KIA WHAKATŌMURI TE HAERE WHAKAMUA

Applying an Indigenous qualitative method with rangatahi Māori and whānau

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Abstract

Many Indigenous-specific research paradigms are used internationally. Kaupapa Māori is one such paradigm that privileges and legitimises Māori knowledge, culture, language, customs and protocols. The qualitative Kaupapa Māori paradigm presented here includes establishing an expert advisory rōpū and a Māori-led research team, developing and pilot testing a Māori data collection method (wānanga interviews), conducting wānanga, and analysing the collected data. Two wānanga were held with groups of rangatahi and whānau. Wānanga 1 centred around components of hauora important for rangatahi Māori. This led to the creation of a provisional model, in which an atua Māori represented hauora rangatahi Māori. The findings from wānanga 1 were presented to participants in wānanga 2 to initiate discussion around the model. Kaupapa Māori principles informed the methods, analysis and resulting model, and inductive thematic analysis was applied to the wānanga data. This paper illustrates the importance of research being informed by Indigenous worldviews, knowledge systems and practices to produce meaningful, substantive, positive and transformational change.

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Introduction

> Kia whakatōmuri te haere whakamua
> *I walk backwards into the future with my eyes fixed on my past*
> — whakataukī; author and iwi unknown

Indigenous peoples have historically been researched on, rather than with or for (Harris et al., 2012; Pihama et al., 2014; Reid et al., 2019; L. T. Smith, 2021). Such an approach silences, oppresses and misrepresents Indigenous languages, knowledges, systems and cultures (L. T. Smith, 2021). For Māori, the Indigenous peoples of Aotearoa me Te Waipounamu, this is no exception. Research on Māori is embedded at the deepest level of imperialist colonial history, systematically documenting and classifying Māori, positioning Māori as "other" and inferior, and misrepresenting Māori knowledge systems (Pihama et al., 2002; L. T. Smith, 2021). This misrepresentation and silencing has occurred in many knowledge areas, including hauora.

Prioritising Indigenous knowledge in research requires culturally relevant or appropriate research paradigms (including ontology, epistemology, axiology and methodologies) (Drawson et al., 2017; Pihama, 2010; G. H. Smith & Smith, 2018; L. T. Smith, 2021). One such Indigenous paradigm, specific to Māori, is Kaupapa Māori. Kaupapa Māori theory has been described as "by Māori, for Māori" (L. T. Smith, 1995) and "a fluid and evolving theoretical framework" (Pihama, 2010, p. 10). Kaupapa Māori research, informed by Kaupapa Māori theory, encourages researchers to engage with a research approach to data collection that is appropriate to the Māori communities with whom the research is being conducted (Cram et al., 2015).

There is no single paradigm or method to guide research with rangatahi Māori. The aim of this paper is to specifically describe the Kaupapa Māori research paradigm undertaken with rangatahi and whānau to demonstrate the importance of researchers engaging with culturally grounded methods to produce meaningful research outcomes. This paper is presented in four sections: Section 1 provides the context of Indigenous research paradigms, with a focus on Kaupapa Māori paradigm; Section 2 describes the specific Kaupapa Māori paradigm used in this research; Section 3 focuses on the study design; and Section 4 presents reflections on the use of a Kaupapa Māori paradigm.

Section 1: Indigenous paradigms—ontology, epistemology, axiology and methodologies

Paradigms are a way of describing a shared worldview, and are informed by ontology (what can be known or the nature of reality), epistemology (how we can know what we know), axiology (researchers' values and positioning) and methodology (principles of carrying out research) (Denzin & Lincoln, 2011; Patton, 2002). Paradigms consequently inform the selection of specific methods to use (e.g., the tools of data collection and analysis). Diverse Indigenous research methods are used internationally (some examples are displayed in Figure 1), and Māori research often uses a Kaupapa Māori paradigm.

Māori paradigm: Kaupapa Māori

A Kaupapa Māori paradigm privileges and legitimises mātauranga Māori, asserts tino rangatiratanga, aligns to cultural values, and provides a safe ontological and epistemological space for Māori researchers (Henry & Pene, 2001; Jackson, 2015; Pihama, 2010; Pihama et al., 2002; G. H. Smith & Smith, 2018; L. T. Smith, 2021). Examples of Kaupapa Māori ontology, epistemology, axiology, methodology and methods are displayed in Figure 2 and further explained below.

Ontology of Kaupapa Māori research: A Māori worldview. Ontology can be understood as te ao Māori. Te ao Māori is what lies at the very heart of Māori culture, and includes elements such as te reo Māori, pūrākau, ancestral landscapes, whakapapa, karakia, waiata, mōteatea, pepeha and whakataukī, as well as values such as manaaki, aroha, āwhina and wairua (Jackson et al., 2018).

