which better reflected Māori realities, unlike Western approaches to TIC, which tended to be based on individualism.

In this study, at the heart of an ecology of whanaungatanga are wairua and mauri, which are crucial elements for fostering a sense of safety and trust with the rangatahi. One participant spoke about being able to pick up on another person's mauri and wairua: "So, we can feel each other's energy and feel each other's mauri, that is why it can affect us physically." Another participant said:

> You have to create that [trust] and cultivate it. My presence is walking in with the energy it is that wairua thing, they feel safe. Separating or improving and bringing them into a safe space to be able to talk to them and kia ngāwari with your voice, come in at the present. Straight away, it gives them [the rangatahi] a sense and it fills them up.

How practitioners express themselves emphasises an ecology of aroha. Through their mauri, wairua, tone, and presence, the demonstration of aroha is evident. Aroha is fundamental to engagement, and expressing or withholding it can positively or negatively affect rangatahi well-being. Durie (2003) articulated mauri as energy in healing spaces. He said: "Energy in whānau [is when] healing flows outwards, away from intensity and raw emotion towards shared ownership of whatever problems are unearthed" (p. 206).

Demonstrating aroha can also be the reason why rangatahi Māori are open to discussing sensitive areas with people they trust. One participant spoke about how important it was to acknowledge rangatahi Māori and show them that they cared about them. They said, "They [youth workers] give them that acknowledgement as soon as they bring them in, you know, give them that awhi, the aroha and give them that acknowledgement that they do matter." Enabling a culture and ecology of aroha fosters trust so that rangatahi will want to open up and kōrero about what is happening in their lives.

Developing and maintaining an ecology of kōrero (talking therapies) needs to be fostered within the attitudes, connections and spaces that practitioners create. One participant said, "The hardest thing in terms of dealing with that trauma is having kōrero about it. The more we talk about trauma, the more the healing process sets in play." Another participant said:

> My own experiences help to relate to his experiences, so we can get on an even medium, I'm not above you, I'm not below you, I'm beside you. That is exactly how I approach it, and the outcomes speak for themselves.

Collectively, ecologies of whanaungatanga, aroha and kōrero are embedded in a whakapapa of relationality.

Our whakapapa connections and relationship to te taiao are equally important to healing pathways. One participant said:

> That is our culture, you know, our culture is very much interconnected into our taiao, into our ngāhere, into our awa and to our moana and to our maunga. From a young age we are instilled with that and we have been taught what it means to us, and why it means that to us. So, we just have that innate understanding, even though we might not know exactly what it is, we can feel it no matter where we are. You can feel it, and it is not until someone says or explains it in a way that resonates with you that you can say, "Ah, that is what it is."

Recognising that rangatahi Māori come from a rich cultural heritage, in which wairua ways of knowing, being perceptive and intuitive are the norm, invites practitioners to consider their approach, where the connection between wairua, mauri and praxis becomes central to trauma-informed ways of working with rangatahi Māori who come from trauma backgrounds. Valentine et al. (2017) argue that wairua is "an immaterial entity that cannot be seen or touched" (p. 67). Therefore, understanding who we are, where we come from and our connections to the environment strengthens cultural identity-making, which is a buffer of negative experiences (Cliffe-Tautari, 2021). In this sense, Māori well-being is inherently connected to "our whānau, our environment, our connection to land, sea, rivers and mountains" (Pihama et al., 2020, p. 39).

These examples highlight that through the ecologies of whanaungatanga, aroha and kōrero the pathway to restore mauriora to rangatahi Māori becomes a possibility. These findings underscore the need for self-determined Māori approaches to TIC.

Final words: Implications for social work practice, law and policy reform

Currently, our legal framework for youth justice makes no mention of the need to address trauma, let alone considerations of Kaupapa Māori approaches to TIC. In this current policy context, it seems highly unlikely that the government's reintroduction of military-style academies will ever be able to fulfil the criteria that the evidence suggests are required to address trauma for rangatahi Māori in a meaningful way. The current youth justice policies have a focus on behaviours that are antisocial. However, rather than "pontificating what resistant behaviour represents [we also need] to understand the context in which resistance is created" (Cliffe-Tautari, 2024, p. 152).

The findings from this study have highlighted how Kaupapa Māori social service programmes grounded in healing pathways and led by adults whom the rangatahi trust can be a significant source of support for young people who find themselves in the justice system. In considering a Kaupapa Māori approach with rangatahi Māori, we argue that there are a multitude of healing pathways, including the criticality of wairua and mauri as spiritual and relational dimensions in Kaupapa Māori approaches to TIC. The relationship that exists between rangatahi Māori and those who work alongside them is also fundamentally important. Acknowledging whanaungatanga as trusting and safe relationships, which are grounded in aroha and kōrero, are not just niceties. As illustrated in the participant quotes, they should be fundamental ecologies that shape practitioner praxis.

These findings also suggest that TIC and healing for rangatahi Māori involved in the justice system must include, but also go beyond, individual rangatahi and whānau units, and look to solutions that address healing pathways for Māori as a people. Pihama et al. (2020) also stress that strengthening Kaupapa Māori frameworks and critically assessing Western individualistic models are essential to advancing Indigenous TIC. There are further links here with issues in the care and protection system. As previously argued from a Kaupapa Māori perspective, the goal of child protection interventions should not be just to restore individual whānau but to restore the tikanga of whānau more broadly (Fitzmaurice, 2020).

In finishing, at the heart of this project has been mātauranga Māori understandings of mauri, wairua and kōrero, which are deeply layered concepts to support the well-being pathways needed for rangatahi Māori involved in the justice system who experience trauma. To aspire to a better future that reshapes the trajectories of our rangatahi Māori in the justice system, we must ensure that our system is fit for purpose and is responsive to their experiences of trauma within our own cultural understandings. Tihei mauri ora!

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Glossary

aroha	kindness, affection, love, compassion
awa	river
awhi	care
hau	vital essence, vitality
hau āio	breath of life
hau moana	breath of sea
hauora	health
hau tāngata	breath of humanity
hau whenua	breath of land
kaimahi	professional
kanohi ki te kanohi	face to face, in person
kaupapa Māori	Māori way of thinking, or doing things based on Māori principles
kia ngāwari	be gentle
kōrero	talking, to talk, conversation; talking therapies
mahi	work
mātauranga	knowledge
mātauranga Māori	Māori knowledge, Māori process of thought of knowing
maunga	mountains
mauri	life force, essence, state of well-being
mauri moe	a state of untapped potential
mauri oho	a proactive and awakened state
mauri ora	a fully aware state of transformative potential
mauriora	flourishing, active, positive participation
moana	sea, ocean
moe	sleep, dream
mouri	life force, essence, state of well-being
ngāhere	forest
oho	awake, awakening
ora	life, health, vitality
rangatahi	youth, younger generation
reo	language; short form of te reo Māori
taha	side, part, portion, section
te ao Māori	Māori worldview
te reo Māori	the Māori language
te taiao	the environment
tihei mauriora	breath of life
tikanga	customary practices, protocols
tūpuna	ancestors
wairua	spirituality
wānanga	discussion
whakairo	carving
whakapapa	genealogy
whānau	family, close kin network
whānau Māori	Māori families
whanaungatanga	relationship, kinship, sense of family connection
whenua	land

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KO TE WHAEA TE TAKERE O TE WAKA

Māori mothers reclaiming tūpuna knowledges for the next generations

*Hine Funaki-Cole**

Abstract

Mātauranga Māori has been severely impacted by settler-colonial agendas; however, continued efforts by Māori have supported mātauranga revival. This article examines interviews with 10 māmā and their journeys to reclaim ancestral knowledges for their tamariki. Māmā described reclaiming ancestral practices, including birthing traditions, wairuatanga, tikanga Māori, te reo Māori, rongoā Māori, weaving and food cultivation. Drawing on a whakapapa approach and the Hautū Waka framework, thematic analysis revealed a journey into the unknown, guided by tohu and shaped by challenges and resilience. These journeys involved ongoing cycles of connection and reconnection, reflecting efforts to embody tūpuna while forging pathways for mokopuna. Whakapapa and politics of love emerged as central to sustaining hope, highlighting how everyday acts of reclamation contribute towards processes of decolonisation.

Keywords

decolonisation, māmā, reclamation, tamariki, whakapapa

Introduction

Colonisation has had a deep and enduring negative effect on Māori communities, steadily diminishing Māori well-being, aspirations and potential, particularly since the 1860s (Moewaka-Barnes & McCreanor, 2019). The confiscation of land broke the vital connection to whenua, disrupting the identities of whānau, hapū and iwi that were tied to specific lands. This upheaval disrupted traditional knowledge and practices around land use, fostering dependence on colonial economic systems and weakening the foundations of Māori society (Walker, 1990). The impact, however, extends beyond material loss, also affecting Māori emotional and psychological well-being. The effects include widespread trauma along with damage to identity and the attempted eradication of Māori cultural practices and norms (Moewaka-Barnes & McCreanor, 2019).

Land grabs and confiscations have separated tangata whenua from their whenua, destabilising place-based whānau, hapū and iwi identities, breaking long-established knowledge practices around land use (Walker, 1990). This has resulted

* Ngāti Whātua, Ngāpuhi, Kāi Tahu. Lecturer in Sociology, Te Kura Mahinga Tangata | The School of Social & Cultural Studies, Te Herenga Waka | Victoria University of Wellington, Wellington, New Zealand. Email: hine.funaki-cole@vuw.ac.nz

in dependence on colonial economic systems, undermining the very fabric of Māori society (Walker 1990). The compounding effects of settler hegemony extended to governance, policy and law to attack mātauranga Māori. Simmonds (2011) asserts that the 1907 Tohunga Suppression Act was one of the most forceful attacks on wairua knowledge because its primary aim was to determine what kinds of knowledge were considered valid and important. This law effectively banned a whole class of Māori intellectuals, denying our tūpuna the right to consult their own cultural and spiritual experts (Smith, 1996, as cited in Simmonds, 2011). Colonisers viewed wairua knowledge as superstitions and tales then (Johnston, 1998, as cited in Simmons, 2011), and this harmful narrative has continued today (Simmonds, 2011). Consequently, limited access to mātauranga has affected the vitality and well-being of Māori, impacting cultural identity and place belonging (Hawaikirangi-Pere, 2013).

Among the many long-established practices that have been threatened is a pā harakeke village approach to child-rearing. As argued by Pihama (2022, as cited in Rokx et al., 1999), tamariki are a vital aspect of "an ongoing whakapapa, their contributions simultaneously fed into the past, present and future" (p. 2), informing a collective approach to child-rearing. A whānau-based approach that extends to tūpuna and other relatives not only supports the well-being of parents and māmā (Simmonds, 2019) but also nurtures tamariki development, allowing for a wealth of knowledge building and sharing of stories as taonga tuku iho (Pihama, 2022). With many Māori living away from whenua, pā harakeke is difficult to maintain, often leaving many māmā to carry more load.

However, where Indigenous challenges and settler-colonial violence exist, Indigenous hope and resistance also lie. Chairperson of Te Taura Whiri i Te Reo Māori | Māori Language Commission Professor Rawinia Higgins acknowledges that it takes one generation to lose an Indigenous language and three generations to restore it ("Revitalising Te Reo", 2020). As a response to such hegemony, and a dire need to retain what we had left of the language, in the past 50 years, out of love for tamariki, there has been a drive to hoki whakamuri kia anaga whakamua, to walk backwards into the future and turn to tūpuna guidance throughout reclamation. There has been a resurgence of mātauranga through the likes of te reo Māori and culture, highlighted by the creation of Māori-language educational institutions such as Te Kōhanga Reo, Kura Kaupapa Māori, wharekura, and wānanga (reo Māori tertiary setting) (Hawaikirangi-Pere, 2013).

Research by Te Ipukarea (2020) followed highly proficient te reo Māori speakers to explore successful language transmission in their whānau unit. The study focused on families who possess strong te reo Māori skills, have tamariki under five years old and are actively using the language to raise them in Māori medium environments. Their study outlined common challenges the whānau met and strategies they used to navigate them, such as planning for situations that could hinder the language acquisition. Reviving the language has contributed to a decolonial Māori future as a form of healing.

Other research that explores (re)learning mātauranga includes studies on reclaiming Māori maternal knowledges (Simmonds, 2017), Māori child-rearing practices (Pihama & Lee-Morgan, 2022) and traditional Māori weaving practices (New Zealand Maritime Museum, 2025), among others. It is apparent that wāhine are often the drivers of these decisions about caring for culture and the environment (Stats NZ, 2020); however, there is limited research on māmā as change makers, from beginner levels without mentors, reclaiming a range of stolen knowledge.

This article describes the research project titled "Ko te whaea te takere o te waka: Māori mothers reclaiming tūpuna knowledges for the next generations" and draws attention to the similarities between the Hautū Waka navigation framework (Taniwha-Pao'o & Hoeta, 2024) and the phases that māmā navigate during their reclamation journeys. The project title is a whakataukī that translates in essence to "Mothers are like the hull of the canoe, they keep the family together" (Morrison, 2022, para. 2). I wanted to explore the ways in which māmā, as creators of whakapapa, led change for their tamariki. I also sought to find out about the challenges they met and surmounted as they reclaimed mātauranga. Further, if we know that it only takes one generation to eliminate an Indigenous language, and a minimum of three to revive it, then it is important to understand how whānau can remain hopeful throughout the challenging aspects of reclamation by noticing and celebrating the positive signs of progress.

Whakapapa reclamation and tamariki mokopuna

When it comes to mātauranga reclamation, I feel drawn to Moana Jackson's (2020) assertion that drawing upon whakapapa is a cornerstone

to an "ethic of restoration" in Aotearoa New Zealand, which incorporates but is not limited to constitutional transformation (Matike Mai, 2016). Restoration (and arguably reclamation) is grounded within a politics of love "where love is seen as both critical and constructive" (Jackson, 2020, p. 153), which works to recentre Papatūānuku, and interrelatedly, whakapapa. Jackson (2020) proposes the "ethic of restoration" (p. 149) as a more relevant term than "decolonization" that offers a hopeful political framework for the context of settler-colonial Aotearoa. This concept gives emphasis to the possibilities that could emerge through whakapapa reclamation. Guided by an ethos of love and hope, Jackson demonstrates how an ethic of restoration reflects the diverse ways Māori are creating flourishing futures. Examples include through engaging with whakapapa stories sustained in whānau and relationships with whenua—with Papatūānuku. An ethos of love and hope, I believe, is the very reason why whānau embark on reclamation journeys, to reconnect to Māori ways of knowing, doing and being to restore love that has been threatened, attacked and stripped across generations. It is important to then highlight how central love is to the way tamariki are viewed in te ao Māori:

> Tama is derived from Tamanuiterā the central sun, the divine spark. Ariki refers to senior most status, and riki on its own can mean smaller version. Tamariki is the Māori word used for children. Children are the greatest legacy the world community has. (Pere, 1991, p. 4)

As Kiri West (2025) explains:

> Whakapapa and pepeha are the first gifts bestowed on newborns as they enter Te Ao Mārama, arguably before. Whakapapa is the story we tell before we can speak and the story we tell when we feel like we cannot speak. It is a foundational element of Māori identity and existence. (p. 13)

As māmā, creators of those babies, creators of whakapapa, it is an act of love to reclaim knowledges and practices that centre them as "smaller versions of a divine spark" (Pere, 1991).

Methods

This is a qualitative Kaupapa Māori project that included 10 māmā from my own networks who were on a journey of reclaiming some form of mātauranga Māori for their pēpi, tamaiti or tamariki. The research questions were:

- What forms of mātauranga Māori are māmā reclaiming for their tamariki mokopuna?
- How are māmā leading change for their whānau?
- What challenges do māmā face as they reclaim mātauranga? And how do they surmount them?
- How do māmā remain hopeful in their reclamation journeys?

