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Finley Ngarangi Johnson [*] , Priscilla M Wehi , Tia Neha , Mike Ross , Veronica Thompson , Stephanie Tibble , Natasha Tassell-Matamua , Kevin Shedlock , Ririwai Fox , Zachary Penman , Tyler Ritchie , Taylor Winter , Hitaua Arahanga-Doyle , Paul Jose

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Abstract: Indigenous peoples around the world are revitalizing their ancestral beliefs, practices, and languages, including traditional understandings of health and wellbeing. In the Aotearoa (New Zealand) context, a number of ground-breaking Māori health and wellbeing related models have emerged, each with their own unique applications and offerings. We sought in these qualitative studies to explore and identify some key sources of wellbeing for Māori individuals. Nine interviews were conducted with members of Māori communities to identify key themes of Māori wellbeing. A Reflexive Thematic Analysis was performed on these data, and then a further fifteen interviews were conducted to revise, refine, and reposition the previously generated themes. The Ngaruroro describes wellbeing as the embodied and active process of being in good relation with your 1) here tāngata (social and familial ties), 2) te taiao (the environment), and 3) taonga tuku iho (cultural treasures), while doing what you can to make lifestyle choices that are conducive to the health of your 4) tinana (body) and 5) wairua (spirit), while cultivating a balanced 6) ngākau (inner-system), fulfilling 7) matea (core needs), and exercising your 8) mana (authority). These themes illustrate and reiterate that Māori wellbeing is dynamic, interconnected, and holistic.

Keywords: Māori; Kaupapa Māori; Māori wellbeing; indigenous health; indigenous wellbeing; qualitative research; thematic analysis

1. Introduction

Indigenous peoples around the world are fighting to be free from violent European colonial practices, institutions, structures, processes, and systems that harm our communities. Our collective struggles for liberation and self-determination are driven by the imperative to be good ancestors by creating better worlds for those who are yet to come. Critical to this endeavour is the wellbeing of our people, which is intertwined with the flourishing of our ancestral knowledge systems, lands, waters, and other non-human relatives. The introduction of foreign diseases, establishment of settler-colonial institutions, land theft, and colonial epistemic violence at the hands of the British Crown has greatly harmed the wellbeing of Māori people in Aotearoa. This led to Māori depopulation, and over time, a systematic degradation of our ancestral knowledge and value systems, lands, and waters [1,2].

Many Māori in Aotearoa are dedicated to the wellbeing of our people, and understand that one of the keys to our collective flourishing is the realisation of our constitutional documents He Whakaputunga (1835) and Te Tiriti o Waitangi (1840). These documents affirm the rights of Māori to

our own sovereignty, self-determination, authority over our lands, natural resources, and other cultural treasures that existed long before the arrival of Europeans in the late 1700's.

1.1. Foundational literature

Following the devastating impacts of the 18th and 19th century colonial periods, the latter half of the 20th century saw significant Māori cultural revitalisation in Aotearoa. Wayfinding Māori leaders (re)built institutions, revived te reo and tikanga Māori, and sparked many important social and political movements like the Māori Womens Welfare League, Kōhanga Reo (Māori immersion pre-schools), Kura Kaupapa Māori (Māori immersion primary schools), Whare Wānanga (Māori institutions of higher learning), and the Māori Language Act [3]. This 'Māori renaissance' period emerged alongside ground-breaking work by seminal Māori scholars like Winiata [4], Jackson [1], Mead [5,6], Walker [7], Smith [8], Durie [9], Mikaere [10], Smith [2], Marsden [11], and Pere [12] whose collective works initiated institutional reform across many fields of research and policy, including economics, law, health, education, arts, resource management, and language. Consistent across these works is a strong faith in the capability of Māori communities to be self-determining, and in their ability to design and deliver the systems and solutions to achieve wellness for our people. Their achievements through the struggle for decolonisation, liberation, and tino rangatiratanga (self-determination), have established prime conditions to ensure the success of ongoing work to reindigenise, and thereby restore, the wellbeing of Māori peoples.

1.2. Landmark Māori wellbeing models

Over the past 30 years, Māori economic, educational, health, and social development has been strongly influenced by two critical Māori models of health and wellbeing: Te Wheke [12] and Te Whare Tapa Whā [9]. These models have revolutionised the way Māori health and wellbeing is understood in Aotearoa by both Māori and non-Māori alike. Translated as "The Octopus", Te Wheke is a Māori wellbeing model that is constituted of eight components: hā ā koro mā, ā kui mā (breath of life from forebears), whatumanawa (the open and healthy expression of emotion), mana ake (unique identity of individuals and family), mauri (life force in people and objects), whanaungatanga (extended family), wairuatanga (spirituality), hinengaro (the mind) and taha tinana (physical wellbeing). In addition to these eight tentacles of the octopus, te whānau (the family) makes up the head of the octopus and waiora (total wellbeing for the individual and family) is represented by the octopus's eyes.

Te Whare Tapa Whā [9], as a model of Māori wellbeing, utilises the whare (house) as an analogy for a person and their wellbeing. This model describes a house with four walls that make up the four key components of Māori wellbeing: te taha tinana (physical wellbeing), te taha wairua (spiritual wellbeing), te taha hinengaro (mental and emotional wellbeing) and te taha whānau (family and social wellbeing). At a later point, a fifth component was added called whenua (land and roots).

For over three decades, Te Wheke [12] and Te Whare Tapa Whā [9] have been the foundation of Māori health promotion, practice, education, and research. They have championed the holistic and culturally specific needs of Māori in relation to health and wellbeing. These and other Māori health and wellbeing models vary in their degree of simplicity vs. complexity and cultural generality vs. cultural specificity, which means they also vary in their applicability to differing contexts. Te Whare Tapa Whā is concise and accessible, which has seen the model broadly applied in various contexts, and it has become a key point of reference for both Māori and non-Māori in Aotearoa. Te Wheke on the other hand, is more culturally specific, drawing upon additional complex Māori philosophical concepts like hā (breath of life), mauri (lifeforce), and mana (authority). This added Māori cultural specificity also has the unfortunate drawback of being more difficult to apply to different contexts and diverse Māori realities [13].

Over thirty years since the inception of Te Wheke [12], and thirty since the introduction of Te Whare Tapa Whā [9], our worlds have changed dramatically and have become increasingly complex and diverse. It is therefore crucial that we have a range of wellbeing models and frameworks that can

be applied in different contexts for different issues in te ao hurihuri (the contemporary world) that we face as a people.

1.3. Māori perspectives on wellbeing

Although Te Wheke [12] and Te Whare Tapa Whā [9] are the most widely known and used, a range of other Māori health and wellbeing related models have been developed over the years. Wilson et al. [14] systematically reviewed the literature pertaining to Māori health and wellbeing models to inform the development of a Māori-centred relational model of care. In their review, the authors detailed and described the Hui Process [15], the Kapakapa Manawa Framework [16], The Meihana Model [17], Te Hā o Whānau [18], Te Kapunga Putohe [19], Te Punga Oranga [20], Te Whare Tapa Whā [9], Te Wheke [12], and Te Whetū [21]. The key concepts, principles, and values of these works were thematically analysed, and this process produced four themes: (1) Dimensions of health and wellbeing; (2) Whanaungatanga (connectedness); (3) Whakawhanaungatanga (building relationships); and (4) Socio-political health context.