Epistemology of Kaupapa Māori research: Mātauranga Māori. From a Māori worldview, ways of knowing and being are entwined (Marsden, 2003; Stevenson, 2018). Mātauranga Māori does not refer to a specific theory or framework; rather, it is a modern term used to discuss a body or continuum of knowledge (Royal, 2012). Mātauranga Māori includes unwritten material

such as verbal, visual, pūrākau, waiata and mōteatea (L. T. Smith, 2021).

Axiology of Kaupapa Māori research: Māori research ethics and values. Axiology does not specify how to carry out research; rather, it provides cultural and ethical considerations derived from Māori worldviews and frameworks to facilitate good Māori research (Simmonds et al., 2014; Stevenson, 2018). L. T. Smith (2012) and Cram (2001) have outlined a set of seven research guidelines that assist researchers in ethical considerations when engaging with Māori in research. See Figure 2 (axiology).

Methodology: Māori research principles. The six principles of Kaupapa Māori methodology are presented in Figure 2. Specifically, the principles of whānau, ako Māori and kaupapa were applied in this research and are described in Section 2.

Section 2: The Kaupapa Māori paradigm in this research project

The intent of our research was to position rangatahi as experts of their own hauora, adept in describing concepts important to them. A Kaupapa Māori paradigm allowed us to privilege mātauranga Māori and te ao Māori, while also enabling historical, social and Indigenous-specific determinants of health to be acknowledged (Barnes, 2000).

As per a Kaupapa Māori paradigm, our research is positioned within a Māori-led research team (GM is the lead Māori researcher who undertook the research as part of her PhD, supervised by two Māori, EW and SC, and two non-Māori, TS and SD, senior academics), guided by a Māori expert advisory rōpū, with wānanga conducted by Māori researchers. The wānanga approach was informed by tikanga, mātauranga Māori, pūrākau, the expert advisory rōpū, the pilot wānanga and the supervisory team. The 17 CONSolIDated critERia for strengthening research involving Indigenous peoples (CONSIDER) (Huria et al., 2019) also guided this research.

Te ao Māori is embodied in this research through centring and normalising Māori beliefs, values and experiences. Mātauranga Māori is embedded in this research by providing a safe, legitimate and privileged space (Pihama, 2010; Royal, 2012).

Methodology principles applied: Whānau, ako Māori and kaupapa

As discussed, the Kaupapa Māori methodology principles of whānau, ako Māori and kaupapa are used in this research and are outlined below.

Whānau: participants and wānanga methods (Hui Process). Whānau is the principle of incorporating cultural structures that emphasise the collective rather than the individual (G. H. Smith, 2003). This principle was enacted through recruiting both rangatahi and whānau as research participants. Relationships were built with rangatahi and whānau in advance of the conducting of wānanga, ensuring connections were made and rangatahi and whānau felt comfortable and safe to participate in the project. Whakawhanaungatanga, an extension of the word whānau, was integral to conducting the wānanga (see HUI Process in Section 3).

Kaupapa: Expert advisory rōpū. Kaupapa is the principle of shared and collective vision or philosophy (G. H. Smith, 2003). Collectivist approaches were taken in planning, interpreting and disseminating this research. For example, a Māori expert advisory rōpū was established to provide guidance and support throughout the research, using wānanga as a collectivist method of data collection, and presenting themes and subthemes back to participants to ensure accurate interpretation of participants' perspectives.

The expert advisory rōpū were invited for their extensive experience and skills in areas relevant to the research project (e.g., in neonatal care, public health, wānanga, Māori health, rangatahi Māori health, health economics, mauri ora, whānau flourishing and kaumātua). The members were selected based on already established connections with the research team, and all members who were invited accepted the invitation. The rōpū, who met three times over the course of the project (in person and via Zoom), provided guidance on wānanga recruitment strategies, engagement, wānanga size, age of youth to be included in the study, the power of words, geographical location, where wānanga should be conducted, and culturally engaging knowledge-sharing strategies, interpretation and analysis of results. All considerations contributed to the development of the wānanga. Dr Paula King (a member of the rōpū) shared a safety plan she developed in her expertise working with rangatahi Māori (King, 2021), which informed the safety plan for this research. Fortunately, the

safety plan did not need to be used at any stage of the project.

Ako Māori: Pūrākau of Tāne. Ako Māori can be described as "the Māori way or agenda, a term used to describe traditional Māori ways of doing, being and thinking, encapsulated in a Māori world view or cosmology" (Henry & Pene, 2001, p. 236). Ako Māori informed the project development, data collection, data analysis and dissemination of results, specifically, in the use of pūrākau as a pedagogy (e.g., to validate wānanga methods, to present results to participants and to disseminate images to participants).