I wanted to ensure that these were people I already knew so they felt safe to have me in their space with their tamariki and whānau while they shared their stories with me.

Eight of the interviews were kanohi ki te kanohi, and two were online because of geographic location. Nine māmā were already parents and one was hapū with her first child. For interviews that were kanohi ki te kanohi, we met at their home, my home or a public space such as a café or local park. All interviews were in the form of casual discussion and some in the form of a playdate at māmā's homes, or a park where the adults talked while the tamariki played and came back and forth as they needed. I welcomed this approach to "interviewing" as seeing tamariki having their needs met rather than as "interrupting" the research process.

I conducted two types of analyses for different purposes. The first was based on the stories that included various types of mātauranga that māmā were reclaiming. These stories were grouped into themes that formed a zine for distribution to whānau Māori spaces specifically for māmā (Funaki-Cole, 2024). These knowledges included wairuatanga, hapūtanga and Māori birthing practices, tikanga Māori, tūpuna child-rearing, food cultivating, weaving, rongoā Māori and te reo Māori. A future article will outline the process of creating the zine from the data analysis, collaborating with Māori artists, the design and dissemination. These discussions, however, are outside the scope of this article.

The second thematic analysis, which is what this article is based on, looked at the overall trends and themes across the stories māmā shared. The data revealed key concepts that shaped the trends, including stages such as (re)imagining desires, researching needs, relearning childhood knowledge, returning home where they whakapapa, overcoming challenges, reconnecting with whānau, reviving learned skills and reclaiming knowledge, to name a few. These concepts are further unpacked below in the conceptual framework section and are visible in the findings and discussion sections.

Conceptual framework

I drew on two bodies of work to form the conceptual framework for this study. The first is the navigation framework (Taniwha-Pao'o & Hoeta, 2024), and the second is a whakapapa approach, drawing on the concepts of onamata, anamata (Burgess & Painting, 2020). These are discussed below.

Hautū Waka

Many concepts that formed the trends used the prefix "re", which comes from Latin and means "again and again" or "to go back and repeat" (Dictionary.com, 2012). This idea of repetition resonates with the journeys described by these mothers, such as returning to study te reo Māori or relearning knowledge they once (k)new (Edwards, 2009), now with a deeper appreciation as adults and parents, as well as returning home to where they have relational connection.

I drew inspiration from these movements as a planned voyage, navigating the vast Moana-nui-a-Kiwa just as our ancestors did before discovering Aotearoa. These themes of movement aligned with voyaging. To guide my understanding, I used the Hautū Waka framework (see Figure 1) as a lens to view their travels, helping me connect the phases of voyaging to the experiences māmā were undergoing in their own journeys.

Explanation of each phase

Phase 1 is Te Whakaritirite, when the crew prepares for the voyage. In this phase, māmā (and those they have in their waka on the same journey) reflected on their desired destinations, considered what was needed to attain those desires, and assessed whether they had the resources necessary to embark on the journey.

Phase 2, Te Rapunga, marks the moment when māmā step into the unknown, bringing all their strengths and resources. This phase can arguably be the most challenging, as it requires transitioning from planning to action. Venturing into unfamiliar territory can feel daunting, creating significant barriers along the way.

Te Kitenga is the following phase when, in the unknown, voyagers rely on what they have learned so far and trust in Indigenous ways of knowing, such as intuition (Cameron, 2008) and tohu (Smith, 2019), that they could be heading in the right direction.

The next phase, Te Whāinga, involves exploring the tohu and testing their reliability. This phase may involve wrong turns and challenges, requiring them to reorient and adapt as they progress.

The fourth phase is Te Whiwhinga. This is at the intersection between where the tohu have led, and having the end in sight, with work still to complete. This is when confidence overcomes doubts as they notice the gains they have made throughout their travels and persevere through the challenges.

And finally, the last phase is Te Rawenga, when they reach the desired destination and celebrate the wins. The tohu that led them there showed they were reliable markers that can be replicated

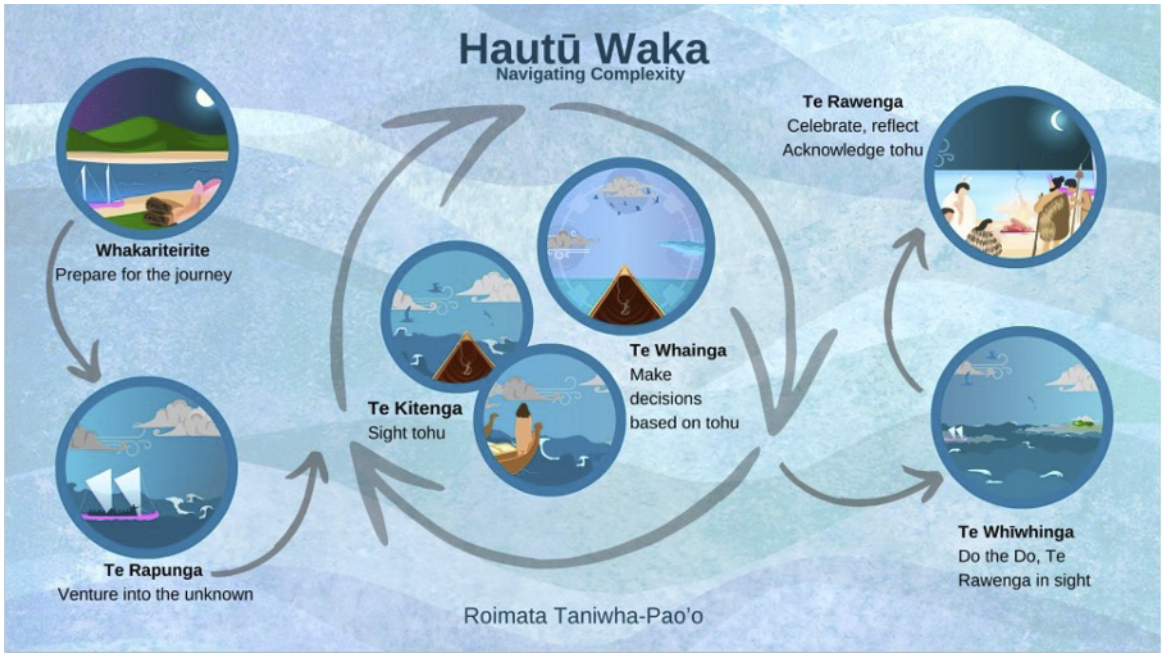

FIGURE 1 Hautū Waka framework (Taniwha-Pao'o & Hoeta, 2024)

for further travels and to pass on that knowledge for collective gain.

Whakapapa: Onamata, anamata

In addition to the Hautū Waka framework, I drew on Burgess and Painting's (2020) concepts of onamata, anamata, seeing through the eyes of our mokopuna and tūpuna. Burgess and Painting claim that, by maintaining strong connections with both past and future generations, we can perceive time more clearly—rooted in the knowledge of our whakapapa.

I see the similarities in the complexities of whakapapa, time and intergenerational connectedness. Burgess and Painting (2020) assert that whakapapa traverses time and space:

> Our existence as Māori is intergenerational, each of us intimately connected to innumerable past and future generations, our tūpuna and our mokopuna. We live as though they are here with us, seeing what we see. We are reflections of each other. (p. 214)

Burgess and Painting understand the present as "that fleeting moment where the past and the future meet. By meeting, the past and future interact. At this point of interaction, whakapapa is laid down" (p. 218).

I can see those intersections at play as māmā, both mokopuna and future tūpuna, are making mokopuna decisions and embarking on reclamation journeys, despite the fears of the unknown and the challenges they face. Additionally, I see how the journey can reconnect these māmā and their whānau, acknowledging the efforts their tūpuna have endured and fostering intergenerational healing by restoring stolen knowledges.

Findings

In this project, I sought to find out how māmā became the hull of the canoe, how they led change for their whānau. I also wanted to know what challenges they met and how they navigated them, including how they remained hopeful during the tough times. The overall aim is to be able to share these stories so that other whānau can embark on similar journeys if they feel inspired to.

How māmā led change for their tamariki mokopuna

Māmā led change for their whānau by reclaiming mātauranga Māori. These māmā learned various forms of mātauranga from beginner levels. These included rongoā Māori, te reo Māori, Māori birthing practices, tikanga Māori and many more. In terms of how they acquired these mātauranga, māmā set goals based on what they desired for their tamariki mokopuna in the near and distant future. Second, they considered strategies and explored options that might help them achieve their goals.

As a māmā of three, Sha was learning te reo Māori to show her commitment to the kōhanga and kura her tamariki attend. She added, "My goal is definitely to be able to speak the reo, and get to a point where I can confidently, fluently speak. And for it to be a norm in our whare … That's definitely my ultimate goal."

Alana was reclaiming wairuatanga as a way of seeking "collective healing" and she added:

> When you heal yourself, you're healing your tīpuna, you're healing those generations. But you're also healing the generations to come. Because if you're not doing your healing, it's passed on to the next.
>
> I really believe you just touch one person; you impact a whānau.
>
> Every single thing in our culture is healing. Every single thing. From one kupu, that's healing. From doing our waiata, from standing for kapa haka, from doing our oriori—all of that is healing and really looking after the creations that we created.

Ria wanted to grow her knowledge of a Māori worldview of pregnancy and childbirth:

> When I first got hapū, one of the biggest things for me was that I had been doing a lot of trying to understand this concept of the whare tangata and what it meant to be the creator and the sharer of whakapapa. It's kind of beautiful.

Huia was hapū with her first tamaiti. She had a list of things that she wanted to complete before her pēpi arrived:

> I wanted to publish my book; I wanted to get my first tā moko. I feel like that was something that I really wanted to do before going into having a pēpi. I wanted to swim in my awa for the first time.

Once these māmā knew what their dreams for their mokopuna were, they set plans and mapped out these visions. Strategies māmā used included researching where they could access the knowledge they were seeking, how much time would be required, travel and financial considerations, whether they could fit it in their everyday schedules and commitments.

Alana talked about using her time wisely and focusing reclamation strategies on what she had the capacity to access, stating, "I'm going to get my language back soon, but what can I do at this point in time? And [I realised] it was about sharing the kōrero that I grew up with, from where I'm from, accessing anything te reo."

The third way māmā led change for their whānau was by leaping into the unfamiliar territory (despite reservations) to begin reclamation for their tamariki. Johanna talked about wanting to learn rongoā Māori for many years before she started that process and added, "I've just got to do that right now, this year, it's now or never, and I did. It was just the most amazing, life-changing thing."

For Ria, reconnecting with her marae had been a challenging experience to navigate:

> It was really uncomfortable initially, and I was really anxious, and I came up with a million excuses why I couldn't go. But I think the thing that made it easier for me, a little bit, is that in lots of Pākehā spaces, my boy is seen as naughty. He's got too much energy, he doesn't shut up, and all those things. But on the marae, no one sees him that way—he's just another one of the tamariki playing outside and no one really cares. And if he's doing something, one of the nannies will tell him off, and he'll go, "Okay," and carry on. So, I thought, "Well he is safe in that space, so if he is safe in that space, then I am safe in that space."
>
> I think what it does is it makes me address my own identity crisis in a way that I've never had to address before … when you're confronted with having someone that you're passing this stuff to, and you have an obligation. It's made me really assess who I am in a way I've never really assessed before. It's been a bit mildly overwhelming, but really, really beautiful as well.

While it may have taken māmā some time to take that next step from the comfortable knowing, into the uncomfortable unknown, they all demonstrated gratitude for making those decisions.

Challenges and strategies māmā faced

This section highlights the challenges māmā met and surmounted throughout their reclamation journeys. Undergoing learning these (k)new knowledges (Edwards, 2009) took a toll on māmā, whether this was felt physically, mentally, emotionally, spiritually or financially.

Hana recalled a time when she changed how she approached mātauranga reclamation, making it easier to engage with and less emotionally draining for herself:

> When I started learning te reo, I was hanging my entire Māori identity on it. That's a lot of pressure to put on yourself! While I love learning te reo, there has been a heaviness to it which challenged my motivation to keep learning and speaking. I realised I could diversify the way I re-connect to our whakapapa, and I didn't have to hang it all on learning te reo. Learning to weave has a fun and creative lightness and has been very accessible.

Abby had a plan in place to combat the heavy times that were involved in her reclamation journey:

> If you want to get the language back, you have to be hungry enough for it that you can get through those low points, because they're there. And it's heavy, it's a burden and they shouldn't be there, we shouldn't have to push through all these things to have our language, but that's the sad reality of it.
>
> Right when everything was going through with the kāwanatanga, we were practising with our kapa for kapa haka. And that was the rongoā where we were just singing, singing as Māori, existing as Māori, singing in Māori. It didn't matter what was happening outside.
>
> When you have a kid, you're like, "Well how many of our ancestors fought so that we could learn te reo? We could have kōhanga? We could have the Treaty of Waitangi?" So now this is actually our time to do that for them. So you've got to have that whawhai in you, that kaha in you. And you don't have to have that all the time—you can't have it all the time—but you've got to.

A key challenge highlighted by several māmā was the limited access to mentors. Abby reflected on her whānau and not having anyone close to her to be able to learn te reo from:

> Within my whānau, there wasn't really anyone to learn off. Except for, I had my great-uncles up North. And that's just a relationship that's really started, where I'm now learning Ngāpuhitanga off of them. But prior to that, it was mainly, I just want to get the language so I can understand everything else.

Tarapuhi acknowledged that these journeys of reclamation require a long process of healing, and

it can take multiple generations to experience the true depth of their labour:

> This is the work of healing historical trauma is looking at each other and being like, "We don't have mentors; we have to lower our expectations and be kinder to ourselves." And I think that's where the mindset of playfulness and experimenting is really helpful for me because I do like being good at things. And so, there's not actually anyone that can come and teach us to do these things, necessarily. You can't take a course in them. You can in a way, but it's not the kind of thing that you just learn like that. And so, I think there's been something really powerful about being like, "We're not going to get it right, and that's okay." The intergenerational healing takes five generations, and we just have to do our part, and it's not as satisfying as being an excellent gardener, but we don't get to see all of the fruit straight away, and that's okay because our mokopuna will.

Reclamation requires time, among other things. Learning te reo comes at a cost, even when classes are free. Reo classes, kōhanga and kura in larger cities are often at full capacity, meaning long waitlists. While hapū, Hana planned for these challenges and considered how to maintain the reo in the home while waiting for a kōhanga vacancy:

> I'm starting to think about, how do I make sure that reo is still a big part of my world. I got some inspiration from Ngāi Tahu, from their Kotahi Mano Kāika where they get a cluster and they meet regularly. I've reached out to a couple of mates and everyone's keen.
>
> Because waitlists for kōhanga reo here are like two or three years. Everyone I know who's hapū or have little ones are keen. That's going to be the next step. Just got to find a time that works for everyone. And hopefully that's set up a bit more by the time baby comes and it can just keep running.

Further, full-time immersive reo courses mean sacrificing income to reclaim their mother tongue. Abby shared the steps she was thankful she took as a university graduate:

> I turned down a job to focus on full immersion te reo.
>
> I'm so proud that I did that back then! I knew there was something there even when everyone was like, "Go take the job, start earning money." I was like, "Nope."
>
> I'm at a real conversational stage now. I can listen to anything and I've got a real good understanding. And I just feel like I've got access to my culture in a way that I didn't have growing up, in that [our tamaiti] will never not have. He's got that key right from birth. I've got kura reo booked in for next year, so it's just now about expanding it and taking it to those next levels.
>
> And as he grows—because I know kōhanga will be a huge thing for us as a whānau. Because, particularly for my side, he'll be the first baby to go to kōhanga. So in that respect, because we made that decision that he's going to do hopefully all his schooling, but definitely kōhanga and kura, in te reo, that we fully commit to that. I'll hopefully be working there, but even if it doesn't work out for actually working there, I'll put a lot of time in anyway. Because we know how vital it is for kōhanga to have heavy whānau involvement. And I think me and my partner have good skills to contribute into that space too.