The narrative overview of the first theme, 'dimensions of health and wellbeing', is relevant to the present research as it provides valuable insights as to how Māori wellbeing is conceptualised and understood across these various models [14]. The authors identified four key dimensions of wellbeing: wairua (spirit), whānau (extended family network), hinengaro (the mind), and tinana (physical). The authors argued that: (1) dimensions are interrelated and connected, (2) the wellbeing of a person and whānau depends on dimensions being balanced, (3) whānau are important and have collective roles and responsibilities for each other, and (4) the hinengaro houses private thoughts and emotions. These observations are consistent with other authoritative pieces of Māori scholarship that speak to Māori understandings of wellbeing and worldviews more broadly [11], and provide important insights into the conceptual landscape of the current models and frameworks related to Māori health and wellbeing.

Pae Mahutonga [22], He Ara Waiora [23], Atua Matua [24], and Whiti Te Rā [25] are notable Māori health- and wellbeing-related frameworks that were not included in the review by Wilson et al. [14]. Like the previously mentioned frameworks, these four speak to holistic, interrelated, and interconnected dimensions of Māori wellbeing. Further, they are useful in illustrating how different wellbeing frameworks have their own unique backgrounds, functions, and strengths. He Ara Waiora for example, was developed to support the New Zealand Treasury in incorporating Te Ao Māori perspectives into policy relating to tax and living standards. Whiti Te Rā on the other hand, was designed to help whaiora (Māori health clients) explore their level of knowledge and comfort, and active engagement with Māori pathways to wellbeing.

While these Māori models and frameworks of health and wellbeing are excellent,   there remains scope for a model that is grounded in the lived experiences of Māori people and their self-identified sources of wellbeing, which is especially important for Māori who are less culturally embedded in Te Ao Māori (due to colonisation and other factors beyond their control), and are trying to figure out how to be well as a Māori person today.

1.4. Goals of the Current Study

The primary goal of this study is to introduce a model of Māori wellbeing that is directly grounded in the lived experiences of Māori people, and that is specifically designed to identify sources of wellbeing for Māori individuals. To achieve this, the first set of interviews generated themes of wellbeing by drawing straight from Māori voices. The second set of interviews built upon these themes generated by the first, by further exploring and refining the themes. These revised themes were then re-worked and reiterated based on this further community input, yielding to the outcome of a new model of Māori wellbeing. This model will further serve as a foundation for the development of a self-report Māori wellbeing measure.

The second primary goal of this paper is to highlight the many existing Māori health and wellbeing-related frameworks and emphasize that it should be about 'addition' not 'competition' as new models and frameworks are developed. This point is crucial as some argue that the introduction

of new models suggests existing ones are incomplete, inadequate, or insufficient. We view models and frameworks as valuable tools that can be wielded by different people, in a variety of contexts, to create positive change for our communities. We believe there is value in developing new and unique models and frameworks based on new data and understandings, as our contexts and times continue to change.

2. Materials and Methods

2.1. Research Approach

This research was conducted from an emic, cultural-insider perspective that utilized an Indigenous Culture-in-psychology approach [26], specifically, using a Kaupapa Māori methodology [8]. Kaupapa Māori is a tool of praxis designed to support scholars in taking action to resist Western epistemic hegemony, and to conduct transformative research for the betterment of Māori communities. This approach involves critiquing and resisting dominant Western forms of knowledge production, dissemination, and privileging, while also normalizing and prioritizing Māori worldviews, practices, knowledges, and principles [2]. The kaupapa Māori methodology was built into this research by engaging in embodied and embedded relational practices that were enacted and guided by tikanga Māori (Māori customs) and grounded in Māori values.

An example of this is FJ travelling out to the house of a participant who is an elder. He arrived in the morning, talked about life and shared stories over cups of tea, then held the interview, talked more over food, and then left later on in the afternoon. In this process, the interview was secondary to the process of whakawhanaungatanga (relationship building and strengthening), and was full of manaakitanga (hospitality) and aroha (love; affection).

Another way that kaupapa Māori methodology was employed in this research was through the use of an intersubjective approach to data analysis. Reflexive Thematic Analysis (RTA) typically focuses on individual-level subjectivity, reflexivity, and meaning making. This research instead focused on shared meanings and collaborative sense-making. This research prioritised collective interpretations and understandings by returning to the participants after an initial analysis of their data, and asking if they felt their ideas were being adequately captured by the codes and themes, engaging in sense-checking with a colleague during the coding process, sharing the analysis processes with the supervision team and advisory rōpū (group), and through engaging in collective sense-making with participants in the second set of interviews.

Together, this emic kaupapa Māori methodological approach ensured that the research was authentic, culturally responsive, enjoyable, ethical, innovative, impactful, robust, safe, and transformative.

2.2. Advisory rōpū

A Māori advisory rōpū consisting of Māori academics, community leaders, and traditional knowledge holders was established to support the robustness of the wider research project of which this research is part (see Table 1). This collective provides critical additional layers of support and cultural security through the integration of diverse perspectives and decision-making guidance. This guidance helps protect the integrity of the research, the Māori community from unforeseen negative implications, and the researchers from engaging in unsafe research practices. Meetings are convened when important issues arise, key findings emerge, or in-between significant transition points in the research. The critical input of this group is acknowledged in the collective authorship of this paper.

Table 1. Members of the advisory rōpū and their iwi affiliations.

Name	Iwi Affiliations
Mike Ross	Ngāti Hauā
Veronica Thompson	Ngāti Kahungunu ki Wairarapa, Te Iwi Morehu
Stephanie Tibble	Rongomaiwahine, Rongowhakaata, Ngāti Kahungunu, Ngāti Hine
Natasha Tassell-Matamua	Te Āti Awa, Ngāti Makea kei Rarotonga
Kevin Shedlock	Ngāpuhi, Ngāti Porou, Whakatōhea

2.3. Participants for the Qualitative Interviews

Nine individuals were interviewed in the first set of interviews (n = 9; see Table 2) and fifteen in the second set (n = 15; see Table 3). Both sets of participants constituted a diverse sample of Māori who varied among the demographics of age, gender, iwi (tribe), Te Reo Māori (Māori language) proficiency, cultural embeddedness, and tertiary education experience. These participants were carefully selected by FJ through personal networks to ensure the sample was diverse. All individuals who were approached provided informed consent to participate in this research and have their name and iwi affiliations listed. Participants were given the option to be identified so that they could exercise their right to proudly own their quotes which are invaluable contributions to this research.

Table 2. The name and iwi affiliations of participants from the first set of interviews.