Pūrākau form "philosophical thought, epistemological constructs, cultural codes, and worldviews that are fundamental to our identity as Māori" (Lee, 2009, p. 1). Further, pūrākau are a way to express an essential Māori way of knowing, being and understanding (Ihimaera, 2020; Keelan, 2014; Lee, 2009; Pouwhare, 2016; Walker, 1996). There are no universal pūrākau; rather, they are dynamic and ever evolving, in the same way people and cultures are (Ihimaera, 2020; Keelan, 2014; Lee, 2009; Pouwhare, 2016). Therefore, the pūrākau used in this research are one narrative of many.

We drew on three pūrākau (see Table 1) that centralise Tāne to guide and inform the research. The connection Tāne has to the natural world, hauora and humankind serves as the foundation for his role as the central character in this research.

TABLE 1 Pūrākau of Tāne drawn on in the research project

Te Wehenga: The separation
The following account is an abridged version of the pūrākau as told by Witi Ihimaera (2020, pp. 47–61).
Ranginui clung to Papatūāknuku in an eternal embrace dooming his offspring to dwell in perpetual darkness forever. The children held a wānanga within the darkness between their parents, and agreed, with the exception of Tāwhiri-mātea, to separate their parents, like the forest, reach for light. After several attempts from the other brothers, Tāne was able to separate his parents by pushing his shoulders to the ground and thrusting his feet into Ranginui. He was successful and Ranginui was flung to the skies, allowing te ao mārama knowledge and intelligence into the physical world.

Ngā kete o wānanga: Three baskets of knowledge
In accordance with Māori tradition, three kete o wānanga were held in the highest heaven (Grey, 1885). They contained the wisdom and knowledge of all seen and unseen, with directions as to how the world should be and humans should behave (Williams & Henare, 2009). Tāne, chosen among his siblings was deemed to possess the qualities necessary to enter the heavens to retrieve them (Mataira, 2000). Tāne was then granted two sacred stones and three baskets of knowledge: 1. Te kete uruuru matua, 2. Te kete uruuru rangi and 3. Te kete uruuru tau (Mataira, 2000). For this deed he received the name Tāne-te-wānanga-ā-rangi, Tāne, bringer of knowledge from the sky.

Hauora
The following account is an abridged version of the pūrākau as told by Hiroa (1949, pp. 450–453).
Thirty-six atua (this number varies) including Tāne went to Kurawaka, where they molded a figure eventually named Hine-ahu-one out of the earth—a portion of Papatūānuku in resemblance of themselves. Each atua gave expressions of themselves to Hine-ahu-one, which we can identify in our own body. The lungs were provided by Tāwhiri-maatea, Tū-mata-uenga fashioned the muscles, Tangaroa provided water and fluids that flow through our body, and Tāne contributed to the creation of the mind and acquisition of knowledge. Not only were physical and external attributes gifted, but so were inner qualities. For example, wairua, manawa ora and toto were retrieved by Rehua and gifted by Io. It was then left for Tāne to instill the breath of life, pressing his nose to the nose of Hine-ahu-one and incantating "Tihei Mauri Ora". This created ira tangata, in the form of a female. Her name was Hine-ahu-one.

The pūrākau informed the research in multiple ways, including the use of wānanga, the emphasis on whānau, and as lessons on mātauranga Māori and the meaning of hauora. The connection between these components and the pūrākau is discussed below.

Wānanga. The origins of wānanga (the method used for data collection) are prominent in all pūrākau presented above, demonstrating how wānanga is an ancient knowledge. The first pūrākau discussed wānanga as a collective deliberation between siblings, a discussion on the future and a hard decision to be made. The second included ngā kete o wānanga—the baskets of knowledge. The third involved self-wānanga—internally deliberate or think deeply—about how and why to create ira tangata.

The concept of wānanga outlined in these pūrākau was applied to this research: (a) as a collective deliberation and discussion between participants (i.e., an ancient method of data collection), (b) as a Māori method to conduct research with Māori participants, (c) as a form of knowledge production and (d) to internally deliberate what was said (i.e., analyse).

Whānau. The first pūrākau depicts a story of a child growing up with their siblings, within the loving embrace of their parents, before creating space in the world for themselves. In the second pūrākau, whānau assisted Tāne with his epic endeavour to achieve the goal of retrieving ngā kete wānanga. The third pūrākau depicts how each whānau member contributed to creating Hine-ahu-one.

The importance of whānau outlined in these pūrākau applies to this research in three ways: (a) just like Tāne, our rangatahi participants are growing up within whānau structures, creating and navigating space for themselves; (b) the importance of collective effort—for instance, this research required the support of the expert advisory rōpū, a large supervisory team and multiple researchers to facilitate wānanga, and the support of whānau, marae and iwi; and (c) many atua contributed to the creation of the first human, emphasising how whānau are integral for hauora—that is, individual hauora cannot be understood without hauora whānau (Durie, 1985; Pere, 1997; Pitama et al., 2007), thus whānau were intentionally included as participants alongside rangatahi.