Abby also mentioned here that she planned to work at the kōhanga, offering her time and skills. So while not having a large pool of mentors for her own learning when starting out, she has taken upon herself to share what knowledge she has acquired to support the collective, much like a mentor or tuakana for others.

How māmā remained hopeful throughout their reclamation journeys

Despite challenges, these māmā saw progress throughout their reclamation. While some gains may have taken a long time to see progress, smaller victories were celebrated along the way.

Abby could see the transformative impact that her reclamation journey has had on her whānau, when reflecting on her child's reo Māori fluency:

> My dad has made a comment like, "I hope he'll learn English as well." And I sat him down and said, "Here's all the evidence, this is how community languages work."
>
> So my dad has enrolled to learn te reo this year. And similarly my mum's Pākehā and we've had similar kōrero with her too. And I was like, "You'll always love your grandson and you'll have that connection, but if you really want to know him, know him through his language. That's his language of expression."
>
> So, they've all really taken that on board. And I think they can just see how uncompromising me

> and [my partner] will be about that. But also, when you then get a kāwanatanga that comes through, "now this is really detrimental for our grandson", it changes something.

Abby also mentioned the impact her efforts as a whānau have had on her tamaiti:

> I'm so glad I put that time in, because the world that my baby's growing up in is so different to the world that I grew up in. Like he's so, he's so Māori! And his worldview is Māori, and his reo is Māori and how he expresses himself is Māori. So that's just, yeah, just beautiful.

> And you can see it with my sister, she wants to learn te reo next year, and a lot of my cousins. So we're going to set up a hapū wānanga for te reo. So our little whānau will come together and start doing te reo. We'll probably do it online. So I think for me, te reo is the starting point and then it branches out from that. Because there are certain tikanga as Māori I think that we've never lost—manaakitanga, whanaungatanga.

Among the everyday wins that māmā shared was how reo Māori practices have become routine. Cora shared signs of the daily progress she noticed with her tamariki that brought her happiness:

> When I hear them speak to me, when I hear them come home and they're singing waiata, when I hear them asking for kupu in Māori, when they automatically choose te reo Māori as their first language.

Tarapuhi talked about celebrating the rewards that come from being in the environment and connecting with tūpuna:

> We have committed to making this (māra kai) an experimentation thing, a learning thing. Trying to take the pressure off doing it perfect and reaping all of the rewards. The rewards we've been given have been about being excited to go outside and connect with the whenua, seeing flowers grow and fruit grow, and then practising communication with each other and the kids, and teaching them.

Tarapuhi shared ways in which she and her tamariki are able to reconnect with their tūpuna:

> When you feel joy in your body, that is, you connecting with your tīpuna, because that is the point of whakapapa, right? Is that you're connected through your tinana—not just at a bones, DNA, blood level. But if you really believe that you're connected to whenua, and you are connected to your tīpuna, when you feel joy and you use your body, you're using your tīpuna's bodies as well.

Māmā were met with various challenges throughout reclamation, but they overcame those by accessing and using what knowledge they did have, by taking steps to reconnect, whether that was at the marae, with their reo or doing māra kai, and by being kind to themselves and celebrating the wins, no matter how small. In Abby's case, it was also about getting more whānau on the same waka, supporting that load that can become heavy at times.

Next, I discuss how these findings contribute to decolonisation through processes of reconnection and reclamation. I unpack the ways in which the findings align with a whakapapa approach and the Hautū Waka model and show how these everyday acts of reconnection can be understood as forms of resistance to settler-colonial harms.

Discussion

Politics of love and hope (Jackson, 2020) sit at the heart of the findings. The love these māmā hold for their tamariki is shown in the way they consider hopeful futures their tamariki mokopuna can thrive in. Their love and hope demonstrate a commitment to equipping themselves with knowledges that require long journeys to reclaim. In doing so, the aim is to undergo generational healing so that the emotional or traumatic load is not passed onto the next generations. As Alana mentioned, everything in our culture is healing, but we need to do that healing ourselves or it will get passed onto the next generations. Such responsibilities are shaped through whakapapa, where concepts like onamata and anamata locate māmā as both tūpuna and mokopuna at the intersection of where whakapapa is laid down (Burgess & Painting, 2020). In this way, whakapapa threads together not just time, but the decisions and desires these māmā make to go back to tūpuna wisdom.

It is important to acknowledge that these māmā were not just reclaiming one specific knowledge, they were undergoing transformations within themselves, and across multiple knowledges. Alana, for example, was learning about wairuatanga but also te reo Māori and tūpuna parenting. She referred to a type of kind, gentle love for tamariki, stating "really looking after the creations that we created". Here, Alana referred to whakapapa creations, as wāhine being the creators

of life. Ria also referred to māmā as the "creator and sharer of whakapapa". The way these māmā referred to their tamariki connects to the way we nurture and care for these miniature suns (Pere, 1991). It is clear there is a depth of love that māmā have for their tamariki which, I argue, motivates their reclamation journeys to begin with.

Employing the Hautū Waka model here, it is easy to align similarities between the findings and the likes of the navigation phases. In preparation for reclamation, or during the Whakariterite phase, māmā were considering what kinds of mātauranga they wanted to connect with in the hopes it would one day be the norm for their tamariki. In this phase, māmā looked to the future through the eyes of their mokopuna—through anamata. Here, they could envision celebrating the fruits of their labour. Māmā considered time, efforts, finances and support people, and had strategies to put plans in place for challenging times.

Te Whakariterite preparation phase can be in the works for several years before any further action begins. This was the case for Johanna wanting to learn about rongoā, or it could come by quickly, like it did for Huia with a list of specific milestones to achieve before her pēpi was born. But that plan is what helped māmā take the leap into the unknown of the next phase, Te Rapunga.

As beginner learners of whichever mātauranga they were following, māmā had to become resourceful about using what knowledge they already had and seek connection with others who had knowledge they were seeking. Many māmā expressed difficulties in not having easy access to mentors, so finding others proved challenging. For Tarapuhi, mahinga kai was not as simple as enrolling in a course. But rather, it was coming to terms with relinquishing the ideals of perfectionism—that it would be okay not to see the larger benefits in her time, but that the seeds had been sown for the mokopuna and that it was enough to celebrate the small, everyday wins of simply feeling joy outside.

Some māmā found it challenging making connections in spaces where mentors were. As Ria mentioned feeling overwhelmed and finding it difficult to reconnect with her marae, she moved through those debilitating feelings and felt that she had to overcome them for the benefit of her tamaiti. These decisions and overcoming challenges are how māmā were enacting onamata, anamata.

When journeying in the unknown, or Te Rapunga phase, māmā also had to rely on what they already had with them, and trust in the process that they could and would find some sign or tohu that they were on track. This kind of resilience would equip them for the Te Kitenga and Te Whāinga phases, in which māmā were met with many different challenges, such as limited mentors, and emotional and financial pressures. In these situations, māmā took comfort in sighting the tohu, testing them out to see if they were makers of change, signalling hope that they were on track and to continue.

And when they were able to see some sign that their hard work was showing gains, such as Cora's tamariki talking to her in te reo Māori, or the rippling effect that Abby's whānau now have in their motivation to also learn te reo, these wins were celebrated in Te Whiwhinga. This is also connected to the way Alana articulated healing through just one person, and that impacting the whole whānau.

Circling back to what West (2025) reminds us, that whakapapa and pepeha are the first gifts we give our tamariki, in Te Rawenga—those gifts are celebrated as flourishing Māori futures.

Conclusion

This article provides a snapshot of the journeys 10 māmā underwent to reclaim various forms of ancestral knowledges for the next generations. Politics of love emerged as māmā embodied tūpuna practices and made mokopuna decisions, privileging Māori futurism in response to settler-colonial attacks on mātauranga. Māmā embarked on these reclamation journeys specifically for their tamariki, often carrying the weight to bear them from inheriting that load. Each in their own way, these māmā are contributing towards decolonisation as they move backward into the future.

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Glossary

anamata	the eyes of our mokopuna
Aotearoa	New Zealand
awa	river
hapū	subtribe; pregnant
hapūtanga	pregnancy
iwi	tribe
kaha	power, strength
kanohi ki te kanohi	in person, face to face
kapa	group, team
kapa haka	Māori performing group.
Kaupapa Māori	Māori research approach
kāwanatanga	government
kitenga	observation, perception, view
kōhanga reo	Māori language nest, reo Māori early childcare
kōrero	story
kupu	word
māmā	Māori mothers
manaakitanga	respect, hospitality, kindness
marae	tribal meeting grounds
māra kai	food garden
mātauranga	knowledge, tradition, epistemology
Moana-nui-a-Kiwa	Pacific Ocean
mokopuna (mokos)	grandchildren, descendants
onamata	the eyes of our tūpuna
oriori	a song or chant composed for a pēpi at birth/lullaby
pā harakeke	flax bush; generations
Pākehā	a person of predominantly European descent
Papatūānuku	Earth Mother
pepeha	tribal saying
pēpi	baby
rapunga	search, hunt, inquiry, investigation
rongoā	traditional medicine
tamaiti	child
tamariki	children
tā moko	traditional tattooing
tangata whenua	first people of the land
taonga tuku iho	gifts handed down through generations
te ao Māori	Māori worldview
te ao mārama	the world of light
Te Kōhanga Reo	reo Māori early childcare
te reo Māori	the Māori language
tikanga	protocols, customs
tinana	body
tohu	signs
tīpuna/tūpuna	ancestors
tuakana	elder brother (of a male), elder sister (of a female); mentor
wāhine	women
Wai	Water
waiata	song/to sing
wairua	spirit, soul
wairuatanga	spiritual knowledge
waka	canoe
wānanga	reo Māori tertiary setting
whāinga	pursuit, aim, goal, objective, purpose
whakapapa	genealogy, ancestry, familial relationships; relational connection
whakariterite	arrangements, planning, preparation
whakataukī	proverb
whānau	family, nuclear/extended family
whanaungatanga	the interrelationship of Māori with their ancestors, their whānau, hapū and iwi, and the natural resources within their tribal boundaries
whare	house
wharekura	kaupapa Māori secondary school
whare tangata	house of humanity; womb, uterus
whawhai	fight, strength
whenua	land
whiwhinga	attainment, procurement

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COMMENTARY

FALLING THROUGH THE CRACKS

The toll of mis- and missed diagnosis in FASD and ADHD: A call to action

*Deb Cole**
Byron Rangiwai†

Abstract

This commentary examines the widespread issue of mis- and missed diagnosis of fetal alcohol spectrum disorder (FASD) and attention-deficit/hyperactivity disorder (ADHD), with a particular focus on the disproportionate impact on Māori individuals and their whānau. Grounded in a Kaupapa Māori approach, this research integrates mātauranga Māori and lived experience to critically analyse the systemic barriers that prevent accurate identification and timely support for neurodivergent individuals. Drawing on academic literature and the lived experience of advocate and researcher Deb Cole, the report highlights the severe consequences of the mis- and missed diagnosis of FASD and ADHD, including increased vulnerability to mental health challenges, justice system involvement, and lack of access to essential services. The overlap in symptomatology between these conditions contributes to frequent diagnostic confusion, exacerbated by institutional inequities, under-resourced services, and the absence of culturally responsive assessment tools. This report issues an urgent call to action directed at policymakers, health professionals, educators, and the wider community. It demands the formal recognition of FASD as a disability in Aotearoa New Zealand and advocates for Kaupapa Māori-led diagnostic pathways and support systems. Furthermore, it calls for investment in Māori-led solutions that prioritise whānau-centred, culturally appropriate care. Without immediate systemic reform, individuals with FASD and ADHD—and their caregivers—will continue to fall through the cracks, perpetuating cycles of disadvantage and marginalisation. The time for change is now.

Keywords

ADHD, Aroreretini, FASD, Kanorau-ā-roro, misdiagnosis, neurodivergence, neurodiversity, Te Iho Tātai-ā-Rongo

* Ngāti Kahu, Te Rarawa, Ngāi Takoto, Ngāti Hine. Master's Student, School of Healthcare and Social Practice, Unitec Institute of Technology | Te Whare Wānanga o Wairaka, Auckland, New Zealand.

† Ngāti Manawa, Ngāti Whare, Ngāti Porou, Ngāi Tūhoe. Associate Professor, Ngā Wai a Te Tūī: Māori and Indigenous Research Centre, Unitec Institute of Technology | Te Whare Wānanga o Wairaka, Auckland, New Zealand. Email: brangiwai@unitec.ac.nz

Introduction

This commentary emerges from the findings of a summer student internship programme funded by Unitec's Tūāpapa Rangahau | Research and Postgraduate Office and supervised by its Ngā Wai a Te Tūī | Māori and Indigenous Research Centre. Grounded in Kaupapa Māori methodology, the research critically examined the mis- and missed diagnosis of fetal alcohol spectrum disorder (FASD) and attention-deficit/hyperactivity disorder (ADHD), highlighting the impact on individuals, whānau, and the broader socio-political landscape of health, education, and social services in Aotearoa New Zealand. The findings contribute to the growing discourse on neurodevelopmental conditions, particularly in the context of systemic inequities affecting Māori.

At the core of this research is Deb Cole (Ngāti Hine, Ngāti Kahu, Te Rarawa, Ngāi Takoto), a dedicated advocate, researcher, and caregiver with lived experience of the challenges surrounding FASD. A mother of five and kuia to 20 mokopuna, Deb's academic and advocacy work is deeply informed by her personal journey. More than two decades ago, four of her mokopuna arrived on her doorstep in a state of severe neglect. Two were later diagnosed with FASD—an experience that reshaped Deb's life and set her on a path of relentless advocacy for tamariki, whānau, and caregivers affected by the condition (Cole, 2021).

Deb's master's research, which examines the intergenerational impact of FASD on Māori whānau, has been instrumental in framing this study. Her work challenges systemic failures in the health, education, and justice sectors, where Māori with FASD are frequently misdiagnosed, underdiagnosed, or overlooked entirely. Through legal action and advocacy, Deb has successfully held health institutions accountable, ensuring that whānau voices are recognised as central to FASD care and decision-making. She has spoken at national forums, Waitangi Tribunal hearings (WAI 2575 and 2624; see Cole, 2021), and before community advocacy groups, sharing both her personal experiences and research-driven insights.

FASD and ADHD are prevalent neurodevelopmental conditions, yet many individuals remain undiagnosed or misdiagnosed, leading to inappropriate or insufficient support. It is estimated that between 3% and 9% of the general population live with FASD, and over 5% of the general population have ADHD (Clark et al., 2024; Popova et al., 2019; Young et al., 2016; Yousefi & Chaufan, 2022). It is estimated that between 45% and 75% of those diagnosed with FASD have a co-occurring diagnosis of ADHD (Chasnoff et al., 2015; Clark et al., 2024; Ehlert, 2017; FASD United, 2016; Ware et al., 2014) and that 86.5% of those with FASD are either misdiagnosed or underdiagnosed (Chasnoff et al., 2015). A study of youth in a youth detention centre, the first study of its kind, found an FASD prevalence rate of 36%, and 89% of those youth had one severe neurodevelopmental domain impairment (Bower et al., 2018). The overlap in symptoms between these conditions contributes to frequent diagnostic confusion, particularly in health and education settings that lack awareness and understanding of neurodiversity. For Māori, these issues are compounded by systemic inequities, including institutional racism, under-resourced services, and a lack of culturally informed diagnostic tools.