Participant Name	Iwi Affiliations
Te Matahiapo Safari Hynes	Rangitāne, Ngāti Kahungunu
Victoria Bell	Kāi Tahu
Stevie-Jean Gear	Te Ararwa, Ngāi Te Rangi
Monica Mercury	Ngāti Kahungunu, Te Iwi Morehu
Denis Grennell	Ngāti Maniapoto
Tau Huirama	Ngāti Tamanuipō, Ngāti Maniapoto
Mary Bennett	Ngaa Rauru Kiitahi, Ngāti Tūwharetoa, Te Ātihaunui ā Pāpārangi
Clive Aspin	Ngāti Maru, Ngāti Whanaunga, Ngāti Tamaterā
Kahuwaero Katene	Ngāti Tūwharetoa, Ngāti Kahungunu

Table 3. The name and iwi affiliations of participants from the second set of interviews.

Participant Name	Iwi Affiliation
Mikaere Paki	Ngāti Raukawa, Ngāti Apa, Ngāti Kauwhata
Connor Goggin	Rongomaiwahine, Ngāti Kahungunu
Chelsea Jacobs-Prescott	Ngāti Raukawa ki Te Tonga
Tohu Waetford Hekeata	Te Arawa
Gina Reiri	Ngāti Kahungunu ki Wairarapa
Tom Roa	Ngāti Maniapoto, Waikato
Paul Edwards	Te Whakatōhea, Ngāti Porou, Ngāi Tūhoe
Billy Corbett	Ngāpuhi, Ngāti Kahungunu, Te Rarawa
Rere-No-A-Rangi Pope	Ngāti Ruahine, Te Āti-Awa, Te Whakatōhea
Hana Kilford	Ngāti Kahungunu ki Wairoa
Pounamu Tipiwai-Chambers	Ngāti Kahungunu, Kāi Tahu, Ngāti Hineuru, Te Whānau-ā-Apanui
Tere Gilbert	Te Āti Awa, Ngāti Kahungunu
Phillip Wilcox	Rongomaiwahine
Ellie Rukuwai	Te Āti Haunui-a-Pāpārangi, Ngā Rauru, Ngāti Tūwharetoa
Annalisa Strauss-Hughes	Unknown

2.4. Data collection

The Victoria University of Wellington Human Ethics Committee granted ethical approval to conduct both the first (ID: 00000028603) and second (ID: 00000029558) sets of interviews.

2.4.1. First set of interviews

Three of the interviews were conducted online and six were conducted face-to-face. Before the interviews commenced, there was first time set aside for whakawhanaungatanga (relationship building) and informal catch-ups. After the whakawhanaungatanga, face-to-face participants were given the necessary consent form and were reminded of their rights as a research participant. Online participants were emailed the consent form to complete in advance. All participants were given the

option to either stay anonymous, or to have their name and their tribal affiliations presented. All participants opted to be identified. The interviews then began with a karakia (incantation) either by the researcher or the participant. Following the karakia, recording commenced, and questions were read from the question sheet. These interviews were largely driven by the participant's kōrero (dialogue) and allowed interviewees to fully express their perspectives. Once the participant had exhausted the list of questions on the sheet or had expressed that they wish to no longer continue, the recording was stopped, the interview was concluded with a closing karakia, and kai (food) was shared. Upon completion, participants were provided with a small koha (offering in the form of a supermarket voucher) as a humble token of appreciation of their time, experience, and contributions.

2.4.2. Second set of interviews

All fifteen interviews were conducted online. All of the same protocols and processes related to whakawhanaungatanga, consent, and opening the interviews were the same as the first set of interviews. Here, participants were first tasked with listing things (e.g. going for bush walks, eating good food, spending time with grandkids) that were important to their wellbeing, before sorting them into groups of similar items (e.g. grouping food, sports, sleep together). The researcher then presented the themes that were identified in the first set of interviews and invited the participant to map their list of things (items) onto the different themes. When an item did not map onto one of the existing themes, it was noted, and the reasoning was explored. Finally, participants were asked a range of questions aimed to provide feedback on the model such as "what do you think of this model of Māori wellbeing?", "does this structure resonate with you and your whānau?", "how could this model be improved upon?", and "would you add or remove any themes or items?".

2.5. Data Analysis

2.5.1. First set of interviews

A Reflexive Thematic Analysis (RTA) was performed on the transcribed corpus of spoken discourse from the first set of interviews. The RTA generally followed the guidelines outlined by Braun and Clarke [27,28], but was adapted to fit kaupapa Māori philosophies, principles, and priorities [2,8]. Firstly, the level of analysis was identified. We transcribed the interviews clean verbatim and only analysed the manifest content (rather than recording and analysing the more nuanced details like pauses, body language, reactions, and silence). The analysis started with the first author becoming familiarised with the data. In order to foster this familiarity, the data were transcribed manually. The transcripts were then sent back to the participants to give them an opportunity to add, remove, or update their transcript. Upon receiving the transcripts back, FJ re-familiarised himself with the transcripts and began coding the data.

The first step in the data analysis involved making notes when particular points, ideas, phrases, or concepts were expressed. The transcripts were then opened with the qualitative coding programme NVIVO, and initial nodes were created based on the note taking process. New nodes and sub-nodes were generated as the transcripts were coded. Support from TR was enlisted during the coding process. A collaborative approach was taken that involved 'sense-checking' (cross-referencing codes and relevant cultural concepts) and exploring different interpretations of the data that ultimately enriched the analytic process. This process supported the identification of patterns, and key themes, which resulted in further refinement of the taxonomy. Themes were organised into au (streams) of wellbeing, and the same colleague was approached to discuss the links between the themes. Items, and the corresponding cultural concepts. The resultant codes and themes were discussed with PJ and TN to ensure the analysis remained grounded in intersubjective understandings. Following this step, we engaged in a 'member reflection' process [29], whereby participants were provided with one-page summaries of their three most prominent themes, each with supporting quotes. Thus, participants were given an opportunity to determine whether their ideas were being fully captured, to provide additional insights, and exercise autonomy over how their experiences were being articulated and presented. Lastly, the themes and items (sub-themes)

were taken to the advisory group and were subject to collective wānanga (group consideration and deliberation), which resulted in various conceptual and linguistic tweaks being made.

2.5.2. Second set of interviews

During the second set of interviews, participants were given the free-listing and sorting tasks and were asked a range of questions in response to the tentative model. The participants' responses were documented on a note taking app and were later transferred to a standardised template. After all the interviews were completed, a master document was created in which all the participants' responses for the different sections were compiled. This method allowed us to visualise all the participants' responses to the various questions. We then created another document that further organised the responses which resulted in a streamlined list of feedback on the model with suggested changes. The suggestions were systematically assessed by FJ, and this document was then taken to PJ, TN, and PW, who collectively reviewed the suggested changes to the items and themes. After the group review, FJ revisited all the qualitative data and made another set of revisions to the model.

The set of revised themes and their corresponding items were taken back to the advisory group for further sense-checking, conceptual clarification, and testing of theoretical coherence. This collective process resulted in a few reconceptualisations and reframings that improved the robustness of the model greatly.