Mātauranga. The pūrākau also teach us lessons regarding mātauranga Māori. The outcome of Tāne separating his parents was te ao mārama.

Te ao mārama is often depicted by Māori as the potential for knowledge acquisition, enlightenment and realisation (Nicholson, 2020). The second pūrākau depicts ngā kete o wānanga and the ability for us to obtain and produce knowledge. The third pūrākau imbues us with the knowledge of hauora (see below).

The lessons of mātauranga are used in this research to (a) use wānanga as a tool to obtain and produce knowledge and (b) privilege mātauranga Māori (i.e., te reo Māori, pūrākau, whakataukī, karakia), Māori values (e.g., manaakitanga, aroha and whanaungatanga) throughout the research.

Hauora. Hauora literally translates to the "breath of life"—breath (hau) of life (ora) (Marsden, 2003). The last pūrākau explains how hauora extends well beyond the term health. Rather, hauora is woven into te ao Māori, the environment, the atua and the connection to all people. Further, this pūrākau shows how we are all imbued with the likeness of the atua (i.e., they helped create us); this connects us to these stories, the atua and the land.

For these reasons, Tāne was chosen as the figure to represent the rangatahi in the findings presented back to participants.

Axiology. As mentioned, Smith's (2012) and Cram's (2001) seven research guidelines were closely followed when engaging with Māori (see Table 2).

Section 3: The study design and methods

The study design is outlined below, including wānanga, participants, participant recruitment, ethics, the Hui Process, specific wānanga activities and analysis. The study design was refined through multiple discussions with the expert advisory rōpū and supervisory team. A summary of the methods timeline is presented in Figure 3, and further detail on the study design is provided in the subsections below.

Wānanga 1

The purpose of wānanga 1 was to investigate the views of rangatahi and whānau on what components contribute to hauora rangatahi Māori. The specific goals were to (a) determine components of hauora identified as important to rangatahi themselves, (b) determine components of hauora identified by whānau as important for rangatahi and (c) investigate what differences (if any) exist between rangatahi and whānau views on components of hauora.

TABLE 2 Application of Kaupapa Māori research guidelines

Research guideline	Implementation
Aroha ki te tangata	Ensuring a variety of spaces were available for participants. For example, Māori spaces (workplace and marae) and familiar sports ground.
	Allowing whānau to choose if they would prefer to participate alone or with other whānau. Grouping whānau together who were familiar with each other.
	This was vital as whānau give up their time and knowledge to participate in this research, which must be acknowledged.
Kia tūpato	Creation of a safety plan to mitigate any concerns that rangatahi might raise.
	Following tikanga and kawa, e.g., karakia at the beginning and end of the wānanga, whanaungatanga and kai.
Kaua e takahia te mana o te tangata	Participants are the most important people in research. A second wānanga was conducted with one objective being to ensure the discussions from wānanga 1 adequately reflected or resonated with participants. Findings were disseminated to participants.
Kanohi kitea	Before wānanga, GM conducted face-to-face meetings with whānau and Māori staff at schools who were helping to organise whānau groups. GM had connections with teachers at multiple schools. Building these relationships ensured (a) rangatahi and whānau felt safe, allowing for relationship building; and (b) rangatahi and whānau could ask questions, be partners in the research, and stipulate their terms and comfort with the research.
Titiro, whakarongo… kōrero	It was important to observe what and how participants spoke in the wānanga and to listen to what they were saying to (a) ensure the kōrero was captured accurately, (b) ensure the questions being asked were relevant and important, and (c) as a sign of respect.
Manaaki ki te tangata	Manaaki ki te tangata was shown in three main ways:
	Kai was shared after whanaungatanga and before any questions were asked in the wānanga. For the Zoom wānanga, kai bags were dropped off at each house to continue to manaaki our participants.
	Koha (a gift to show respect and thanks for sharing their time and knowledge) was given to all participants (rangatahi and whānau) after each wānanga.
	We were flexible and accommodating of the busy lives of participants. We made it clear that all whānau were invited, even if they did not meet the age restriction (i.e., if participating rangatahi had siblings under 8 years of age); their children would be looked after and there would be games for them to play. If whānau had to cancel or reschedule, they could do so easily.
Kia māhaki	Participants were considered the experts, and data collection was conducted in this manner, e.g., we assumed participants had no prior knowledge of any topics and we spoke in lay terms rather than academic jargon that is often unclear for those outside of academia.

Wānanga 1 methods were initially developed in conjunction with the supervisory team and then discussed with the expert advisory rōpū, whereby advice and guidance was provided to further develop and aid the wānanga.