The research reported here was framed within a Kaupapa Māori approach, which positions whānau, whakapapa, and tino rangatiratanga as central to understanding and addressing FASD and ADHD. The study advocates for Māori-led solutions that integrate mātauranga Māori, ensuring that tamariki and rangatahi receive timely, culturally appropriate diagnosis and support. By foregrounding lived experience, this research highlights the urgent need for systemic change, focusing on equitable access to resources, policy reform, and whānau-driven models of care.

This report is primarily authored by Deb, with structural and editorial support from Dr Byron Rangiwai, an experienced Kaupapa Māori researcher. His role in this study has been to support the development of the introduction and conclusion and prepare the research for publication. However, the essence of this work remains deeply personal—it reflects Deb's lived realities, her academic journey, and her unwavering commitment to advocating for those affected by FASD and ADHD. Furthermore, Byron lives with ADHD and has published a paper that seeks to reframe ADHD from a Māori perspective through the metaphor of the pīwakawaka, an energetic and playful bird that is significant in Māori society (Rangiwai, 2024). Through our research, we call for a fundamental shift in policy and practice, ensuring that Māori with neurodevelopmental conditions, and their whānau, are no longer left navigating these challenges alone.

How does mis- and missed diagnosis of FASD and ADHD affect individuals and their caregivers?

Misdiagnosis occurs when someone presents with symptoms but is incorrectly diagnosed with

a condition; missed diagnosis is when the symptoms are missed altogether (Crowe & Harris, LLP, 2022). Mis- and missed diagnosis can profoundly impact quality of life, leaving many individuals with significant functional challenges without access to essential, coordinated, multidisciplinary support such as daily living assistance, housing, employment, and mental healthcare (Crawford et al., 2020; McLachlan et al., 2020; Olson & Sparrow, 2021). This lack of support places a significant burden on whānau and caregivers, often leading to strained relationships and increasing the vulnerability of individuals with FASD to mental health issues, interactions with the justice system, and incarceration (Disability Rights Commissioner and Children's Commissioner to the Prime Minister, 2021; Gibbs, 2022; Jonsson, 2019). Caregivers frequently experience grief, isolation, inadequate support and information, difficulties in accessing resources, and financial strain (Crawford et al., 2020; Harding et al., 2022; Mukherjee et al., 2013; Popova et al., 2023). Additionally, they often find themselves in an ongoing battle to secure essential services while facing misunderstanding, stigma, and blame (Flannigan et al., 2022; Hamilton et al., 2020).

What is the relationship between FASD and ADHD?

FASD and ADHD are two distinct neurodevelopmental conditions with overlapping symptoms. Research suggests that approximately 73% of individuals with FASD may also meet the criteria for ADHD; however, the disorders differ in their underlying causes, behavioural patterns, symptom profiles, and treatment approaches (Copley, 2023; Ehlert, 2017; FASD United, 2016; Young et al., 2016). Due to their shared characteristics, such as difficulties with attention and impulse control, they are often mistaken for one another. These challenges frequently contribute to struggles in academic and social settings, as well as in diagnostic settings.

What is FASD?

FASD is a broad term encompassing a spectrum of negative effects resulting from prenatal alcohol exposure (PAE; Espiner et al., 2022; Mattson et al., 2019). These effects are lifelong conditions resulting in significant neurobehavioral and cognitive impairments, as well as challenges with adaptive behaviour, executive functioning, memory, attention, and language (Mattson et al., 2019). Awareness and understanding of the disorder remains limited among professionals, service providers, and the public (Flannigan et al., 2020). FASD is also called the "invisible disability" as over 80% of those with the condition have no discernible facial abnormalities (Bashista, 2022) and, as such, is one of the most underdiagnosed and misdiagnosed conditions (Chasnoff et al., 2015; Chudley, 2022; Clark et al., 2024; Rockhold et al., 2024; Young et al., 2016).

FASD can be separated into two classifications: primary disabilities and secondary disabilities. Primary disabilities refer to those conditions that a child is born with as a consequence of PAE. These conditions cause permanent brain damage that results in impaired neurocognitive and adaptive functioning accompanied by significant developmental and behavioural challenges. Secondary disabilities, meanwhile, are not present at birth but occur as a result of the primary disabilities (Bagshawe et al., 2023). These include mental health problems and can lead to incarceration, poor academic achievement, addictions, and unemployment (Streissguth et al., 1996).

In their seminal paper on the secondary disabilities of those who live with FASD, Streissguth et al. (1996) describe a set of important protective factors to mitigate the onset of secondary disabilities, which is still quoted today. The most important protective factor is an early and accurate diagnosis, preferably before age six. This is followed with immediate appropriate resources and support structures for the individual and their carers. Finally, the individual needs to have a stable long-term home that is free from violence and substance abuse.

What is ADHD?

ADHD is a common neurodevelopmental disorder affecting over 5% of children and adolescents (Salari et al., 2023; Shah & Suresh, 2024; Young et al., 2016) and characterised by patterns of age-inappropriate levels of inattention, hyperactivity, and impulsivity that interfere with development and functioning (FASD United, 2016; Rosso et al., 2023). The *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5; American Psychiatric Association [APA], 2013) outlines the criteria for an ADHD diagnosis, which include a persistent pattern of inattention and/or hyperactivity-impulsivity (six or more symptoms for <17 yrs; five or more for ≥17 yrs) for at least six months, present in multiple settings (home, school, work), interfering with the quality of school work and social interactions (see also FASD United, 2016; Shah & Suresh, 2024). ADHD often emerges in childhood and significantly impacts

cognitive, academic, behavioural, emotional, and social functioning. It is also associated with a high risk of comorbid psychiatric conditions and severe functional impairments (Shah & Suresh, 2024; Young et al., 2016).

Overlapping symptoms

FASD and ADHD share overlapping symptoms but are distinct conditions. About 73% of those diagnosed with FASD may also have ADHD, and the shared symptoms contribute to frequent diagnostic confusion (Copley, 2023; Ehlert, 2017; FASD United, 2016; Young et al., 2016). Both disorders are characterised by difficulties in attention and impulse control, often leading to poor academic and social performance.

Children with either condition may struggle with sustained attention, exhibit impulsive behaviour, and experience challenges in task completion. These shared traits frequently result in children with FASD being misdiagnosed with ADHD, particularly since ADHD is more widely recognised and understood by clinicians and educators.

Behavioural issues such as emotional dysregulation, inattentiveness, daydreaming, and hyperactivity are hallmark features of both disorders, contributing to functional difficulties in school and social settings. Additionally, studies have shown significant overlap in diagnostic criteria, with many children with FASD meeting the criteria for ADHD (Chasnoff et al., 2015; Ehlert, 2017). Understanding these differences is crucial for ensuring accurate diagnosis and appropriate interventions. Mis- and missed diagnosis of these conditions can have profound implications for individuals, families, and society, often resulting in inadequate support, stigmatisation, and poor long-term outcomes.

Differences between FASD and ADHD

FASD and ADHD differ significantly in their causes, cognitive profiles, behavioural phenotypes, and responses to stimuli, despite sharing some overlapping features. FASD is caused by PAE, making it an environmentally driven condition (Popova et al., 2023). In contrast, ADHD is a neurodevelopmental disorder with many causes, including genetic and environmental factors, but it is not directly linked to PAE. Unlike ADHD, which has well-established diagnostic criteria and extensive treatment guidelines (APA, 2013; Ergun et al., 2021; Ware et al., 2014; Young et al., 2016), FASD lacks a unified diagnostic framework.

The cognitive impairments associated with FASD are broader and more severe than those typically observed in ADHD (Popova et al., 2023). FASD often results in deficits in verbal abilities, perceptual reasoning, working memory, processing speed, and overall adaptive functioning. Children with FASD also struggle to switch attention between tasks and can become overwhelmed in environments with multiple stimuli.

ADHD is the most common psychiatric disorder diagnosed in children with PAE worldwide, at a rate of 48% (Young et al., 2016). ADHD is associated with deficits in executive functioning, such as inattention, hyperactivity, and impulsivity, but the cognitive impairments are generally narrower in scope (Mattson et al., 2019). Additionally, children with FASD often daydream due to overstimulation, whereas children with ADHD tend to daydream due to understimulation, reflecting distinct cognitive challenges in each condition (Kooistra et al., 2010).

Behaviourally, individuals with FASD or ADHD exhibit different patterns. Children with FASD are more vulnerable to social difficulties, such as susceptibility to peer pressure, confabulation, stealing, and challenges recognising social cues (Chasnoff et al., 2015). They often display poor social judgement, struggle to predict consequences, and face challenges forming positive peer relationships. These behaviours stem from neurodevelopmental impairments and are less common in ADHD. On the other hand, ADHD is primarily characterised by inattention, hyperactivity, and impulsivity without the broader spectrum of behavioural issues seen in FASD.

There are significant gaps in the screening and assessment tools available for FASD (Chasnoff et al., 2015). For instance, existing screening tests often fail to differentiate FASD from ADHD, leading to misdiagnoses. While children with ADHD typically have the potential to develop adaptive skills (everyday life functioning) over time, children with FASD face greater challenges in this area and require intensive, tailored support to make progress (Lambie, 2020). In their study, Kooistra et al. (2010) found that rather than being a form of ADHD, FASD has behavioural traits that are distinct from it.

Another key distinction lies in how children with FASD and ADHD respond to stimuli. Children with FASD are particularly susceptible to overstimulation, showing significant variability in performance in fast-paced environments. Conversely, children with ADHD tend to struggle in understimulated settings, driven by a need for higher levels of stimulation. These differences in responses to stimuli can help clinicians differentiate

between the two conditions and guide tailored approaches to diagnosis and treatment (Kooistra et al., 2010).

Discussion

The quality of life of individuals with FASD and/or ADHD is significantly impacted by misdiagnosis, missed diagnosis, and the availability of support services. Popova et al. (2023) report that longitudinal studies consistently show that adverse outcomes are more likely when such services are lacking. Addressing postnatal environmental exposures and opportunities can mitigate secondary disabilities (Streissguth et al., 1996). According to Flannigan et al. (2020), "There is a critical and timely need for increased research and targeted service delivery during this life stage and to provide wraparound supports for individuals with FASD who may otherwise lack resources and supports to promote healthy outcomes" (p. 2425).

Regarding mortality, Thanh and Jonsson (2016) found the average life expectancy for individuals with FASD to be 34 years, with 44% of deaths attributed to external causes, including suicide (15%) and accidents (14%). Those also diagnosed with ADHD have a higher mortality than their non-ADHD counterparts due to unnatural causes like suicide, injury, and poisoning (Catalá-López et al., 2022; Li et al., 2024).

Mis- and missed diagnosis further exacerbates the problem, leaving many individuals with significant functional deficits without the benefits of coordinated, multidisciplinary support like daily living assistance, housing, employment, and mental healthcare (Crawford et al., 2020; McLachlan et al., 2020; Olson & Sparrow, 2021). This places an immense burden on whānau and caregivers, often resulting in relationship breakdowns and leaving individuals with FASD more vulnerable to mental health issues, encounters with the justice system, and incarceration (Disability Rights Commissioner and Children's Commissioner to the Prime Minister, 2021; Gibbs, 2022; Jonsson, 2019).

Finally, mis- and missed diagnosis not only impacts the person living with FASD—their caregivers are also significant victims, along with the wider society. Caregivers often experience loss and grief, isolation, a lack of support and accurate information, difficulty accessing resources, and financial stress (Crawford et al., 2020; Harding et al., 2022; Mukherjee et al., 2013; Popova et al., 2023). They often have to constantly advocate for essential services while facing misunderstanding and blame (Flannigan et al., 2022; Hamilton et al., 2020).

These challenges negatively impact caregivers' and families' functioning and quality of life (Harding et al., 2022; Popova et al., 2023) and create additional stress from navigating interpersonal relationships and systemic barriers (Harding et al., 2022; Petrenko et al., 2019). Furthermore, caregivers of individuals with FASD experience stressors that are often more severe compared to those caring for other disability populations (Flannigan et al., 2022).

In June 2024, the New Zealand Institute of Economic Research (NZIER, 2024) estimated the cost of alcohol harm to the New Zealand economy to be $9.1 billion, with over half of that, $4.8b, associated with FASD. NZIER concluded that "the true cost of alcohol harm may be considerably higher than existing evidence can show" (p. vii). Successive governments have continued to ignore the enormity of alcohol harm and the FASD epidemic, refusing to categorise FASD as a disability and failing to dedicate funding and resourced pathways for lifetime support for those who live with FASD and their whānau/caregivers. Currently, over 80% of those diagnosed with FASD and those who care for them are disqualified from receiving vital, immediate, and comprehensive support. This must change—now.

While there are no figures for the estimated cost to the New Zealand economy of harms associated with ADHD, imagine the savings if the government took these harms seriously and worked to address them. A recent US study found the annual costs associated with ADHD to be US$19.4 billion among children (5–11) and US$13.8 billion among adolescents (12–17) (Schein et al., 2022).

Conclusion and call to action

The mis- and missed diagnosis of FASD and ADHD creates profound and lasting consequences for individuals with the conditions, their caregivers, and society. Without timely and accurate identification, those affected are denied essential resources, leading to severe functional impairments, mental health challenges, and increased interactions with the justice system. Caregivers, too, bear the weight of these failures, often facing financial strain, emotional exhaustion, and systemic barriers in their advocacy for support.

For Māori, these challenges are further compounded by institutional inequities, a lack of culturally responsive diagnostic frameworks, and an ongoing struggle for recognition within the health, education, and social service systems. The research reported here was grounded in a Kaupapa Māori approach and highlights the urgent need for

a shift in thinking—one that prioritises Māori-led, whānau-centred solutions, integrating mātauranga Māori to ensure culturally appropriate, timely, and effective interventions.

The economic burden of these conditions is staggering. The estimated cost of FASD-related harm in New Zealand alone is $4.8 billion annually. Despite the overwhelming evidence supporting early diagnosis and comprehensive support as protective factors, the government has still not categorised FASD as a disability, denying individuals and their whānau access to vital services. This leaves families to navigate complex and indifferent bureaucratic structures with minimal assistance. The emotional, financial, and social toll on caregivers is immense, highlighting the urgent need for systemic change. Addressing these issues proactively—through better screening, diagnosis, intervention, education, and wraparound support—would not only reduce this financial strain but, more importantly, improve countless lives.

Our call to action is clear. Māori communities and leaders must continue demanding the formal recognition of FASD as a disability and work towards strengthening Kaupapa Māori-informed education and diagnostic pathways. Developing Māori-led wraparound services will ensure culturally grounded care that meets the needs of individuals and their whānau. Policymakers must take immediate steps to officially recognise FASD as a disability and implement policies co-designed with Māori experts, those who live with FASD, and those who support and care for them, to ensure culturally safe diagnosis, treatment, and support. Urgent funding must be allocated towards Kaupapa Māori health models to address the specific needs of neurodivergent individuals. Researchers and academics must prioritise Māori-led research on FASD and its impact within Māori communities while also investigating the long-term consequences of mis- and missed diagnosis. Decolonising diagnostic frameworks in mental health and neurodevelopmental research is essential to achieving more equitable outcomes.

The wider public also has a role to play in addressing stigma and misinformation surrounding FASD and ADHD. Understanding that the societal impacts of FASD and ADHD are not due to "bad parenting" but rather systemic failure is crucial in shifting public perceptions. Advocating for equitable access to diagnosis, treatment, and lifelong support will ensure that individuals and their caregivers are no longer excluded, ignored, or dismissed. Supporting whānau and caregivers through increased awareness, community engagement, and advocacy will create a society of tolerance and kindness where those with neurodevelopmental conditions receive the respect and support they deserve, and whānau are strengthened.

The failure to properly diagnose and support individuals with FASD and ADHD is not just a medical oversight—it is a human rights issue. Ensuring accurate diagnosis, appropriate intervention, and culturally responsive care is essential for the well-being of individuals, families, and future generations. The time for change is now.