Through our Reflexive Thematic Analysis, we generated a Māori wellbeing model consisting of eight themes, encompassing thirty-one items. The collective wānanga processes saw the initial model revised and re-worked into eight themes encompassing thirty-six items. The last of the analyses resulted in the final model consisting of eight themes encompassing forty-one items. Below, we explain and unpack these themes, provide a few supporting excerpts, and list the relevant items.

3. Results

1)   Here Tāngata

Figure 1. The Here Tāngata theme's icon.

Throughout the interviews, participants placed a strong emphasis on social and familial ties. From this content the first theme gets the name 'Here Tāngata', that refers to the ties that ground us and keep us connected to one another. Participants described the importance of being connected to those in their whānau (family), their hoa (friends), members of their hapū, others with the same iwi affiliations, members of their different hapori (community), and their tīpuna (ancestors). Developing and maintaining these connections was said to deeply nurture the wellbeing of participants. Out of all of these social and familial ties, connection to whānau was emphasised the most. Participants described their wellbeing as being intrinsically linked to the wellbeing of their whānau members. If an individual whānau member experiences difficulties, it *"affects the whole whānau"* (Stevie).

"Well I mentioned about whānau and that is family. These relationships are a very important part, they affect us deeply, our whole well-being. Their living standards, the way we live together, the things that they do that affects us, what they do well you rejoice, when they don't do well or when they are unwell and make mistakes you are saddened" – Kahu

Consistent with Māori cultural beliefs related to whakapapa (genealogy), participants described the importance of being and feeling connected to their tīpuna. There was a strong consensus among the participants that their ancestors play a significant role in who they are, what they do and where they are going.

"Knowing who my tūpuna were, knowing what they did and achieved in their lifetimes and the attributes they had means that, for me, I suppose that the experiences I learnt from my tūpuna absolutely explain to me what I was doing, why I was doing it, and where I have seemed to have gotten. Some of the natural abilities and skills that I have are passed down, that's what my tūpuna used to do. So absolutely, major. That connection, and the understanding that these weren't just skills I had learnt through going on courses, they were already embedded within me, which means you know, the more you know about your tūpuna the more you can choose to actively grow in a particular area or not. Yeah, so apart from you know, our tūpuna being there for us, if we want to access that guidance and strength we can." – Denis

Another aspect of social and familial ties that participants greatly emphasised relates to connection to hapori. Throughout the interviews, exampes of hapori included a variety of groups including sports clubs like *"Morehu Māori basketball"* (Monica), *"your neighbours"* (Stevie), and *"local service providers"* (Kahu). Many participants described engagement, and active participation in hapori as key for their wellbeing.

"Definitely like support from my community, like I feel so frustrated, like so hoha if I'm not going to my meetings. Like I go to 12 set meetings and that's so important for me like I just need connection with other people with the same experiences and understandings as me." – Victoria

Table 4. The six items for the Here Tāngata theme and their English approximations.

Items	English approximation
Whānau	Family
Hapū	Sub-tribe
Iwi	Tribe
Tīpuna	Ancestors
Hoa	Friends
Hapori	Communities

2) Tinana

Figure 2. The Tinana theme's icon.

Looking after your tinana (body) through maintaining your physical health was a salient theme across the interviews, and was identified as being foundational to and a major driver of wellbeing. Participants specifically described the importance of nourishing kai (food), engaging in some form of kori tinana (physical activity), having good quality and sufficient moe (sleep), having kanohi kitea (your face seen) by being physically present in spaces with others, and having healthy relationships with kai whakapiri (substances like alcohol, marijuana, and methamphetamine that some people use to feel a sense of connection and/or self-medicate). In addition to going to the gym and playing sports, participants highlighted the importance of participating in culturally relevant activities, games, and practices like mahi ruku kai (diving for seafood), ki-o-rahi (a traditional Māori ball game), kapa haka (Māori performing arts) and mau rākau (a Māori weaponry art).

"Exercise is really important to me, and I make a real effort sometimes to do my dose of exercise but afterwards I'm really glad that I did and I think I probably wouldn't have been as healthy as I am if I had not been exercising most of my life"- Clive

Being physically present at events and having your face seen is of cultural significance to Māori on a number of levels. It can foster whanaungatanga (interpersonal connection), show commitment to kaupapa (initiatives), and support the more embodied and experiential-based spiritual practices.

These interviews were conducted not long after the New Zealand Covid-19 lockdowns, which highlighted the importance of being together with others face-to-face, and that videocalls were not the same.

"Physical presence is an important part because you can feel other people's wairua as well, and as humans we need that. We need to be able to touch, smell, see, sense, grab. I know that's an important part for me."-Stevie

A point of emphasis across the interviews was that physical wellbeing is often about *"doing the basic things (that we all know we should do) properly"* (Te Matahiapo). Sleep was highlighted as one of the areas of priority.

"A lot of it is like really basic stuff, like sleep is number one, have to get enough sleep."-Victoria

Table 5. The five items for the Tinana theme and their English approximations.

Items	English approximation
Kai	Diet
Kori tianana	Physical activity
Moe	Sleep
Kai whakapiri	Substances that people use to feel a sense of connection or self-medicate
Kanohi kitea	Having your face physically seen

3) Ngākau

Figure 3. Artistic depiction of the Ngākau theme.

Throughout the interviews, participants described the importance of various psychological and emotional capacities for their wellbeing. The most prominent among these were related to kare-ā-roto (emotions), whakaaro (thoughts), waiaro (attitudes), aroha (love), and pāmamae (trauma, grief, deep pain). We drew upon the whakapapa kōrero (Māori ancestral teachings) relating to traditional ways of knowing provided by Smith [30] in naming this theme. These understandings relate to the decentralisation of thinking from the brain to other parts of the body. The ngākau (heart; seat of affections; internal system) was selected to conceptually couch this theme over the more commonly used concept hinengaro (mind) as Smith [30] provides examples of whakapapa kōrero that suggest the ngākau is responsible for and the repository of rational thought, embodied knowledge, emotions, feelings and memories, while responses centred in the hinengaro and roro (brain) are perceived as more fleeting or impulsive [30].

Participants described the importance of being aware of, monitoring, and addressing one's whakaaro. This orientation was said to be important for wellbeing as, if left unaddressed, negative thoughts can spiral out of control, leading to views being exaggerated and blown out of proportion, affecting your relationships (Kahu).

"Controlling your mind is an ongoing thing and it is a difficult thing. The mind is difficult to control but that's where all of our thoughts come from. It's from our mind and we have to strive to think positive thoughts and when we think negative we have got to work on it, get rid of it, talk to our mind, we gotta control our mind." – Kahu

The ability to experience, process and work through different emotions was highlighted by several people as important to wellbeing. Participants spoke on the importance of not trying to control your emotions but instead being able to navigate them in a healthy way (Victoria).