Participants

Rangatahi as well as whānau were recruited as participants because both perspectives are important to holistically conceptualise and understand hauora rangatahi Māori. Participants included any Māori person aged 8–17 years and their whānau living within Hawke's Bay or Otago. Whānau members included in the wānanga were determined by each whānau group, and were often diverse, having multiple rangatahi or multiple whānau members (e.g., parents, grandparents, uncles or aunties) making up one whānau group.

In te ao Māori, individual hauora and hauora whānau are equally important for attaining optimal hauora (Durie, 1985; Love, 2004; Pere, 1997; Pistacchi, 2008; Pitama et al., 2007). In te ao Māori, Māori children are often seen as a representation of their ancestors and the embodiment of all past and future generations (Pihama & Cameron, 2012). For example, the harakeke plant has been conceived by Māori as a representation of the whānau structure (Pihama & Cameron, 2012). The whole foundation is centred around the middle shoot, depicted as the rito (child), which is surrounded by its mātua, then kaumātua (Pihama & Cameron, 2012). This analogy illustrates how rangatahi are central to the whānau structure, surrounded and protected by other whānau members.

Participant recruitment.

Initially, whānau who were familiar with some of the research team through community and professional networks were approached. When relationships were not previously established, kanohi ki te kanohi meetings were held with key personnel, including whānau members and Māori staff of various secondary schools, who assisted in facilitating recruitment within schools of potentially interested rangatahi (and by extension their whānau).

Online advertising of the study (e.g., pānui and social media) also occurred between June and November 2021, and a snowballing method (Tracy, 2019) was employed with already-confirmed participants. Eligible participants included rangatahi aged 8–17 years and their whānau who resided in one of two geographical regions of New Zealand: Hawke's Bay or Otago.

Ethics and consent

Ethical approval was obtained from the University of Otago Ethics Committee (H20/119) and consultation was undertaken with the Ngāi Tahu Research Consultation Committee prior to the research commencing (University of Otago, 2023).

Wānanga as a method

Wānanga were the main method of data collection. As discussed above, wānanga is an ancient Māori knowledge system, steeped in mātauranga Māori and Māori culture, providing a Māori grounding and framework for conducting research (Mahuika & Mahuika, 2020). The word wānanga according to *Te Aka Māori Dictionary*, means to discuss, deliberate or consider (as a verb), and it refers to traditional cultural, religious, historical, genealogical and philosophical knowledge (as a noun) (Moorfield, n.d.).

Research wānanga facilitate collective conversation, a powerful method for storytelling and knowledge production. The purpose is to explore and pursue the creation of new knowledge and understanding through discussing, debating and analysing, and thus is an active process (Royal, 2005).

Pilot wānanga. The wānanga was pilot tested with three whānau well known to the research team. The pilot test provided feedback that changed the wānanga structure in three main ways: (a) numbers of whānau and rangatahi, (b) activity order and time, and (c) number of research team members present.

Wānanga and the Hui Process. Wānanga were conducted using the Hui Process (Lacey et al., 2011), which has four components: mihimihi whakawhanaungatanga, kaupapa and poroporoaki (Lacey et al., 2011).

Mihimihi is an informal way of welcoming participants into the kaupapa. Mihimihi begins with a karakia, followed by pepeha. Mihimihi introduces and connects researchers, participants and whānau, physically and spiritually through whakapapa, landscape and place. For example, in the wānanga, mihimihi provides an introduction, a welcome, an explanation of the purpose of the research, the role of the wānanga facilitators and an outline of the structure of the wānanga.

Whakawhanaungatanga is used as a means of establishing connections and was expressed in the wānanga through a group kēmu and sharing kai.

Kaupapa includes all the data collection components of the wānanga. First, informed consent

(verbal and written) and demographic information were collected from both rangatahi and whānau. Demographic information was collected in hard copy. Both te reo Māori and English versions of the forms were provided to participants. Any queries from participants were answered during this time, and it was made clear that questions were welcome throughout the duration of the wānanga.

Poroporoaki is the closing or finishing of the wānanga. In the wānanga, poroporoaki enables participants to ask further questions, and for the explanation of next steps in the research process, including discussing how the research will be disseminated. Clarifying available support for participants, providing a koha in recognition of the knowledge and insights shared by participants, and closing with a karakia are also carried out in poroporoaki.

Kaupapa: Wānanga. Rangatahi and whānau wānanga were held separately; however, they followed a similar structure, as described below. GM facilitated all aspects of the rangatahi and whānau wānanga. KM supported the rangatahi wānanga and EW supported the whānau wānanga.