Glossary

Kaupapa Māori	research approach that is informed by Māori philosophy and principles and is by Māori for Māori
kuia	grandmother
Māori	Indigenous peoples of New Zealand
mātauranga Māori	Māori knowledge
mokopuna	grandchildren
pīwakawaka	New Zealand fantail, *Rhipidura fuliginosa*
rangatahi	youth
tamariki	children
tino rangatiratanga	self-determination
whakapapa	genealogy
whānau	family

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COMMENTARY

HE TIKANGA RANGAHAU, HE TINO RANGATIRATANGA

Te Tiriti o Waitangi as constitutional warrant for compositional, non-synthesised research

*Chris W. Cunningham**

Abstract

This commentary proposes that the decision to hold findings from te ao Māori and biomedicine in productive tension—rather than resolving them into a single integrated account—is not a methodological preference but a constitutional obligation grounded in the te reo text of Te Tiriti o Waitangi. Drawing on the ontological turn in research methodology and on recent Waitangi Tribunal findings, the commentary argues that the two texts of the Treaty/Tiriti constitute two different worlds of reality: the English-language version enacting a hierarchical transfer of sovereignty; the te reo text enacting complementary, coequal spheres of kāwanatanga and tino rangatiratanga. Since tino rangatiratanga in Article Two extends to all taonga, including mātauranga Māori, the absorption of Māori health knowledge into dominant biomedical or social science frameworks without consent is constitutionally unsound. Composition—the practice of holding multiple worlds of reality in structured relation without reducing one to another—is proposed as the methodologically and constitutionally appropriate alternative.

Keywords

compositional methodology, diffractive analysis, mātauranga Māori, ontological turn, Te Tiriti o Waitangi, tino rangatiratanga

Introduction

The decision not to synthesise findings from te ao Māori and biomedicine is not, in the first instance, a methodological decision. It is a constitutional one.

This commentary develops that claim. My argument has three moves. First, the two texts of the Treaty/Tiriti constitute different worlds of reality—not two translations of one agreement, but two different founding documents that

* Ngāti Raukawa, Toa Rangatira, Te Ātiawa, Te Atihaunui-a-Pāpārangi. Director, Research Centre for Hauora & Health, Massey University, Wellington, New Zealand. Email: c.w.cunningham@massey.ac.nz

enact different distributions of authority. Second, synthesis in Māori health research enacts the world of reality constituted by the English-language version of the Treaty: a hierarchical incorporation of Māori interests into Crown frameworks. Third, composition—the structured arrangement of multiple worlds of reality in relation without reduction (Stengers, 2010)—enacts the world of reality constituted by Te Tiriti o Waitangi: coequal, complementary authority grounded in tino rangatiratanga over taonga, including the taonga of mātauranga Māori.

My argument draws on the ontological turn in social science and health research methodology, particularly on Barad's (2007) agential realism and Mol's (2002) ontological multiplicity, and on the constitutional foundations established by the Waitangi Tribunal's findings in *Te Paparahi o Te Raki* (2014, 2022) and *Tino Rangatiratanga me te Kāwanatanga* (2025). It is written from within Māori health research, with specific reference to mixed methods studies that bring quantitative epidemiological data and qualitative te ao Māori knowledge into the same analytical frame.

Two texts, two worlds of reality

Te Tiriti o Waitangi and the English-language version of the Treaty of Waitangi are not two translations of one agreement. They enact two different constitutional relationships.

The te reo text was drafted in te reo Māori by Henry Williams and his son Edward on the night prior to 6 February 1840. Over 500 rangatira signed the te reo text at Waitangi and at subsequent locations throughout Aotearoa New Zealand; fewer than 40 signed the English-language document (Orange, 1987; Walker, 1990). The document that carries both historical and constitutional primacy—in terms of who signed it, what the signatories understood, and what international Indigenous rights law recognises—is the te reo text (Waitangi Tribunal, 2014).

The te reo text constitutes a specific distribution of authority through three concepts that cannot be translated without ontological loss. Article One confers *kāwanatanga* on the Crown: the Waitangi Tribunal (2014) has established that rangatira understood this as limited governance authority over British settlers, not the comprehensive sovereignty over all persons and territories that the English word "governance" implies. The rangatira retained *tino rangatiratanga*—paramount authority over their peoples, lands, and all *taonga*—under Article Two. These were understood as complementary, coequal spheres, not competing claims to the same authority (Waitangi Tribunal, 2014). The English-language version, by contrast, states that Māori "cede to Her Majesty the Queen of England, absolutely and without reservation, all the rights and powers of Sovereignty" (Orange, 1987, p. 40), a formulation that carries the weight of nineteenth-century British constitutional law: indivisible, comprehensive, and hierarchical.

The ontological turn in social science research provides a vocabulary for describing what is at stake here. Barad (2007) argues that apparatuses do not passively describe prior, independent realities; they produce—constitute and enact—particular phenomena as determinate and real. An apparatus makes certain things visible, causally operative, and institutionally actionable while excluding others from the domain of the real. Each text of the Treaty/Tiriti is an apparatus in this sense: each enacts a world of reality, and the world each enacts is different. The English-language text produces a Crown sovereign and a subordinate Māori subject; the te reo text produces a Governor with limited authority and rangatira with coequal, continuing authority in their own spheres. These are not two perspectives on one constitutional reality; they are *two* constitutional realities, both enacted, both producing ongoing effects.

The Waitangi Tribunal's December 2025 findings in *Tino Rangatiratanga me te Kāwanatanga* confirmed what its 2014 and 2022 *Te Paparahi o Te Raki* reports had established: the Crown has consistently and systematically enacted the English-language text's world of reality over the te reo text's constitutional guarantees, asserting practical authority while repeatedly and foundationally breaching the tino rangatiratanga guaranteed in Article Two (Waitangi Tribunal, 2025). The finding is not historical; it describes an ongoing constitutional condition.

What synthesis does to tino rangatiratanga

The standard methodological ambition of mixed methods health research is integration: bringing findings from different sources, frameworks, and methods into a single, coherent higher-order account. This is understood as the mark of research quality—the achievement of a more complete picture than any single framework could provide (Creswell & Plano Clark, 2017). When it is applied to research that includes both biomedical frameworks and te ao Māori knowledge, the integrative impulse generates a specific constitutional problem.

Synthesis requires a vantage point from which

different accounts are adjudicated and merged. In Aotearoa health research, that vantage point is constituted almost entirely within what Barad (2007) would call the kāwanatanga apparatus: the dominant, Crown-governed, biomedically inflected research system with its own peer review standards, funding criteria, publication conventions, and audit requirements. When biomedical findings and te ao Māori findings are synthesised within this apparatus, the latter are incorporated into the terms of the former. The specific ontological content of te ao Māori—the causally real status of wairua, the constitutive role of whakapapa, the relational and historical nature of Māori bodies and collectives—is translated into categories the dominant framework can recognise: psychosocial factors, cultural variables, protective factors for resilience (Durie, 2001; Tinirau et al., 2021).

What is lost in that translation is not merely interpretive nuance. What is lost is a world of reality. To synthesise mātauranga Māori into biomedical categories is to enact the English-language Treaty's constitutional arrangement: the incorporation of Māori interests into Crown frameworks on the Crown's terms, without Māori consent over how knowledge is held, structured, and used. This is not a matter of intent. It is a matter of which apparatus performs the "agential cut"—which framework determines what counts as a finding, what constitutes adequate evidence, and what remains as remainder at the edge of the analysis.

Under Te Tiriti o Waitangi, tino rangatiratanga in Article Two extends to all taonga. The Waitangi Tribunal and New Zealand courts have consistently recognised that taonga include mātauranga Māori, tikanga, and te reo as foundational knowledge systems whose authority resides with Māori (Waitangi Tribunal, 2011; *New Zealand Māori Council v Attorney-General* [1994] 1 NZLR 513 (PC)). The absorption of mātauranga Māori into Crown-governed research frameworks without consent is therefore not merely methodologically inadequate; it is an exercise of kāwanatanga over a domain that Te Tiriti guarantees to the authority of tino rangatiratanga.

Composition as constitutional practice

Composition is not the absence of integration; it is a different kind of coherence. Where synthesis seeks a single higher-order account that reconciles difference, composition seeks a structured arrangement in which different worlds of reality remain distinct, audible, and mutually illuminating without being reduced to one another (Mol, 2002; Stengers, 2010). The term is preferred here over alternatives such as *triangulation* or *multi-perspectivism* precisely because it does not presuppose a prior unity that the analysis recovers. There is no pre-existing complete picture of which different methods offer partial views. There are multiple, partially overlapping, sometimes incompatible worlds of reality, each enacted through specific practices and apparatuses, each making certain things real and excluding others from the real (Mol, 2002).

In Aotearoa mixed methods health research, composition means three things in practice. First, it means protecting the ontological integrity of each methodological strand. Quantitative epidemiological analysis enacts individuals, variables, and probability distributions as the units of a world of reality; that world produces important findings about health inequity that carry genuine force. Kaupapa Māori qualitative work enacts relational, historical, and spiritual beings—whānau, atua, whenua, tūpuna—as constitutive of health (Pihama, 2010; G. H. Smith, 2012). Neither strand is a validation device for the other. Each produces findings that are adequate within its own ontological commitments and its own criteria of adequacy. Composition means designing analysis so that each strand retains that integrity throughout.

Second, composition means writing findings from te ao Māori in te ao Māori terms, without translation into biomedical or social science categories at the point of analysis. This is not a refusal of dialogue between frameworks; it is a prior condition for dialogue that does not absorb one partner's terms into the other's. A whakataukī about kai, kaumātua accounts of whakapapa and illness, rangatahi descriptions of wairua; are written in their own idiom and read in their own terms—not as illustrations of a biomedical finding, and not as qualitative "texture" for a quantitative argument.

Third, composition means applying diffractive analysis (Barad, 2007; Haraway, 1997) to attend explicitly to the interference patterns produced when different frameworks are brought into relation. Where two apparatuses *intra-act*—as they do in any mixed methods study—they produce constructive interference (where differences between accounts amplify each other into new phenomena visible from neither framework alone) and destructive interference (where the agential cuts made by one apparatus cancel what the other can make visible). Attending to these patterns as primary analytic findings—rather than

resolving them through a higher-order synthesis—is the distinctive methodological contribution of a compositional approach.

To illustrate concretely: In a study of Māori elder wellbeing drawing on both survey data and whakawhiti kōrero, quantitative analysis may show strong statistical associations between self-reported wellbeing and participation in cultural practices. A compositional reading does not translate this into a biomedical protective factor model. Instead, it asks: What does the statistical apparatus make visible about this relationship that the kōrero cannot—and what does the kōrero enact about whakapapa, mauri, and intergenerational relationship that the statistical apparatus excludes by its agential cuts? The interference pattern between these two sets of findings—what each amplifies and what each cancels—is the analytic site of greatest ontological significance.

This practice is not novel in Kaupapa Māori research. It is, in important respects, what the best Kaupapa Māori scholarship has always done: refuse to subordinate Māori knowledge to dominant frameworks while remaining in critical, generative dialogue with them (Pihama, 2010; L. T. Smith, 1999, 2012). What the ontological turn adds is a theoretical vocabulary and a set of methodological commitments that make explicit what Kaupapa Māori researchers have enacted through careful practice: that the worlds of reality constituted by te ao Māori and by dominant frameworks are genuinely different, that their difference matters, and that holding the difference open is not a methodological limitation but a principled and constitutionally grounded analytic achievement.

The constitutional stakes

The argument that composition is constitutionally grounded has stakes beyond academic methodology. It shifts the burden of justification.

Currently, researchers who refuse to synthesise findings from te ao Māori and dominant frameworks are required to justify that refusal—to explain why they are not integrating, why they are leaving things in tension, why they have not produced the "complete picture" that funders and reviewers expect. The assumption built into this demand is that synthesis is the default and refusal requires special pleading. The constitutional reading of Te Tiriti proposed here reverses that assumption: the burden falls on those who synthesise to demonstrate that they hold the authority to absorb mātauranga Māori into their frameworks—and under Te Tiriti, that authority requires consent, meaningful Māori participation in research governance, and accountability to the communities whose knowledge is at stake (Hudson et al., 2020; L. T. Smith et al., 2018).

I am not here making a claim that mixed methods research engaging with te ao Māori knowledge is inherently a breach of Treaty obligations. Rather, I am claiming that the *manner* of engagement—whether it produces synthesis or composition, whether it preserves or dissolves the ontological integrity of mātauranga Māori—is a matter of Treaty obligation, not methodological preference. Research that synthesises Māori health knowledge into dominant frameworks without those protections in place participates, however unwittingly, in the same absorptive logic that the Waitangi Tribunal (2025) has consistently identified as the foundational Treaty breach: the enactment of kāwanatanga over a domain that Te Tiriti guaranteed to tino rangatiratanga.

This analysis has implications at each stage of the research enterprise. In research design, it requires structural protections for the ontological integrity of te ao Māori strands—analysis phases that precede rather than assume integration, and explicit attention to the agential cuts made by each method. In ethics review, it requires attention to the ontological structure of the analysis, not only to consent procedures and data ownership. In publication, it requires journals and reviewers to develop literacy around ontological plurality and the difference between synthesis and composition as forms of research coherence. And in research funding, it requires the Health Research Council and other bodies with explicit Treaty obligations to develop criteria of research quality that do not require synthesis as a condition of adequacy.

He tikanga rangahau, he tino rangatiratanga

Te Tiriti o Waitangi was signed at dawn on 6 February 1840. The rangatira who signed it understood themselves to be entering a relationship—not surrendering a world. The te reo text they signed constituted coequal, complementary authority: kāwanatanga for the Governor, tino rangatiratanga for the rangatira, and an ongoing relationship founded on consent, good faith, and continuing negotiation (Waitangi Tribunal, 2014; Williams, 2011).

That constitutional act was not extinguished by 185 years of the English-language Treaty's world of reality being made to stick through force of law and institutional practice. The Waitangi Tribunal's (2025) findings make this clear. Tino

rangatiratanga over taonga—including the taonga of mātauranga Māori, of knowledge about Māori health, wellbeing, and being—was guaranteed and never ceded.

Composition is not a method in search of a rationale. It is a Treaty obligation in search of a method. The methodological tools of the ontological turn—diffractive analysis, ontological staging, parallel narration with method integrity—offer practical resources for meeting that obligation. Kaupapa Māori research has been meeting it through careful practice for over three decades. What the constitutional reading offered here adds is the warrant: the refusal to synthesise is not methodological timidity, not a failure to complete the analysis, not political overcaution. It is an enactment of tino rangatiratanga within the research apparatus itself—small, perhaps, in the full scale of what Treaty obligations require, but real, grounded, and constitutionally defensible.

The constitutional warrant was signed at Waitangi. The methodological task is to enact it.