"When I start feeling a bit resentful about something or a bit put upon or ungrateful, that's real bad because then everything will kinda go out the window so I just have to be really careful about you know like getting angry and stuff like that because it's no good." – Victoria

Participants highlighted the power and influence of having positive waiaro (attitude) on wellbeing. This approach included the ability to approach situations with positive and challenge-oriented mindsets, and maintain *"an overall optimistic outlook in life"* (Monica). It also included understanding what control you do and don't have about your wellbeing. For example, Te Matahiapo described how *"you can't control the weather, but you can control whether you do a karakia or not"*. Similarly, others spoke to the importance of being intentional with how and where you place your focus and energy.

"You can either choose to give into the hopelessness that the world can kinda exert on us or you can choose to look at it in other ways. This is going to sound cheesy, but focus on the positive instead of the negative, which is what I do. If I see a situation that I'm like man that's no good, and I start to feel that its impacting my waiora, I start to think about what I can do to help or what isn't in my control and then I'm able to pack it away and let it go and move on" - Stevie

Table 6. The five items for the Here Tāngata theme and their English approximations.

Items	English approximation
Kare-ā-roto	Emotions
Whakaaro	Thoughts
Waiaro	Attitudes
Aroha	Love
Pāmamae	Trauma, grief, deep pain

4)   Wairua

Figure 4. Artistic depiction of the Wairua theme.

For many of the participants, being and doing well in relation to wairua was a paramount concern for wellbeing. Wairua is often defined, interpreted, and experienced differently from person to person. Tau, a wairua practitioner, illustrated this point concisely when he said, *"If you asked 100 people about what wairua is, you'll get 100 different answers"*. It is important to note that when many participants talked about wairua, their descriptions extended beyond the typical Western notions of religion and spirituality. Participants described wairua as being important for their wellbeing through connection to atua (Māori deities; ancestors with continuing influence), the closely related experiences of wana (exhilarating and breath-taking experiences) in response to displays of ihi (essential lifeforce / personal magnetism) and feeling wehi (the feeling of awe or fear in response to ihi), being in wāhi wairua (spaces that nurture your sense of wairua), engaging in mahi aroha (activities or work that they do out of love, passion, or service), and poipoi i te mauri (nurturing the lifeforce of the beings, spaces, and things around you).

Participants discussed the importance of spiritual sustenance and the nurturing of wairua from a religious point of view for wellbeing. Kahu is a staunch believer in the power of prayer and sees her strong wairua as the backbone of her wellbeing *"I still think my wairua is the strong point, it always has been through my life"*. This notion of wairua being the foundation for wellbeing was echoed by other participants who described a fed wairua being just as or even more important than a fed stomach.

"I know growing up in my family, a large family of 18, that our wairua was fed. So although we didn't have a flash home and stuff, we were always inspired. You know if your wairua is inspired, if your wairua is fed good kai, good nourishment of the mind and of the soul, we can achieve anything."
- Tau

Mary described the key role of wairua in connecting us to people, place, and everything around us, *"I think in my personal circumstance there is the wairua aspect that is really critical for me … It's the portion for me that helps me connect in a different way to everything around me"*. Te Matahiapo touched on this role of wairua in connecting us to our surroundings while speaking to the link between atua and te taiao *"the Māori belief system looked at our taiao or our land as our deities so you know we can touch our deities, we can touch our gods, we personify the environment and they become our deities"*. This notion of te taiao and atua being a source of spiritual nourishment was salient across the participants.

"Absolutely key, you know we are spiritual beings having a physical experience really, and the whole aspect of wairua in our world is with us every day… So we have a mindset, a way of looking at the world that is personified by our atua, when we look around us we see Tāne, we feel Tāwhiri-mātea, we feel Tama-nui-te-rā, so that's a different way of thinking and framing the world. So wairua is absolutely key to waiora". - Denis

The experiential and embodied aspect of wairua beyond engaging with te taiao was highlighted across interviews with participants describing experiences of wana (breath-taking or exhilarating moments) as spiritual experiences.

"I think that deep down, not necessarily in a religious way but I think everyone gets that feeling you know like I don't know maybe it's just like going into the country for the first time and it gets dark and then you just see more stars than you ever thought possible and it just hits you… like I think everyone feels that kinda spiritual thing but maybe they just don't know what it's called" - Victoria

Table 7. The five items for the Wairua theme and their English approximations.

Items	English approximation
Atua	
	Māori deities, Ancestors of continued influence, god(s)
Wana	Exhilarating and breath-taking experiences
	Spaces that nurture your sense of wairua
Wāhi wairua	Activities or work you do for passion, love, or service.
	Nurturing the lifeforce of the beings, spaces, and things
Mahi aroha	around you
Poipoi i te mauri	

5) **Taiao**

Figure 5. Artistic depiction of the Taiao theme.

Features of te taiao emerged as core factors to the wellbeing of participants. Te taiao refers to our attachment and engagement with the natural environment, and as a theme, includes whenua (land), wai tai (bodies of salt water), wai māori (bodies of fresh water), ngahere (bush and forests), and ngā rangi (celestial bodies). Participants made clear that we are inseparable from te taiao, and that our

wellbeing is closely tied to the wellbeing of the many aspects of our natural environment. Denis made this clear when he said *"we can't be well if Papatūānuku is not well"*, where papatūānuku refers to the Earth Mother. Participants talked about the importance of drawing upon Māori belief systems in their entirety when exploring a concept from a Māori perspective. Te Matahiapo highlighted how a whakapapa (Māori cosmological geneology) approach to wellbeing links our wellbeing to all aspects of te taiao as they are our tīpuna, our family.

"Oranga is not just tied into te ora o te tangata, ko te oranga o te tangata, te taiao, te whenua, o ngā wai, o te rangi, all of it, is all encompassing" - Te Matahiapo

The active and embodied process of being engaged with and embedded in te taiao was a key source of wellbeing for many of the participants. Going for walks in the ngahere, swims in the moana (ocean) and awa (rivers), hikes up maunga (mountains), and observing the marama (moon) and whetū (stars) were all explained to be grounding practices, conducive to improving wellbeing.

"For me, having my hands and feet in the ground or in the earth and you know linking with the energy of Papatūānuku is an important aspect, as is you know swimming in the sea and the rivers, as is venturing into the ngahere, those different domains of our atua and the different energies that come from those domains" - Denis

In the interviews, participants explained that various aspects of te taiao held different levels of significance to them based on their ancestral connections. For some people from more coastal iwi, connection to the moana was more important, and for some people from more inland iwi, connection to the ngahere was more important. Another factor related to the significance of these place-based connections was whether the participants had whakapapa connections to the feature of te taiao. For example, some participants felt an extra special type of replenishment and nourishment from being on their ancestral maunga. Stevie described how although it wasn't the same, she would climb local maunga and seek out high points that resemble being on her own maunga.

"Whitireia isn't my tūrangawaewae as such but I love going up there and just sitting there and it feels so good. Like it almost feels just as good as being on my tūrangawaewae in Tauranga, Mauao". - Stevie

The intimate connection between the participants and te taiao was described as deeply spiritual by some and an inseparable bond by others.

"you cannot disengage or just disconnect yourself from the whenua just like you can't disengage yourself from the moana. We have such strong connections to our place and I think those are important". - Monica

Table 8. The five items for the Taiao theme and their English approximations.