A total of 40 participants from 12 whānau groups took part in the wānanga (23 rangatahi and 17 whānau members). Six wānanga were conducted in total—two in Dunedin and four in Hawke's Bay—and each wānanga comprised between one and three whānau groups in each wānanga.

Research warm-up. Rangatahi engaged in a general discussion about hauora, including the concepts encompassed by Te Whare Tapa Whā (Durie, 1985). Discussions were then held about various other hauora dimensions identified by participants, and the positive or negative effect of these dimensions on their hauora. Discussions were facilitated with magnets, which were labelled with various concepts relating to hauora. Rangatahi were invited to place the magnets on a board under the Te Whare Tapa Whā domains of hauora. The same discussions (without the magnets as guide) were held separately with whānau participants.

Main kaupapa—ingredient list. The "ingredient' list" (see Figure 4) was developed and designed for use within this research and was the main data collection activity. Rangatahi were given pens and printed copies of the ingredient list and asked to write down their own personalised ingredients that contribute to their recipe for positive and negative hauora. In addition, rangatahi were

given an audio-recorder and invited to record their thoughts about why each ingredient was important to them and what activities contributed to their various ingredients.

Whānau were asked to think about important components individually (i.e., on their own) of hauora for their rangatahi or rangatahi in general, and to write a list of or discuss the ingredients they thought contributed to positive and negative hauora. A series of open-ended questions about hauora in general were then discussed.

Analysis

With participants' consent, wānanga sessions were audio-recorded and later transcribed verbatim by a transcription service (wānanga 1) or by the lead author (wānanga 2). Inductive reflexive thematic analysis was used to analyse and interpret the wānanga, allowing rangatahi and whānau voices to be prominent in all theme development (Braun & Clarke, 2006). Kaupapa Māori principles (as explained above in Section 2) underpinned all aspects of analysis (Pihama et al., 2002; L. T. Smith & Reid, 2000). Tāne was used as an atua embedded in Māori epistemology and ontology to depict hauora rangatahi Māori (see Figure 5). The model depicts the rangatahi as Tāne, with each branch representing the concepts of hauora (both positive and negative) that rangatahi and whānau identified as important for hauora rangatahi, and the leaves depicting the specific examples (i.e., ingredients) for each component. In the completed model, the branches and leaves embody the themes and subthemes from wānanga 1, further refined in wānanga 2. Given that the focus of this paper is on the wānanga methods, the study findings are not presented here.

Expert advisory rōpū. Findings from wānanga 1 were discussed iteratively with the supervisory team and the expert advisory rōpū for collaborative interpretation. The expert advisory rōpū suggestions and main amendments and considerations are presented in Table 3.

The image was then adapted and a video created to capture and explain the provisional findings to rangatahi and whānau during the second wānanga. Again, the themes will be reported elsewhere.

Wānanga 2

To ensure the themes and subthemes from the provisional phase of analysis reflected and resonated with the rangatahi and whānau perspectives on hauora rangatahi Māori, the initial findings were presented in a subsequent wānanga (wānanga

TABLE 3 The expert advisory rōpū suggestions and main amendments to and considerations regarding the research project

Suggestion	Amendments and considerations
Tāne is not alone in the ngāhere, but rather is part of a complex system involving other trees, roots, wildlife and elements.	The image was modified to be situated in a larger ngāhere, one that includes elements (water, sun, wind), wildlife (native birds), a root system to portray the interconnectedness of the individual with other forest life and trees and atua, for example, Tāwhiri-mātea and Papatūānuku.
Branches can be broken and leaves can fall off (i.e., parts of our hauora may not be optimal at certain times), but a tree can regrow leaves and branches and become stronger.	Tāwhiri-mātea was added to depict the winds blowing leaves and branches down. Following the separation of Ranginui and Papatūānuku, Tāwhiri-mātea waged war on Tāne with the intent to tear trees from their roots, blow the leaves off and damage Tāne. Additionally, the creation of a video was suggested to explain the pūrākau, the significance of Tāne, the collation of hauora rangatahi dimensions and how they are depicted in the image.
There are likely impacts that are negative on the ngāhere, such as stoats and rats. These can be likened to external negative impacts, such as adverse socio-economic factors, racism and discrimination that rangatahi may experience.	A stoat was added to represent adverse social determinants of health.

2). The three goals of wānanga 2 were to determine whether the following reflect or resonate with rangatahi and whānau: (a) the themes and subthemes identified (i.e., the branches or roots and leaves) from wānanga 1, (b) the Tāne pūrākau and (c) the Tāne model depicted in Figure 6.

Pilot test. Wānanga 2 methods were pilot tested with the same rangatahi and whānau who were involved in the pilot testing for wānanga 1. Wānanga 2 were held online (over Zoom) due to COVID-19 disruptions and wanting to keep participants and researchers protected from any inadvertent exposure to COVID-19. The pilot wānanga tested Zoom breakout rooms, multiple devices within one household, managing multiple rangatahi and whānau online, and the video and resources.