Glossary

atua	deities, gods
he tikanga rangahau	research methodology; customary approach to inquiry grounded in tikanga
he tino rangatiratanga	absolute chieftainship; full authority, autonomy and self-determination
kai	food; to eat
kaumātua	respected elder; holder of knowledge and authority within whānau/hapū (subtribe)
Kaupapa Māori	Māori approach or agenda; research and practice grounded in Māori principles and the world of reality of te ao Māori
kāwanatanga	governance; delegated authority of governance (often contrasted with tino rangatiratanga in Te Tiriti)
kōrero	speech, discussion, narrative or story
Māori	Indigenous people of Aotearoa New Zealand; "ordinary" or "natural" in older usage
mātauranga	knowledge, knowing; includes traditional and contemporary Māori knowledge systems
mauri	life force; vital essence that animates and connects entities
rangatahi	young people, youth
rangatira	chief; leader with authority derived from whakapapa and relationships
taonga	treasured thing; anything of value (material or non-material, including language and knowledge)
te ao Māori	the Māori world; ontologically the Māori world of reality
te reo	the language (usually referring to te reo Māori)
Te Tiriti o Waitangi	the Treaty of Waitangi (Māori text, 1840)
tikanga	correct procedure; customary values, practices, and ethical framework
tino rangatiratanga	full chiefly authority; sovereignty, self-determination, highest form of authority
tūpuna	ancestors (also tīpuna); those who precede and continue to shape the present
wairua	spirit; spiritual dimension of existence
whakapapa	genealogy; layered relational ordering connecting people, land and entities
whakataukī	proverb; ancestral saying embedding knowledge and values
whakawhiti kōrero	exchange of ideas; dialogue, discussion across people or positions
whānau	customary extended family; collective group connected through relationships and purpose
whenua	land; placenta, signalling deep relational connection between people and land

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COMMENTARY

ADDRESSING SYSTEMIC INEQUITIES THROUGH A PUBLIC HEALTH LENS

Indigenous models of health and equitable and inclusive programme design

*Kylie A. McKee**

Abstract

This commentary explores how systemic inequities and homelessness, particularly among Māori in New Zealand, can be addressed through a public health approach that integrates Indigenous models of health. It emphasises the importance of considering broader social determinants of health, such as housing, income, education, and access to healthcare, in the design and delivery of public health interventions. Utilising the Te Whare Tapa Whā framework, a Māori model of health, this commentary illustrates how culturally responsive and holistic approaches can enhance the effectiveness of public health programmes. Additionally, it discusses the potential for scaling this approach and its relevance to other marginalised populations and countries facing similar health disparities.

Keywords

Indigenous health frameworks, health equity, Te Whare Tapa Whā, social determinants of health, homelessness, culturally responsive programme design

Introduction

Systemic inequities are a persistent issue in New Zealand, with Māori disproportionately affected by poverty, overcrowding, and homelessness. These disparities are deeply rooted in the historical context of colonisation, which has led to significant socio-economic disadvantages for Māori, including limited access to essential services and poor health outcomes. This commentary explores these issues through a public health lens, advocating for the integration of broader health determinants into the design and implementation of programmes aimed at addressing these inequities.

The focus here is on the use of the Te Whare Tapa Whā framework, a Māori model of health that considers the holistic well-being of individuals by addressing physical, mental, family, and spiritual health. The framework was utilised in a recent initiative by an Indigenous navigation service designed to address housing strain

* Independent Public Health Researcher, New Zealand. Email: contact@kyliemckee.com

and homelessness among Māori, particularly in the context of the COVID-19 pandemic (McKee, 2023). This commentary presents the findings from this initiative, discusses the importance of culturally responsive programme design, and explores the potential for scaling this approach to benefit other marginalised populations and countries.

Literature review

The disparities in health outcomes between Māori and non-Māori populations are well documented. Research highlights how colonisation, land confiscation, and rapid societal changes have contributed to the systemic inequities that disproportionately impact Māori (Cram, 2019; Groot et al., 2011). Housing is a critical determinant of health, with inadequate housing conditions exacerbating physical and mental health issues. The COVID-19 pandemic further exposed and deepened these inequities, particularly in access to healthcare and social services (Russell et al., 2022).

Māori are significantly over-represented in the homeless population in New Zealand, and their experiences of homelessness are often compounded by other factors, such as mental health issues, substance abuse, and family violence. The literature emphasises the importance of addressing these intersecting issues through a comprehensive and culturally appropriate approach that considers the broader social determinants of health (Lawson-Te Aho et al., 2019).

Methodology

This commentary examines the efforts of an Indigenous navigation service designed to address the increasing housing strain faced by Māori, particularly in the wake of the COVID-19 pandemic (McKee, 2023). The service utilised the Te Whare Tapa Whā framework, which considers the holistic well-being of individuals by addressing physical, mental, family, and spiritual health. The research involved secondary analysis of data from 60 Māori participants, with a focus on understanding the barriers to accessing safe and affordable housing and the effectiveness of culturally tailored interventions.

The Te Whare Tapa Whā framework was employed as an assessment tool to evaluate the well-being of individuals experiencing homelessness and to develop tailored interventions that address the specific needs of Māori (McKee, 2023). This model views well-being as a four-sided structure, in which each side—taha tinana, taha hinengaro, taha whānau, and taha wairua—must be in balance for overall health (Durie, 1985). This holistic approach was used to guide the development of individualised care plans and to ensure that interventions were culturally responsive and inclusive.

Results

The implementation of the Te Whare Tapa Whā framework in the Indigenous navigation service demonstrated significant positive outcomes for the participants. Many individuals who were initially homeless were able to secure stable housing, gain employment, and improve their overall well-being. The framework's emphasis on holistic well-being allowed for a more comprehensive understanding of the participants' needs and facilitated the development of tailored interventions that addressed the root causes of their challenges.

It is important to acknowledge that these outcomes were achieved within an extremely challenging wider social and political context. The post-pandemic period saw a significant housing crisis in New Zealand, with rising housing costs, limited rental availability, and increasing homelessness rates. Additionally, rising unemployment and economic instability created further barriers to securing stable housing and employment. The ability of this programme to achieve positive outcomes for participants despite these adverse conditions speaks to both the strength of the Te Whare Tapa Whā framework and the commitment of the navigation service providers.

However, it is also important to recognise the inherent limitations of the Te Whare Tapa Whā model in addressing the upstream determinants of health that contribute to homelessness and systemic inequity. While Indigenous models of health provide essential culturally responsive frameworks for working with Indigenous communities, they cannot by themselves combat the impact of upstream political policymaking and national economic factors (see Figure 1). Structural barriers such as discriminatory housing policies, inadequate social welfare systems, systemic racism within institutions, and broader economic inequalities require intervention at the national policy level. The Te Whare Tapa Whā framework provides an invaluable approach for understanding and responding to the holistic needs of whānau, but its effectiveness is constrained by the political and economic context within which it operates. True equity in housing and health outcomes for Māori requires not only culturally responsive service delivery but also fundamental changes to the systems and policies that maintain and entrench discrimination and inequity.

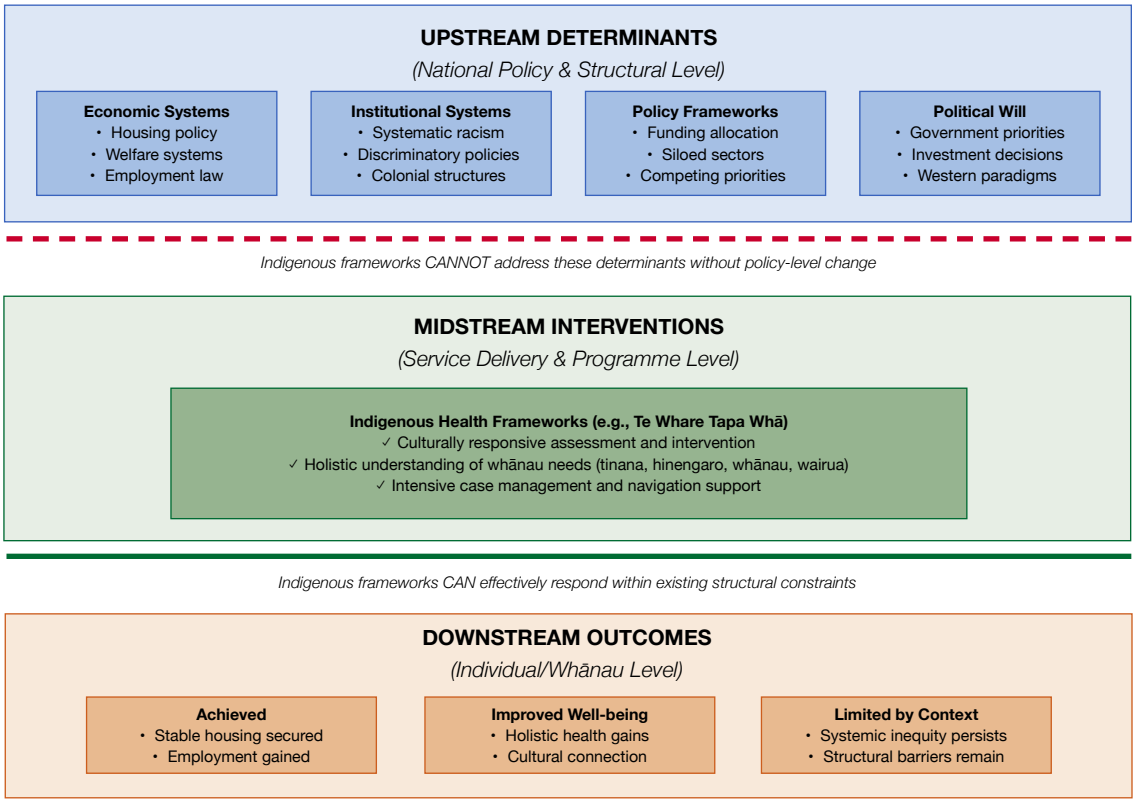

FIGURE 1 Scope and limitations of Indigenous health frameworks in addressing systemic health inequities

Note. While Indigenous health frameworks such as Te Whare Tapa Whā provide essential culturally responsive approaches at the service delivery level (midstream), their effectiveness in achieving equitable health outcomes is fundamentally constrained by upstream structural determinants that require policy-level intervention. The dashed line represents the barrier beyond which service-level interventions alone cannot create systemic change.

Nonetheless, the findings suggest that intensive case management, combined with culturally responsive support services, can lead to lasting improvements in the well-being of marginalised populations. The success of this approach underscores the importance of integrating Indigenous knowledge and frameworks into public health interventions to achieve equitable and inclusive outcomes.

Discussion

The use of the Te Whare Tapa Whā framework in this initiative highlights the potential for Indigenous models of health to enhance the effectiveness of public health programmes. The approach ensures that interventions are comprehensive and culturally appropriate, through addressing the broader social determinants of health, such as housing, income, and access to services. This is particularly important in the context of systemic inequities, where marginalised populations may face multiple and intersecting challenges that require a holistic response.

Further, the success of this approach in New Zealand suggests that it could be adapted and scaled to benefit other marginalised populations and countries facing similar health disparities. The principles of cultural responsiveness, holistic well-being, and community empowerment that underpin the Te Whare Tapa Whā framework are relevant to a wide range of contexts and could inform global efforts to reduce health disparities and promote equity.

Scalability and relevance to wider population groups and other countries

The Te Whare Tapa Whā framework's success in addressing homelessness and systemic inequities among Māori in New Zealand suggests that it holds potential for broader applicability in other contexts. The principles of cultural responsiveness, holistic well-being, and community empowerment that underpin this model are relevant not only to local Indigenous populations but also to other marginalised groups facing similar challenges. For instance, in Canada, Indigenous peoples are

over-represented in the homeless population, with rates as high as eight times that of non-Indigenous people in some urban areas (Patrick, 2014). Similarly, in Australia, Indigenous Australians make up 20% of the homeless population despite being only 3% of the total population (Australian Bureau of Statistics, 2016). These statistics highlight the systemic nature of homelessness among Indigenous populations, which often stems from historical injustices, socio-economic disadvantages, and cultural disconnection.

The Te Whare Tapa Whā framework, by addressing the broader social determinants of health such as housing, income, and access to services, provides a comprehensive approach that can be adapted to these contexts. Evidence from the Whānau Ora programme in New Zealand, which also employs Indigenous frameworks, shows improved health outcomes and increased well-being among participants, further supporting the scalability of such models (Smith et al., 2019). Moreover, a comparative study on Indigenous health models in Australia and New Zealand found that culturally tailored approaches led to higher engagement and better health outcomes than mainstream services (Parker & Milroy, 2014). These findings suggest that the integration of Indigenous knowledge and frameworks into public health policies can not only address immediate needs but also contribute to long-term systemic change, reducing health disparities and promoting equity on a broader scale.

Challenges of implementing Indigenous frameworks in other countries

While the success of the Te Whare Tapa Whā as a framework for addressing housing strain and homelessness in New Zealand is promising, implementing Indigenous frameworks in other countries poses several challenges, particularly regarding cultural adaptation and contextual differences. Indigenous frameworks are deeply rooted in specific cultural contexts, making it challenging to adapt them to different countries with distinct Indigenous populations. For example, the cultural values and health practices of the Māori in New Zealand differ from those of the First Nations in Canada or the Aboriginal peoples in Australia. Successful adaptation requires collaboration with local Indigenous communities to ensure that the model is culturally appropriate and reflects their unique needs and values (Parker & Milroy, 2014). This process involves not only translating the framework but also modifying it to align with local traditions, languages, and governance structures. Additional challenges include overcoming racial bias and discrimination within health systems, securing political will and investment in Indigenous models, and addressing the reluctance of some governments and funding bodies to invest in approaches that differ from Western-centric healthcare paradigms.

Addressing critiques: The example of Whānau Ora

While Whānau Ora has been celebrated for its culturally grounded, holistic approach to improving the well-being of Māori families, it has also faced criticism and challenges in its implementation and evaluation. Understanding these critiques and how they have been addressed provides important lessons for scaling Indigenous health frameworks.

Lack of clear outcome measurement: One of the primary critiques of Whānau Ora has been the difficulty in measuring its outcomes using conventional metrics. Because Whānau Ora is designed around the concept of holistic well-being, traditional health and social service metrics do not always capture the full scope of its impact. Critics argue that the lack of clear, quantifiable outcomes makes it challenging to assess the programme's effectiveness and justify continued funding (Boulton & Gifford, 2014).

To address this, there has been a push towards developing new evaluative frameworks that align with the holistic nature of Whānau Ora. These frameworks incorporate both qualitative and quantitative measures, including narratives of family well-being, community engagement, and cultural revitalisation. By using mixed-methods approaches that respect Māori values and perspectives, the programme's impact can be more accurately assessed (Te Puni Kōkiri, 2015).

Inconsistent implementation: Another critique has been the inconsistent implementation of Whānau Ora across different regions. Some communities have reported varying levels of success, which has been attributed to differences in local leadership, resources, and understanding of the Whānau Ora principles. This inconsistency can undermine the overall effectiveness of the programme and lead to unequal outcomes for Māori families (Gifford et al., 2018).

Addressing this inconsistency requires a more robust support system for Whānau Ora providers, including ongoing training, clear guidelines, and stronger partnerships between government agencies and Māori organisations. Strengthening

the governance structure and ensuring that all providers have access to the necessary resources and support can help standardise the implementation of the programme while still allowing for local adaptation to meet specific community needs (Gifford et al., 2018).

Funding and sustainability concerns: Whānau Ora has also been critiqued for its funding model, with some arguing that the programme has been underfunded relative to its ambitions. The competitive nature of funding allocation has led to concerns about the sustainability of services, especially in areas where resources are already stretched thin. Some critics worry that the programme's reliance on short-term funding cycles could hinder its long-term impact (Te Puni Kōkiri, 2015).

To address these concerns, advocates have called for more stable and long-term funding commitments from the government. By securing consistent funding, Whānau Ora providers can focus on building sustainable programmes that have a lasting impact on Māori communities. Additionally, there is a growing recognition of the need for co-funding models that involve both government and community investment, ensuring that the programme remains responsive to the needs of whānau while maintaining financial stability (Gifford et al., 2018).

Challenges in intersectoral collaboration: Whānau Ora's holistic approach requires collaboration across multiple sectors, including health, education, housing, and social services. Some critics have pointed out that intersectoral collaboration has been challenging, particularly when different sectors have conflicting priorities or operate in silos. This lack of coordination can result in fragmented services and limit the programme's ability to address complex, interrelated issues faced by Māori families (Boulton & Gifford, 2014).