Items	English approximation
Ngahere	Bush and forests
Whenua	Land features
Wai tai	Bodies of salt water
Wai māori	Bodies of fresh water
Ngā rangi	Celestial bodies

6) **Matea**

Figure 6. Artistic depiction of the Matea theme.

The capacity to meet a range of core matea (needs) was described as instrumental to an individual's wellbeing. These needs include whai mātauranga (acquiring knowledge), tuku mātauranga (passing on knowledge), kainga (housing), pūtea (money), and wā whakatā (relaxation). This theme recognises the very real impact of external resources on wellbeing, especially while situated within our current social and economic systems. Many participants spoke of the struggles associated with poverty and low socio-economic status and how it directly impacts wellbeing.

"you know you can't be in the state of ora if you don't have a decent house, decent job, decent food, decent clothes, you know these all contribute in one way or another to whether we're in a state of ora" - Te Matahiapo

"Another thing that really is really important for my wellbeing is living in a beautiful comfortable location and living in a house that provides shelter and warmth." - Clive

Knowledge transmission was found to be an important source of wellbeing, and included aspects of both whāi mātauranga and tuku mātauranga. Participants discussed the importance of acquiring different forms of both cultural and academic knowledge for navigating their academic, work, social, and personal lives. Similarly, participants discussed the role of transmitting mātauranga to whānau, friends and other community members for their wellbeing. This included teaching others in both formal and informal contexts.

"as a whānau we're always striving to learn, most of us would have to have something to do and what I'm enjoying at the moment the fun that I'm having and the excitement that I get from teaching my mokopuna and just singing you know just yeah rhymes and that kind of stuff it's yeah so that's actually bigger than we think" - Mary

"actually being able to share our experiences with each other not just as siblings but all our nephews and nieces so everything we've learned in experience it's about sharing that knowledge sharing the growth so that our our babies can flourish in a different way" - Mary

Table 9. The five items for the Matea theme and their English approximations.

Items	English approximation
Whai mātauranga	Acquiring knowledge
Tuku mātauranga	Passing on knowledge
Kainga	Housing
Pūtea	Money
Wā whakatā	Relaxation

7) Mana

Figure 7. Artistic depiction of the Mana theme.

This theme is about capacities associated with exercising mana (authority). These include tū tangata (express and stand in the fullness of your identity), whiriwhiri (make key decisions over how your life unfolds), manaaki (uplift, take care of, and be hospitable to others), whakatere (navigate challenges in life), and tū toa (stand accomplished in a skill or area). The importance of knowing who you are and the capacity to stand tall in your identity (including intersecting identities related to gender, sexuality, and religion) was a strong theme across the interviews.

"So I think that if you don't have a solid identity, we can be really influenced by whatever comes across our paths. If we have a solid identity and we are really clear about who we are, while we might engage in all of those things, having a solid identity means we filter it through who we are, rather than seeking for identity in what's in the next guru or the next movement that comes along" – Denis

"I think the most important aspect would be having a good sense of who you are, of understanding where you fit into the community, understanding where you fit in your whānau, understanding where you fit in your network of friends and acquaintances and that you feel confident to contribute in a way that is positive and enhancing" – Clive

Of the various identities, most participants discussed the paramount importance of knowing who they are in terms of their Māoritanga (Māoriness) and its contribution to their wellbeing.

"I think being Māori what it does for me is gives me an understanding of our cosmology, you know it does because that gives me the riches of who I am and that is what I take into my world" - Tau

Table 10. The five items for the Mana theme and their English approximations.

Items	English approximation
Tū tangata	
Whiriwhiri	Stand in the fulness of who you are
	Power to decide how your life unfolds
Manaaki	Uplifting, caring for, and being hospitable
	Navigate challenges
Whakatere	Stand confident, accomplished, or capable in a skill or area
Tū toa	

8) Taonga Tuku Iho

Figure 8. Artistic depiction of the Taonga Tuku Iho theme.

Being connected to taonga tuku iho (cultural treasures that have been passed down through generations) in their various forms was identified as a core source of wellbeing. Taonga tuku iho can broadly refer to many different things, however in the context of this theme, it encapsulates te reo Māori (the Māori language), mātauranga Māori (traditional and contemporary Māori knowledge), tikanga Māori (Māori customs and ways of being), uaratanga Māori (Māori values), and tūrangawaewae (traditional and contemporary places of belonging). Multiple participants highlighted wharenui (meeting houses) and urupā (burial grounds; cemeteries) as the places where they go to feel connected to their tūrangawaewae. Other participants talked about the significance of certain areas, neighbourhoods, and family houses.

"That is where I go back to, to replenish. With all of my tūpuna, my parents now, aunties, uncles, cuzzies they are all in our urupā you know that's where all that connection is, and that's the first place any of us go when we arrive at our marae. That's where we go, to our urupā and then come back to the whare and catch up with the cousins and that. So yeah absolutely crucial" - Denis

Connection to te reo Māori through speaking, listening, and understanding the language was described by many to also be important for wellbeing.

"I think that without that reo I constantly just constantly have the gap, this hole in my heart I guess. That's until I get that reo, I'll be confident to fully engage in kōrero Māori. I'll get a better sense of my identity and a better sense of wellbeing I don't know I mean I could learn te reo Māori and still feel the same as I did before but right now it's definitely of significance to my well-being and something I am trying to do everyday" - Stevie

Participants described the importance of being connected to mātauranga Māori and mātauranga ā iwi (tribal knowledge). This state includes holding knowledge relating to history and whakapapa, and is linked to aspects like identity as participants explained how holding certain knowledges can help you stand strong in who you are.

"I can recite my whakapapa back to Tahupotiki you know so you can't tell me that I am not Māori or that I am not Ngāi Tahu because I can tell you exactly how I am" - Victoria

Table 11. The five items for the Taonga Tuku Iho theme and their English approximations.

Items	English approximation
Te reo Māori	
Tikanga Māori	Māori language
	Māori customary protocols and practices
Mātauranga Māori	Traditional and contemporary Māori knowledge
	Māori values
Uaratanga Māori	Traditional and contemporary places of belonging
Tūrangawaewae	

Table 12. The eight themes, their relevant descriptions, and items.

Theme	Description	Items
Here Tāngata	Connection to social and familial ties	Whānau
		Hapū
		Iwi
		Tīpuna
		Hoa
Tinana	Lifestyle choices related to the tinana and physical health	Kai
		Kori tinana
		Moe
		Kanohi kitea
		Kai whakapiri
Ngākau	Capacities related to the 'inner-world'	Kare-ā-roto
		Whakaaro
		Waiaro
		Aroha
		Pāmamae
Wairua	Lifestyle choices related to spirit and interconnectedness	Atua
		Wana
		Wāhi wairua
		Mahi aroha
		Poipoi i te mauri
Taiao	Connection to the environment	Ngahere
		Whenua
		Wai tai
		Wai māori
		Ngā rangi

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Matea	Capacities to meet core needs	Whai mātauranga
		Tuku mātauranga
		Kainga
		Pūtea
		Wā whakatā
Mana	Capacities related to exercising mana	Tū tangata
		Whiriwhiri
		Manaaki
		Whakatere
		Tū toa
Taonga Tuku Iho	Connection to cultural treasures	Te Reo Māori
		Tikanga Māori
		Mātauranga Māori
		Uaratanga Māori
		Tūrangawaewae

Figure 9. Artistic depiction of the Ngaruroro model of Māori wellbeing.