The methods in action: Wānanga. A poster hard copy of Figure 6 was sent to participants prior to wānanga to allow adequate time for consideration. Participants were also provided with a written explanation of the poster, colouring pens

to draw on the poster, a consent form and kai. Additionally, access to adequate internet connection and multiple devices was confirmed.

The Hui Process was also used in wānanga 2. Mihimihi and whakawhanaungatanga were fostered through general discussions, karakia, obtaining consent, presenting the general outline of the wānanga and answering any questions. The kaupapa portion included discussing a summary of the work completed to date. A general explanation of the poster was given, along with a four-minute video explanation of (a) the pūrākau involving Tāne and (b) how hauora components discussed in wānanga 1 were conceptualised in the model.

Rangatahi and whānau were then separated into Zoom breakout rooms. The provisional hauora concepts were discussed to determine whether Tāne, the image, and the themes and subthemes adequately reflected or resonated with the views of rangatahi and whānau. The general line of discussion in both the rangatahi and whānau wānanga included (a) the specific concepts (i.e., themes or branches and subthemes or leaves) to ensure we captured all the main components important for

hauora rangatahi Māori; (b) the pūrākau of Tāne, for instance, what participants thought about Tāne, whether Tāne is a useful character to depict hauora rangatahi Māori, and whether the pūrākau of Tāne resonated with participants; and (c) the imagery of the poster and video, for example, whether the imagery resonated with participants and what participants liked or disliked about the poster and video.

Poroporoaki. A closing discussion allowed participants to ask questions or make further comments. The next steps in the research process were explained and the wānanga closed with a karakia. Koha were delivered to participants after the wānanga.

Analysis

Results from wānanga 1 and wānanga 2 were combined and discussed with the expert advisory rōpū. The developing Tāne model was finalised, and a Māori artist was commissioned to create the final image for dissemination to participants.

Section 4: Reflections of a Māori PhD student on the methods used

> Kia whakatōmuri te haere whakamua
> *I walk backwards into the future with my eyes fixed on my past*
> — Whakataukī; author and iwi unknown

This whakataukī expresses how the past, present and future are intertwined—how our research can be informed by the ancient knowledges of our past, to have an impact on our flourishing futures. This section presents a reflection on the use of a Kaupapa Māori paradigm, highlighting the importance of reimagining pūrākau, use of wānanga for data collection and self-inquiry, and in how you know you've "got it right".

Reimagining pūrākau. Creative expression is essential to Indigenous knowledge (Battiste, 2002; Castellano et al., 2000). However, creativity is often constrained by notions of acceptability within Western institutions, and especially in scientific research. This research worked well because of its creativity. The ability to draw on mātauranga, te ao Māori and pūrākau to create methods that were engaging, relevant and culturally grounded was a strength. One outcome of these creative methods was the use of pūrākau, specifically of Tāne, to depict hauora rangatahi Māori. While not an original objective of the research, this model emerged organically through the Kaupapa Māori paradigm process.

However, in the first wānanga of wānanga 2, there was confusion surrounding the use of Tāne, despite efforts to assume participants had no prior knowledge of the pūrākau (as advised by the expert advisory rōpū). This highlighted the importance of recognising the impact of colonisation and the loss of intergenerational knowledge resulting in many Māori growing up without pūrākau (Thom & Grimes, 2022). In subsequent wānanga, we then provided a more detailed explanation of Tāne and the reasons for his representation of hauora rangatahi Māori in subsequent wānanga.

Wānanga. Wānanga was not just a method of data collection; it was an approach to deep engagement, self-inquiry and collective knowledge creation. More than a "Māori method of data collection", wānanga served a method of self-inquiry to critically examine and reflect as a Māori researcher who happens to be Māori (Etherington, 2004; Irwin, 1994). Self-wānanga continually encouraged me to ask: What kind of researcher do I want to be? How do I uphold my responsibilities to my community? What is tika?

Knowing we got it right. Prioritising participants in research is vital to both address the historical imbalance of research experienced by Māori and produce meaningful and relevant research outcomes (Cram, 2001; G. H. Smith, 1992, 2003; L. T. Smith, 2021).

Collecting data in diverse ways (i.e., group activities, ingredient list, narrating into microphones, choice of participating in groups, one-on-one or alone) ensured that the methods fitted the needs of a diverse range of rangatahi, learning abilities and preferences. Presenting findings to participants in a follow-up wānanga increased ownership of the knowledge created (i.e., opportunities to provide feedback, reflect on the first wānanga, observe progression of the research and development of the provisional model), and increased the likelihood of the findings being of relevance (i.e. contributing to the credibility and trustworthiness of the themes). It also strengthened participant ownership of the outcomes, ensuring that the research was not just about them but also for them, with their voices at the core. Further, this fostered the production of research outputs in ways more relevant to rangatahi.