Enhancing intersectoral collaboration requires a concerted effort to break down silos and create a culture of partnership between different sectors. This can be achieved by establishing clear communication channels, shared goals, and joint accountability frameworks. Further, involving Māori leadership at all levels of decision-making can help ensure that the programme remains focused on the holistic needs of whānau and that all sectors are aligned in their efforts to support Māori well-being (Te Puni Kōkiri, 2015).

However, it is critical to acknowledge that the success of these strategies is fundamentally limited in the absence of change at a national policy level. Many of the challenges to intersectoral working stem from existing political and policy frameworks that maintain siloed ways of working and competing priorities across government agencies. Achieving true intersectoral collaboration is extremely difficult without higher-level policy reform that incentivises and mandates cross-sectoral cooperation, aligns funding mechanisms across sectors, and removes structural barriers to integrated service delivery. While local-level collaborative efforts are valuable and can produce meaningful improvements for individual whānau and communities, their impact will remain constrained without supportive national policy frameworks. This is not to diminish the importance of local collaboration, but rather to emphasise that sustained, large-scale impact requires the development of trusting relationships and genuine mutual commitment between key stakeholders at both local and national levels, supported by policy structures that enable rather than hinder integrated approaches to health and social well-being.

Overcoming the challenges: Evidence-based strategies

To address these challenges, several evidence-based strategies can be employed:

- *Community engagement and co-design:* Engaging Indigenous communities in the design, implementation, and evaluation of health programmes ensures that the interventions are culturally appropriate and effective. Co-design processes, in which Indigenous voices are central to decision-making, have been shown to increase the relevance and success of health interventions (Nelson & Wilson, 2017).
- *Policy advocacy and education:* Advocacy efforts should focus on educating policymakers and healthcare providers about the value of Indigenous health frameworks. Advocates can build support for the adoption of these models in other countries by presenting evidence of their effectiveness and highlighting successful case studies. Further, integrating Indigenous health concepts into public health curricula could help healthcare professionals understand and respect these approaches (Severinsen et al., 2021).
- *Building a strong evidence base:* To gain broader acceptance and investment, it is essential to conduct rigorous research that demonstrates the efficacy of Indigenous health frameworks. This includes longitudinal studies, cost-benefit analyses, and comparative studies that highlight the benefits of these models over traditional Western approaches. Publishing this research in reputable journals and presenting it at international conferences can help build credibility and support for Indigenous models of health (Smith et al., 2019).
- *Anti-racism initiatives:* Addressing racial bias in

healthcare requires comprehensive anti-racism initiatives, including mandatory training for healthcare workers, reforms to healthcare policies that perpetuate inequities, and the promotion of Indigenous leadership within healthcare systems. These initiatives can help create an environment where Indigenous health frameworks are respected and valued (Curtis et al., 2019).

Conclusion

This commentary demonstrates the importance of a public health approach that considers the broader determinants of health in addressing systemic inequity and homelessness among Māori. The use of the Te Whare Tapa Whā framework provides a culturally responsive and holistic approach to health, ensuring that programmes are equitable and inclusive. While challenges exist in implementing Indigenous frameworks in other countries, these can be greatly mitigated through community engagement, policy advocacy, robust research, and anti-racism initiatives. The scalability of this model and its relevance to other populations and countries underscore the potential for Indigenous knowledge to contribute to global public health efforts.

Glossary

Māori	Indigenous peoples of New Zealand
taha hinengaro	mental well-being side
taha tinana	physical well-being side
taha wairua	spiritual well-being side
taha whānau	family well-being side

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COMMENTARY

REMOVING THE KĀINGA ORA SUSTAINING TENANCIES FRAMEWORK

Cycles of colonial housing politics in Aotearoa New Zealand

*Annie Te One**
Jacqueline Paul†

Abstract

This commentary responds to the removal of the Kāinga Ora–Homes and Communities Sustaining Tenancies Framework (STF) by the National-led Coalition Government of Aotearoa New Zealand. We suggest that the ideologies informing the removal of the STF are grounded in a long history of colonial housing policies that have led successive governments to politicise Māori housing through punitive policies. Despite recent reports written about Māori housing by both the United Nations and the Waitangi Tribunal advocating for Māori housing as a fundamental human right, the removal of the STF provides an example of how guaranteed housing is treated as a privilege, as opposed to a right. A significant concern is that the STF's removal could lead directly to homelessness for whānau with tamariki.

Keywords

colonisation, housing policy, housing politics, Māori housing, New Zealand politics, social housing

Introduction

In March 2024, the National-led Coalition Government of Aotearoa New Zealand announced the removal of the Kāinga Ora–Homes and Communities (Kāinga Ora) Sustaining Tenancies Framework (STF) as part of its first 100-day plan. The STF policy was set up under the Kāinga Ora Act 2019 to help customers sustain their tenancies, thereby preventing and reducing evictions. Developed in 2021 under the Sixth Labour Government, it reflected a shift from tenancy enforcement to a holistic approach of working with tenants, whānau, and support services to keep people housed (Kāinga Ora, 2021).

* Te Ātiawa, Ngāti Mutunga. Senior Lecturer, Te Herenga Waka | Victoria University of Wellington, Wellington, New Zealand. Email: annie.teone@vuw.ac.nz

† Ngā Puhi, Ngāti Tūwharetoa, Ngāti Kahungunu ki Heretaunga. Researcher, Pūrangakura Māori Research Centre, Tāmaki Makaurau | Auckland, New Zealand.

However, under the Coalition Agreement between the National and Act parties, it was agreed to remove the STF, which would make it easier to evict tenants who engaged in repeated "antisocial behaviour" (New Zealand National Party & ACT New Zealand, 2023). In a press conference detailing the government's plans to remove the STF, Minister of Housing Chris Bishop stated that by removing the policy, "the threat of evictions will help change behaviour" and that he was "confident Kāinga Ora enforcing the law ... will lead to a change of [tenants'] behaviour" (Witton, 2024, para. 3). He stated that as it currently stood, the STF has had "the effect you'd expect: There is no incentive for tenants to improve their antisocial behaviour or to stop deliberately damaging their taxpayer-owned house" (para. 5). This "threat" of eviction was questioned by journalists, who asked Prime Minister Christopher Luxon whether this could result in homelessness for those families who might be evicted under the proposed changes. Luxon replied that the change was about "fairness" and that "[the government was] not there to accommodate people who [did] not hold up their end of the deal" (Desmarais, 2024).

Similarly, when Associate Minister of Housing (Social Housing) Tama Potaka was asked about how the removal might impact housing for whānau with children, he said that "he [could not] guarantee tamariki [would] not be evicted in the Government's crackdown on antisocial social housing tenants" (Hauiti, 2024, para. 1). Potaka added that "the most important thing is that parents, caregivers and others ... act in a ... manner to ensure that they retain their residence" (para. 4).

These statements made by members of the New Zealand Government are the basis for this commentary, particularly the willingness of all three ministers to treat homelessness as an acceptable consequence for tenants, including those whānau with children. The data show how many children stand to be affected: approximately 43% of Kāinga Ora tenancies with serious concerns against them house children (Witton, 2024). Of the 448 tenants who owe more than $10,000 in rent, 287 (64%) have dependent children at home (Witton, 2024). These figures show that any punitive action against tenants will disproportionately fall on children who have no control over their housing circumstances. The removal of the STF therefore has the potential to impact and potentially push these children into homelessness, an outcome the government itself has acknowledged yet appears willing to accept.

In our review of this removal and the associated comments made by ministers, we are concerned by the wider narratives that are evoked through the position of the Coalition Government, and suggest that given the severe overrepresentation of whānau Māori within social housing, creating greater housing volatility that could lead to homelessness has the potential to disproportionately impact Māori. Of great concern in this commentary is what we see as an ongoing practice of punitive housing politics rooted in colonisation. While the removal of the STF is only one small measure, it is by no means an isolated event, and we argue that when considered within the wider context of Māori land and kāinga dispossession, as well as the alarming rates of Māori homelessness, this adds to the cycle of homelessness and landlessness that continues to shape the lives of many Māori.

Despite the STF focus on preventing homelessness, Ministers Bishop and Potaka offer a view consistent with a narrative of punitive housing policies. We suggest that grounding this narrative within broader colonial politics demonstrates how the removal of the policy stipulates housing as a privilege afforded to those who behave appropriately. Homelessness should never be a possible outcome from government initiatives, and even the threat of homelessness needs to be taken seriously.

We discuss the potential impacts of the STF's removal and position this change within a history of punitive policies that have overwhelmingly impacted Māori. We show that the STF's removal is one of many government decisions that reflect colonial views. While the removal has the potential to impact all New Zealanders living in social housing, Māori are overrepresented in these statistics, and tamariki Māori are the worst affected (Stats NZ, 2020). Furthermore, we argue that punitive housing policies have been a feature of colonial governance, and that therefore the actions undertaken by the Coalition Government must be understood within the context of colonisation.

Punitive housing politics

Housing is an issue that Indigenous peoples around the world have had to contend with. The reasons for this are obvious. With land theft being at the centre of colonisation, settler-colonial governments have utilised numerous forms of violence to attain Indigenous lands and then control—through law and policies—the ways that Indigenous peoples live on and access that land. This violence has taken numerous forms globally, from military attacks that led to both loss of life and land through to violence that has attacked the hearts and minds of Indigenous peoples. It is

this latter, at times insidious, violence that can be mistaken for government actions to protect the wider populations (or rights of landlords, in this case) that we take issue with in this piece. The "threat" of homelessness treats housing as an earned privilege, one that the government has ultimate control over.

More broadly, housing demonstrates the tensions between Indigenous sovereignty, or tino rangatiratanga, and the neoliberal policies of the colonial state. Tino rangatiratanga requires that Indigenous peoples have sustained collective control over where and how they live on their ancestral lands, while neoliberalism presumes that access to housing rests within the broader dynamics of individualism and meritocracy. These tensions are fraught and complex, but by locating current government discourse and policy within this complexity, we aim to show that colonial intent continues to be reinvented, and that the right to housing is frequently politicised in relation to how Māori and Indigenous peoples are able to live on their lands (Moreton-Robinson, 2015). Put simply, landlessness and homelessness go hand in hand and are intimately linked with Crown decision-making (Waitangi Tribunal, 2024).

Human rights and te Tiriti o Waitangi obligations

The United Nations (UN) recently released a situation report stating that existing housing policies in Aotearoa were inadequate to address the housing crisis (Rajagopal, 2021). In large part, this was compounded by the fact that successive New Zealand governments had not yet legally recognised housing as a human right, thereby failing to position homelessness as the state's failure to uphold human rights. Amongst numerous other concerns aired by the UN in the report, they noted that there needed to be much stricter policies relating to evictions to ensure that tenants were protected and would not be made homeless. This concern was echoed by the UN Human Rights Council (2024), which recently released a report highlighting significant issues with homelessness in Aotearoa, notably the disproportionate impacts on Māori as both overrepresented in homelessness figures and being amongst the highest at risk of becoming homeless.

In the same year, the Waitangi Tribunal (2024) released a report that questioned whether the overrepresentation of Māori in homelessness statistics could be deemed a breach of te Tiriti o Waitangi. In assessing whether the situation could be deemed a breach of the Crown's obligations, the Tribunal researched the meaning of the word "kāinga" as a guarantee under Article 2 of te Tiriti. They found that "kāinga" means is not just a physical house, but also the core of a safe, healthy place to live, within which Māori exercise rangatiratanga over decisions about home and wellbeing. While kāinga can refer to papakāinga, claimants have argued that the nearly complete theft of papakāinga by the Crown since 1840 has meant that very few Māori today have access to papakāinga. Therefore, the broader view of kāinga must include houses and must recognise homelessness in order to address the Crown's breaches of Article 2 of te Tiriti. The report clearly stated that homelessness is a symptom of systemic and intergenerational issues (Waitangi Tribunal, 2024).

Vitally, the report noted that Crown policy on housing and homelessness occurs in isolation from other issues faced by Māori; an issue we see as apparent in the removal of the STF. For example, citing claimants' closing submissions, the Waitangi Tribunal (2024) stated:

> Applying the principle of active protection … requires the Crown to have "a clear understanding of what the guarantee of tino rangatiratanga over kāinga means, and careful consideration of what would now promote its maintenance and restoration". This would include "recognising the drivers of homelessness, and the role the legislative economic and policy decisions have had in perpetuating same". (pp. 121–122)

The Tribunal also argued that the Crown has responsibilities not only to ensure Māori access to kāinga (defined broadly as "healthy homes") but also to ensure that Māori experience no further exclusion from housing through Crown decisions.

These arguments are confirmed in the UN Declaration on the Rights on Indigenous Peoples (UNDRIP; UN, 2007). Article 21 of the UNDRIP protects the right to housing without discrimination and requires states to take appropriate measures to support this. The fact that an internationally agreed declaration—the UNDRIP—includes the right to housing as a core economic and social condition reveals how colonial ideologies enacted by settler governments have consistently used housing to colonise Indigenous peoples. Furthermore, the UNDRIP represents a collective agreement on fundamental Indigenous rights. It confirms that the tools of colonisation are the same globally, and that, in the context of housing, Indigenous peoples have received no guarantees of safe homes (UN, 2007). In Aotearoa, successive governments'

policy decisions have been recognised as ongoing breaches of human rights, te Tiriti o Waitangi, and Indigenous rights, and the removal of the STF rests within this context. As we now detail, there has been a long history of punitive housing policies that continue to position Māori housing as a political issue as opposed to a fundamental right.

A (brief) history of punitive housing policies

Aotearoa's housing crisis is a symptom of deeper injustices rooted in colonisation, which have resulted in structural and systemic issues. The erosion of Māori housing autonomy began in 1842 with the introduction of the Raupo Ordinance Tax (Isaacs, 2011), which applied taxes to new homes built from native plant materials—that is, typical structures built by Māori at the time. While it was claimed that the tax addressed the fire danger posed by materials such as raupō, the impact, when coupled with the rapid pace of land confiscation, was a redirection of housing control away from Māori (Harman, 2014; Te One, 2019).

Furthermore, the Crown utilised law to justify the alienation of Māori from their whenua (Kake, 2016). Such legislation included the Native Lands Act 1862, the Suppression of Rebellion Act 1863, the Native Schools Act 1867, the Tohunga Suppression Act 1907, and the Native Health Act 1909. These acts worked together to systematically dispossess Māori of their whenua and resources, leading to enduring inequities such as homelessness.

In the mid-20th century, many Māori were forced to migrate away from their kāinga whenua and move to cities to seek employment (Williams, 2015). Māori faced severe societal and political discrimination in the urban housing market, which led to overcrowded, impoverished living conditions, in some cases producing urban "ghettos" and "slums" (Rout et al., 2020, p. 15). These rapid urban migrations were encouraged by government officials at the time in efforts to "integrate" Māori into Pākehā society (Hunn, 1961). Under the First Labour Government (1935–1949), the "pepper-potting" plan to house Māori alongside Pākehā whānau was part of a broader drive to encourage Māori to live and behave like Pākehā. Urban housing policies at that time rewarded Māori for fitting in with government ideals, while behaviour deemed antisocial meant that state housing was not offered (Hill, 2012).

The 1991 "Mother of all Budgets" orchestrated by the Fourth National Government marked an ideological shift (Boston et al., 1999), with reduced state intervention in the market and significant social welfare and housing assistance cuts, which disproportionately affected Māori, who more often depended on public services such as the state rental sector (Waldegrave et al., 2000). This budget coincided with an economic downturn and a notable increase in unemployment among Māori (Rout et al., 2019). The dramatic shift exacerbated housing instability and unaffordability in Māori communities. From 1991 to 2013, the proportion of Māori living in owner-occupied dwellings decreased substantially, with a 27.6% decline in urban areas and a 9.9% drop in rural parts (Rout et al., 2019). Compared with Pākehā, since the 1990s, Māori have experienced a more severe drop in homeownership (Rout et al., 2019, p. 5).