4. Discussion

This study sought to develop a model of Māori wellbeing that is directly grounded in the lived experiences of Māori people, and that is specifically designed to identify sources of wellbeing for Māori individuals. The first set of interviews generated themes of wellbeing by drawing straight from Māori voices and the second set of interviews refined them. Together, the resultant eight themes and forty-one items make up the Ngaruroro model of Māori wellbeing.

4.1. The naming of the model

A respected kaumātua of Ngāti Kahungunu and academic, Joe Te Rito, who is also the uncle of FJ, gifted the model with the name 'Ngaruroro' after being presented with the themes, items, and sentiment that wellbeing is dynamic, interconnected, and flows like streams of water. Ngaruroro is also the name of the ancestral awa to which FJ and Joe Te Rito are both connected through whakapapa. Uncle Joe recounted a story that was passed down to him by word of mouth from his nanny (FJ's great grandmother) who he said likely heard it from her father (who frequently gathered food from alongside the Ngaruroro awa), that chronicles how different parts of the awa were named. The relevant section of the story described the confluence of two tributaries of the river after which she would say *'tapangia toutia te awa ko Ngaruroro'* i.e., 'hence the river was given the name Ngaruroro' [31]. Uncle Joe's interpretation of this name is that it refers to the turbulence created as the waves

from each tributary converged into the main body of the river (ngaru = wave; roro = turbulent). We recognise that there may be other accounts of the naming of the awa, but I (FJ) chose to draw on the oral history of my whānau, passed down through generations.

The name 'Ngaruroro' is therefore fitting and significant as it carries the ideas relating to movement, interconnection, and flow of separate but connected streams, while also referencing the ancestral awa that has supported the wellbeing of FJ's family from Ōmāhu.

4.2. Similarities with previous research

The eight themes of the Ngaruroro model of Māori wellbeing describe wellbeing as the active process of being in good relation with (1) here tāngata, (2) te taiao, and (3) taonga tuku iho, making lifestyle choices that are conducive to the health of your (4) tinana and (5) wairua, while cultivating a balanced ngākau (7), fulfilling matea, and (8) exercising your mana. Many of the themes that have emerged from this research can also be found in the Māori health and wellbeing related frameworks discussed earlier in this paper. Tinana, wairua, taiao, ngākau, and here tāngata will be some of the most familiar as their core concepts map directly onto Te Whare Tapa Whā [9], and very closely to Te Wheke [12]. When looking beyond the main Ngaruroro themes to the items, more similarities can be seen between the Ngaruroro and other existing models. Whiti Te Rā [25] for example, consists of te taiao, mahi-a-toi, wairua, reo Māori, whakapapa and take pū whānau, in which five out of the six themes relate directly to our model, and the last one, mahi-a-toi could come under the mahi aroha item from the Ngaruroro model. Further similarities can be seen between the Ngaruroro and the He Ara Waiora [23] framework. Both models explicitly include domains relating to te taiao, wairua, and Māori values, and overlap in sections of the Ira Tangata (human) domain that map onto items from the here tānagata, mana, and matea themes.

Wairua features in most Māori health and wellbeing related frameworks as it sits at the core of Māori ontologies. Our ancestral knowledge systems are predicated on the interconnected co-existence of te ao wairua (spiritual world) and te ao tianana (physical world), with the former being said to be the ultimate reality, possessing the power to impinge on the latter [11,12]. Valentine et al. [32] qualitatively explored the many depths and dimensions of wairua through conducting and analysing interviews, and identified four key themes; (1) wairua is fundamental to human existence, (2) wairua knows no boundaries, (3) wairua is a perceived sensation, and (4) wairua is relational. The Ngaruroro model's wairua items closely relate to themes three and four as they are both embodied and embedded in relationships. For example, wana is grounded in sensations, and wāhi wairua, mahi aroha, and poipoi i te mauri are about relations with the people, places, spaces, and things around you.

4.3. Unique offerings

Despite the many convergences between the Ngaruroro and the other models, there are a few notable areas in which the Ngaruroro uniquely articulates certain themes and sources of wellbeing. The three most salient offerings of the Ngaruroro that are unique from other models are the themes mana, matea, and taonga tuku iho, and their respective items.

The theme of mana is unique in how it describes relational capacities that are key to understanding one's sense of agency and efficacy. Items like tū tanagata are important as they make space for the many diverse and intersectional lifeways of Māori who also identify with other cultural, ethnic, faith, or queer communities. It is critical that models acknowledge that Māori identities are linked with, and often shaped by, other intersecting identities. The theme of mana is also unique in how it incorporates items like manaaki, which highlight the link between looking after others, the exercising of our mana, and, the wellbeing of yourself and whoever you are looking after. Items like this are also important as they articulate things that we often practice as Māori, that feed into our wellbeing, that we often don't take notice of.

The matea theme is another important contribution as it takes into consideration the socio-economic realities that many Māori face as a result of the marginalising settler-colonial systems that were brought to Aotearoa. It is important that we acknowledge the impact of these material

circumstances on Māori wellbeing, and at the same time, see the bigger picture, and acknowledge all of the other holistic sources of wellbeing for our people. Matea importantly extends the typical notions of 'core needs' beyond material resources to also include the gaining and passing on of knowledge. This is also fitting when reflecting upon the fact that Māori historically relied on oral traditions for transmitting knowledge.

Taonga tuku iho is a valuable theme that contributes to our collective understandings of wellbeing as it explicates the utility of our cultural treasures as sources of wellbeing. This idea is not new and is consistent with well-established ideas of 'culture as a cure', where connection to ancestral language, knowledge, practices, and ways of being is linked to wellbeing [24,25,33]. This has been researched extensively in the Aotearoa context and has sparked conversations and new lines of research into what it means to be culturally embedded [33–35].

4.4. Study strengths

A major strength of this research is the unique two-stage qualitative study design. Explicitly testing the themes and items that were generated in analyzing data from the first set of interviews proved highly valuable. This mapping and refinement process greatly enriched the model overall and provided critical insights into the model's further development. This was evident in how the model initially had thirty-one items and ended up with forty-one items.

The diversity of life experiences across the different participants was also a real asset to the development of this model. We were able to sample Māori from a range of age groups, genders, iwi, and levels of Māori cultural embeddedness, despite there only being twenty-four participants in total. The diversity of participants was also important to the quality of the study because we wanted to hear from the community, not just from academics, health professionals, or Māori cultural experts. We believe it is important to acknowledge and listen to the expertise that everyone holds in their own experiences of what brings them wellbeing.