The success of the project is reflected in the wānanga where many rangatahi were forthcoming with their opinions; others drew all over the physical posters provided, adding in missing

ingredients of their hauora, and one rangatahi asked "Can we do this every year?" Whānau also discussed how effective they found the model and how it could be easily implemented into practice:

> Fantastic, I've really enjoyed … I just moved a few months ago to [Māori health service] … and … this would be really good for … the youth work going on … you could see it working straight away … and it's also that relationship building with the workers that work alongside the rangatahi … can I use it now? … If you need a pilot come back to us and we can pilot it.

This was supported by whānau participants who continued to provide feedback long after the wānanga concluded, which highlighted the meaningfulness of the results and the value of wānanga as a method for data collection:

> I used … the pikitia today … she had been going through a lot of raru … we had a look at what our pikitia can help with. And it benefited so well! We had to pin-point what we needed to work on at kura, around us and home.

Conclusion

Indigenous paradigms provide an approach to centre, legitimise and prioritise Indigenous worldviews, knowledge systems and practices. To obtain meaningful research outcomes for Indigenous groups, research must enact positive change, aim to build new pathways that include traditional knowledge systems, and enable Indigenous practices (Royal, 2009).

The Kaupapa Māori paradigm used in this research proved to be a transformative tool for investigating how rangatahi and whānau conceptualise hauora rangatahi Māori. This paradigm resulted in the development of culturally grounded and creative methods, images, a (developing) model of hauora rangatahi Māori, and pūrākau that resonated with rangatahi and whānau, and in rangatahi wanting to "do this every year". Prioritising participants, tailoring methods and dissemination to participants, and embedding the research in Māori knowledge and worldviews allowed these meaningful and relevant research outcomes to be actualised.

We have significant work to do to rectify the deficit-based lens and misrepresentation of Indigenous knowledge systems often presented in peer-reviewed literature (Drawson et al., 2017; Pihama et al., 2002; L. T. Smith, 2021).

Encouragingly, a growing body of literature is demonstrating that Indigenous paradigms and methods are increasingly strengths based to counter historical perspectives and approaches. This study illustrates how the use of a Kaupapa Māori paradigm can help address this imbalance.

Acknowledgements

Glossary

ako Māori	culturally preferred pedagogy
Aotearoa me Te Waipounamu	New Zealand
aroha	love
atua Māori	Māori deity
āwhina	help/support
harakeke	native NZ flax plant used for weaving
hauora	health and well-being
hauora rangatahi Māori	Māori youth health
Hine-ahu-one	the earth-formed maiden
ira tangata	the first human
iwi	tribe
kai	food
kanohi ki te kanohi	face-to-face

karakia	prayer
kaumātua	grandparent(s) or elder(s)
kaupapa	collective philosophy, purpose of wānanga
Kaupapa Māori	Māori based topic/event/ enterprise run by Māori for Māori
kawa	marae protocol
kēmu	game
kete	basket
koha	gift
kōrero	talk, narrative, discussion
kura	school
manaaki	care
manaakitanga	generosity, hospitality, care
manawa ora	breath of life
Māori	the Indigenous Peoples of New Zealand
marae	tribal meeting grounds
mātauranga Māori	Māori knowledge and knowledge systems
mātua	parents
mauri ora	well-being and vitality
mihimihi	greetings and engagement
mōteatea	traditional chant
ngāhere	forest
ngā kete o wānanga	three baskets of knowledge
pānui	advertisement
Papatūāknuku	the earth mother
pepeha	tribal saying
pikitia	picture
poroporoaki	farewell/conclusion of the wānanga
pūrākau	tribal stories
rangatahi	youth
Ranginui	the sky father
raru	difficulty, problems
rito	young centre leaf of the harakeke
rōpū	group
Tāne	atua of the forest, birds, insects and humankind
Tāwhiri-mātea	atua of the winds and elements
te ao Māori	a Māori worldview
te ao mārama	the world of light
te kete uruuru matua	knowledge of peace, goodness and love
te kete uruuru rangi	knowledge of prayers, incantations and ritual
te kete uruuru tau	knowledge of war, evil and darkness
te reo Māori	the Māori language
tihei Mauri Ora	I awaken, the Breath of Life
tikanga	Māori customs
tino rangatiratanga	self-determination
toto	blood
waiata	songs
wairua	spirit, spiritual health
wānanga	deliberation, method used for data collection
whakapapa	genealogy
whakataukī	proverb, saying
whakawhanaungatanga	establishing reciprocal relationships
whānau	family health, extended family
whanaungatanga	kinship, sense of family connection

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