This brief history illustrates the long-term impact of housing politics on Māori. While many historical policies set the context for understanding the roots of housing disadvantage, contemporary barriers continue to perpetuate the challenges. For instance, whānau seeking to build on whenua Māori face a host of obstacles, including navigating Te Ture Whenua Māori | Māori Land Court processes, complying with council regulations and securing access to finance (Office of the Auditor-General, 2014). These barriers, combined with the legacy of punitive housing policies, have created a cycle of housing insecurity that shapes the lives of Māori communities today. Clearly, addressing contemporary barriers within the historical context is crucial to improving housing outcomes and opportunities for Māori.

The erosion of Māori housing rights

The legacy of colonisation infiltrates modern housing politics. The current housing crisis in Aotearoa is rooted in colonisation, which has eroded Māori housing rights over generations. The dire housing situation faced by Māori today is not a random event or a sudden "crisis", but rather, it is the intended outcome of colonial policies and neoliberal ideologies that have undermined Māori access to whenua, resources, and tino rangatiratanga. At the heart of this issue lies the dispossession of whenua Māori, which began with the arrival of European settlers and continues to shape housing inequities to this day. The alienation of Māori from their kāinga whenua through unjust policies, confiscations, and sales disrupted traditional ways of life and left many Māori disconnected from their cultural and economic bases. This theft and loss of whenua, coupled with the imposition of Western nuclear whānau structures and urban migration, has made Māori

particularly vulnerable to housing insecurity and homelessness.

Moreover, colonial ideologies have perpetuated harmful stereotypes and narratives about Māori that continue to influence housing policy and public discourse. The punitive measures and victim-blaming rhetoric employed by successive governments, while not always explicitly targeting Māori, have had a disproportionate impact on Māori communities. The statistics consistently show that Māori are overrepresented among those experiencing housing deprivation, including homelessness (Stats NZ, 2020). Yet, this situation is often framed as a failure of individual responsibility, rather than a systemic issue rooted in colonisation. When viewed together, the disproportionate impact of housing policies on Māori, and the colonial ideologies that underpin them, suggests that the current crisis is not an unintended consequence, but is instead a predictable result of a system designed to deprive Māori of their decision-making powers. Ultimately, the erosion of Māori housing rights is colonisation's legacy.

The modern politics of housing

As described at the start of this commentary, the New Zealand Government has instructed Kāinga Ora to end the STF and adopt a firmer approach to managing disruptive tenants and those with significant rental arrears (Bishop, 2024). The government cites concerns about serious antisocial behaviour and the growing debts owed by tenants. Although only three tenancies were terminated because of disruptive behaviour in 2023, the government says that Kāinga Ora should prioritise those on the social housing waitlist over tenants who abuse their homes or neighbours. While the change is not expected to affect compliant tenants, there are concerns about the potential impact on Māori whānau with tamariki, given the high proportion of Kāinga Ora tenants with tamariki who are accused of antisocial behaviour or have rental arrears.

We have grounded the removal of the STF within a complex and sustained web of colonial ideologies applied through government policy. Kāinga Ora's removal of the STF is yet another example of punitive housing policies that disproportionately affect Māori. According to Kāinga Ora's 2024/25 annual report, 36% of Kāinga Ora tenancies involve Māori, while 200,000 people (approximately 3.8% of the total New Zealand population) are housed as Kāinga Ora occupants (Kāinga Ora, 2025). Though Māori make up only 17% of Aotearoa's total population, their representation in public housing at more than double that rate reflects the extent to which public housing has become a critical source of housing security for whānau Māori. In the context of declining Māori homeownership rates since the 1990s (Rout et al., 2019) and well-documented discrimination in the private rental market, Kāinga Ora tenancies represent one of the few remaining pathways to stable kāinga for many whānau. This is not a deficit to be problematised; rather, it reflects the housing system fulfilling its function for those who have been dispossessed of whenua through generations of Crown policy. The concern, therefore, is not that Māori are in public housing, but that the government is now making that housing less secure.

Although the change is only relatively recent, the potential impacts of removing the STF can be forecast. In addition to people in social housing being forced out of their homes, the STF's removal sends a clear signal that the plethora of issues people in social housing face in sustaining tenancies does not concern our government. The removal of the STF would strip away critical tenancy protections for some of Aotearoa's most vulnerable communities.

Removing tenancy protections and imposing punitive consequences exacerbates housing instability, insecurity, and hardship, creating a cycle in which people are pushed out of public housing onto the street or into transitional private rentals, only to end up back on the 25,000-plus public housing waitlist (Ministry of Social Development, 2024). The government's claims about "antisocial behaviour" fail to recognise that these statistics are symptoms of deeper underlying issues such as mental illness, addiction, trauma, abuse, economic hardship, and poor physical health. Such complex problems require comprehensive support systems to effectively address them, but current systems are inadequate.

To reduce antisocial behaviour in society, the Coalition Government must invest in strengthening social safety nets and improving access to services that address the root causes driving these behaviours. However, even a well-functioning government would struggle to fully resolve such complex, deeply rooted societal problems. Nonetheless, responding with punishments will put even more strain on other public systems, like healthcare and social welfare. Tamariki are likely to bear the brunt of these policies, further entrenching intergenerational traumas. The Coalition Government has openly admitted to ignorance about critical details such as how many tamariki will be impacted, how many tenants have

health concerns, and, crucially, where the evicted will go ("'Not Clear Exactly'", 2025).

This lack of detail suggests the policy is a rushed decision designed to meet the Coalition Government's arbitrary "first 100 days" goals without fully understanding the broader context. Furthermore, it is yet another policy that is focused on opposing the previous Labour Government, rather than supporting those in need. As a collective, we must demand a more thoughtful, compassionate, and practical approach to housing, while also acknowledging the systemic tides of housing politics.

Conclusion

This commentary began by highlighting our concerns about the removal of the STF and the uninformed justifications made by the responsible ministers. Our concerns stem from the punitive language behind the STF's removal, and the lack of detail provided about how homelessness will be avoided. While this commentary is motivated by current policy decisions, we also argue that the policy shift is entwined in a colonial history that has deliberately, consistently, and disproportionately impacted Māori. Such policy shifts are not unique to the current Coalition Government. Rather, it is a feature of successive colonial governments' policy-making that, in taking control over whenua Māori and kāinga, has created a view that housing for Māori is not a fundamental human right but something that must be earned. In other words, Māori who are considered to be "antisocial" should be punished with homelessness.

Housing will continue to be a political issue, with social and economic pressures likely to remain a feature of debates for years to come. However, for Aotearoa to succeed as a nation, international human rights must inform policy and uphold tino rangatiratanga and te Tiriti o Waitangi. Further work is required to map out the consequences of punitive housing policies, and to document ways in which policy has negatively impacted Māori and could continue to do so. The key point is that a plethora of housing solutions led by Māori already exist. Growing the capacity of Māori to support housing for Māori is necessary and will go some way to upholding human dignity, Tiriti obligations, and Indigenous rights, and to ending the vicious cycle of colonial housing politics.

To date, the Coalition Government has not publicly disclosed the ethnicity of any tenant whose tenancy has been terminated, who has been issued a Section 55A notice for antisocial behaviour (under the Residential Tenancies Act 1986), or who has been relocated under the new framework. This absence of data is not incidental. This is a political choice that allows the policy to proceed without scrutiny of its equity impacts. An Official Information Act request has been lodged seeking this data. If the figures confirm what the structural conditions strongly suggest—that Māori are disproportionately affected—then the removal of the STF cannot credibly be described as ethnicity-neutral policy. It must instead be understood as the latest iteration of the colonial housing cycle this commentary has described. Until the Crown is willing to confront the disparate impact of its housing decisions on Māori, the cycle of colonial housing politics will continue.

Glossary

Aotearoa	New Zealand
kāinga	home
Māori	Indigenous peoples of New Zealand
Pākehā	New Zealanders of European descent
papakāinga	tribal homelands
rangatiratanga	Māori self-determination, sovereignty
raupō	wetland reed plant (*Typha orientalis*); native building material
tamariki	children
te Tiriti o Waitangi	the distinct Māori-language version of the Treaty of Waitangi (1840)
tino rangatiratanga	Māori self-determination, sovereignty
whānau	family
whenua	land
whenua Māori	ancestral Māori land

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BOOK REVIEW

Mātauranga Māori. Mead, Hirini Moko. (2025). Te Whare Wānanga o Awanuiārangi and Huia Publishers. 400 pp. ISBN: 978-1-77550-924-0.

Tēnā koutou. Ko Te Kapua O'Connor ahau—he uri nō Muriwhenua. Ka tuhia tēnei arotake i runga i te ngākau whakaiti. Ko wai au ki te arotakengia he pukapuka nā tētahi rangatira rongonui o te ao Māori i tuhi? Nō reira, ahakoa te kupu "arotake" e noho nei hei tītara mō te tuhinga nei, me mōhio te kaipanui, he tirohanga kē tēnei whai muri i taku otinga o *Mātauranga Māori* nei. Ka huri.

Tā Hirini Moko Mead's *Mātauranga Māori* is an exquisite book that carefully opens up Tāne's kete o te wānanga, allowing readers to gaze upon the knowledge inside. In this review, I discuss the structure of the book and its contents, and Tā Mead's unique writing style, and share a personal vignette that speaks to the book's mana.

Structurally, this book contains 14 chapters, each dedicated to a particular kaupapa. Tā Mead makes it clear that the chapters of *Mātauranga Māori* are not intended to be exhaustive discussions of each kaupapa. Rather, they serve as succinct essays that can be supplemented by further reading. For example, Chapter 2, "Te Koha a Tāne", describes the pūrākau associated with mātauranga. We are taught about Tāne's collection of mātauranga, and his brother Whiro's attempts to take it himself. We are invited to contemplate the division of knowledge into three kete and into kauae runga and kauae raro categories. Chapter 9, "Te Whare Toi", covers toi, or art, in a broad sense, taking readers to Rarohenga, where Niwareka and Mataora famously retrieved important art forms from Uetonga and others. Chapter 11, "Ngā Āhuatanga o te Wā"—a personal favourite—talks about Māori time, and how various environmental features and other aspects of life inform a comprehensive, interconnected system of time. Each chapter is full to the brim with exciting, meaningful, transformative mātauranga.

These chapters (and the 11 others) demonstrate Tā Mead's craft as a knowledge sharer. Some readers will want more on each kaupapa, but I think that the way that each essay whets the appetite is effective. Mead concludes each chapter with an implicit statement: "There you go, now go and do some more research yourself!" As well as encouraging readers to continue learning about mātauranga, keeping the chapters short maintains the book's manageable size. From a practical perspective, *Mātauranga Māori* is the type of book that can and will be carried around by keen scholars of mātauranga, taking it into learning environments such as kura, kura reo, wānanga, and more.

The structure of having 14 chapters each dedicated to a particular kaupapa also influences how *Mātauranga Māori* can be engaged with. For example, I read the introductory chapters, then went straight to Chapter 10, "Te Whare o Tangaroa". This was because I am teaching two tertiary courses that include content on navigational knowledge. I imagine that many readers will choose to read this book in this manner, selecting chapters that they want to read first, and then going forwards or backwards to read other chapters. There is no necessity to read this book in sequential order.

Let us now turn to Tā Mead's unique writing style in *Mātauranga Māori*. At first, the writing style surprised me, as it is not what we are used to when we think of writing emerging out of tertiary learning spaces. If asked to describe Mead's style of writing, I would say that it is both gentle and academic—two words that might seem incongruous when used together. The word "gentle" speaks to the way Mead makes readers feel safe, seen and supported in their learning. Further, Mead's gentle voice is completely void of ego, self-aggrandizement, and the overly complex language that is often found in academic writing. It feels like we are sitting with him in a warm house—with a hot beverage perhaps—around a table with a small group of companions. Conversely, "academic" is a reference to how Mead's voice resonates and stimulates the mind. Mead also makes readers feel like they are gathered in a large lecture theatre or a whare tipuna—Mataatua in Whakatāne perhaps—surrounded by hundreds of sharp minds, listening to the kauhau of the century. A "gentle

academic" voice—this style of writing may well become a hallmark of Māori scholarship about mātauranga in the future.

I would like to conclude this review by telling a brief story that speaks to the mana of *Mātauranga Māori*. As mentioned, I teach a tertiary-level course called Māori 320: Mātauranga in the School of Māori Studies and the School of Pacific Studies at Te Wānanga o Waipapa | The University of Auckland. When Tā Mead's book came out in mid-2025, I left my office to purchase a copy, given its relevance to my paper. As I neared my destination, a curious thing happened. I fell into step with what felt like a hapū of mostly Māori scholars all converging on the local bookshop to purchase a copy of *Mātauranga Māori*, which sat proudly with its blue jacket upon the shelf. I have not personally seen such excitement for a non-fiction book before. I know that this pattern was occurring nationwide—and overseas too—where Ngāi Māori and non-Māori alike were scrambling to purchase this new book, hungry to consume its contents. It is clear that, collectively, we are so excited and so grateful to have this taonga of a pukapuka in our hands. There is no doubt that it will become (or already is) one of the most important books for scholars of mātauranga Māori that we have. I only have one parting question—will Te Whare Wānanga o Awanuiārangi and Huia Publishers fund or seek funding for a te reo Māori version, or is this already in the pipeline? I am sure there are many who would find it meaningful to read this book in the Māori language.

Ka whakakapi i tēnei arotake ki tēnei o ngā whakataukī ka takoto ki roto i tā Tā Mead pukapuka *Ngā Pēpeha a Ngā Tīpuna*. He whakataukī tēnei mō te hue. Ka whakatōngia ngā kākano hue, nāwai nāwai, ka tupungia he hue maha. Kō ēnei hue kua tupungia, he rauemi kawe wai mō ngā uri whakatupu. He huahuatau tika tēnei mō te pukapuka *Mātauranga Māori* nei. Ka whāngaia ngā mokopuna e tēnei pukapuka, otirā e tēnei taonga kāmehameha:

> Ko ngā kākano o roto i a au hei utu wai mō āku mokopuna.
> *The seeds within are to provide water for my descendants.* (Mead & Grove, 2001)

Nō reira e te whānau, I must conclude this review and get back to my books. As Tā Mead says of mātauranga: "There is so much to learn[!]"

Mihirau ki a tātou.

Glossary

hapū	sub-tribe
kauae raro	lower jawbone; terrestrial knowledge
kauae runga	upper jawbone; celestial knowledge
kauhau	presentation, speech
kaupapa	topic, matter for discussion, subject
kete o te wānanga	baskets of knowledge
kura	schools
kura reo	language symposiums
mana	prestige, authority, control, power, influence, status, spiritual power
Mataatua	ancestral meeting house built by the Ngāti Awa tribe in 1875
Mataora	ancestor who travelled to Rarohenga to retrieve his wife, Niwareka
mātauranga	knowledge
	Māori people
mihirau ki a tātou	greetings to us all
Niwareka	a tūrehu (spirit) in Rarohenga; the daughter of Uetonga and wife of the mortal Mataora
nō reira e te whānau	therefore, family
pukapuka	book
pūrākau	origin narrative
Rarohenga	the underworld
tā	sir
Tāne	god of the forest and all forest creatures
taonga	treasure
te reo	the Māori language
toi	art, knowledge
Uetonga	a chief who dwelled in Rarohenga; the father of Niwareka
wānanga	tertiary education institutions, learning spaces
whare tipuna	ancestral meeting house
Whiro	god of darkness and embodiment of all evil

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Review author

Te Kapua O'Connor, Ngāti Kurī, Muriwhenua. Lecturer, Māori Studies, Faculty of Arts and Education, Waipapa Taumata Rau | The University of Auckland, Tāmaki Makaurau | Auckland, Aotearoa | New Zealand. Email: kapua.oconnor@auckland.ac.nz