This model's development was deeply enriched by the practices and processes that were driven by the kaupapa Māori research approach. Not only was the model informed by and situated within a wider body of Māori wellbeing literature, but we were able draw upon the lived experiences of Māori people in their own words (making the process emergent and grounded), while interpreting and analyzing with theory in mind (utilizing hypothetical-deductive methods), and then engage in member-checking to see whether these interpretations are valid, and participate in collective meaning-making with others. These embodied and relationally embedded practices are often common in Indigenous research contexts, but can be valuable for conducting all sorts of research.

4.5. Important caveats

4.5.1. Wellbeing as opposed to Waiora

The Ngaruroro model is grounded in Māori understandings of wellbeing, by means of kōrero with a diverse group of Māori individuals. This research distinguishes the concept of waiora (which is often translated as wellbeing) from the English concept of wellbeing, as waiora sits within the unique linguistic and conceptual landscape of te ao Māori. The model that has emerged out of this research does not therefore claim to speak to or represent waiora. As we continue to 18decolonize and indigenise our understandings and practices related to wellbeing, it is important that future research also investigates our ancestral knowledge related to waiora. There is scope for thorough qualitative examinations of our sources of mātauranga like waiata (songs), haka (posture dances), moteatea (chants), pūrākau (story), whakataukī (proverbs of unknown origin), whakatauākī (proverbs of known origin), and pepeha (tribal sayings). This could provide valuable context, guidance, and insights for Māori researchers wishing to conduct further wellbeing research in a more culturally robust manner.

4.5.2. Wairua in research

It is necessary to acknowledge that wairua is far too encompassing to be intellectualised and condensed into a mere theme or model. This notion is held by many wairua practitioners and is spoken to in a broader sense by Marsden [11] when he states *"Māoritanga is a thing of the heart rather than the head"* (p.2). The boundless nature of wairua has resulted in most frameworks avoiding specific detail so as to allow room for interpretation and subjective understandings, which protects the concept from being narrowed and misrepresented. But at the same time, having fewer descriptive details can leave people who do not possess a foundational understanding of wairua without guidance to start feeling their way into their Māoritanga. We believe that articulating points of entry to wairua is an important endeavour, with the provision that the appropriate caveats are made. The five wairua items from this model resulted from the interviews, a dedicated wānanga with the advisory rōpū members, and the analyses with the research team. These items humbly represent a handful of ways in which wellbeing can be sourced in relation to wairua (see Marsden [11], Smith [30] or Valentine et al. [32] for a more comprehensive understanding of wairua). We believe that the inclusion of items for the wairua theme is an important contribution to the literature and body of Māori health and wellbeing related frameworks.

4.5.3. 'Māori' level of analysis

It is important to recognise that this research operates at the 'Māori' unit of analysis. 'Māori' are first and foremost peoples of various hapū and iwi collectives, each with unique mana, tikanga, kawa, histories, collective experiences of colonization, and identities. We appreciate that there always have and always will be diverse 'Māori' realities, and by no means seek to homogenise Māori. It is also important to establish that models at this general 'Māori' level are still valuable, despite the current move towards more iwi and hapū-centric frameworks and tools. Durie [36] argued that we need tools to measure wellbeing across all levels and units of analysis (individual, collective, population). Similarly, we believe that it is still also important to have a range of models available across various levels, and that it's about having the right tool for the job.

4.5.4. Diverse Māori realities

Another important caveat is that this model is meant to be descriptive, not prescriptive. Descriptive in how it was made to help people to better understand their wellbeing by identifying and describing different potential sources of wellbeing for them. The model does not prescribe any components of the model to be essential for someone to be well as a Māori person. We believe this to be critical in the context of diverse Māori realities. For example, connection to te reo Māori can be fundamental to the wellbeing of some Māori people, but at the same time, not be for others. This is an important point to raise as models like this can be used to marginalise Māori who have not had the opportunity to, for example, experience the nourishing feeling that speaking te reo Māori can bring someone. We invite readers to become familiar with the concept of Māori cultural embeddedness to gain a more nuanced understanding of such issues [33–35].

4.6. Limitations

This research study is part of a wider PhD thesis project that naturally impacted the timeline and imposed budget constraints. Ideally, this research would be employed over a longer period of time, with larger budgets, talk to more people, and use more co-design and wānanga methods. This more expansive collaborative community-driven approach would allow for much deeper insights into Māori wellbeing, and would ultimately be more robust from a kaupapa Māori perspective. The limited number of informants is a common limitation of qualitative research in general. Although that was generally the case with these studies, this research's collective-focused approach has meant multiple sources have been able to inform the creation of this model, rather than just the interview data.

5. Conclusions

In this paper, we highlighted a range of Māori health and wellbeing related models and frameworks, and introduced 'Ngaruroro', a new model for understanding Māori wellbeing. The eight themes and forty-one items offer fresh and unique insights as to what is important to the wellbeing of Māori people today, and identify a variety of potential sources of wellbeing. The Ngaruroro would describe wellbeing as the embodied and active process of being in good relation with your 1) here tāngata (social and familial ties), 2) te taiao (the environment), and 3) taonga tuku iho (cultural treasures), while doing what you can to make lifestyle choices that are conducive to the health of your 4) tinana (body) and 5) wairua (spirit), while cultivating a balanced 6) ngākau (inner-system), fulfilling 7) matea (core needs), and exercising your 8) mana (authority). Like the physical Ngaruroro river, our wellbeing is dynamic in how it naturally ebbs and flows, has times of activity and inactivity, emerges as the result of multiple interconnected streams of water, and exists within an holistic system of connections.

Institutional Review Board Statement: This research was approved by the Victoria University of Wellington Human Ethics Committee (ID: 00000028603; ID: 00000029558).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study. Written informed consent has been obtained from the patient(s) to publish this paper.

Data Availability Statement: The qualitative data presented in this study will not be shared to maintain the participants' governance over their data.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Jackson, M. The Māori and the criminal justice system: a new perspective - He whaipaanga hou, Department of Justice. Policy and Research Division: Wellington, New Zealand, 1987; pp. 1-45.
2. Smith, L. *Decolonizing Methodologies: Research and Indigenous Peoples*, 3rd ed.; University of Otago Press: Dunedin, New Zealand, 1999.
3. Taonui, R. (2017). Ngā tuakiri hōu – new Māori identities. *In Te Ara - the Encyclopedia of New Zealand*. Ministry for Culture and Heritage; pp. 3-4.
4. Winiata, W. *Whakatupuranga rua mano – Generation 2000: An Experiment in Tribal Development*, New Zealand Planning Council, Wellington, New Zealand, 1979; pp. 1–17.
5. Mead, H.; Grove, N. *Ngā Pēpeha a ngā Tīpuna: The Sayings of the Ancestors*, 1st ed.; Victoria University Press: Wellington, New Zealand; pp. 1-448.
6. Mead, H. *Tikanga Māori: living by Māori values*, 1st ed.; Huia Publishers: Wellington, New Zealand, 2003; pp. 1-398.
7. Walker, R. *Ka whawhai tonu mātou Struggle without end*, 2nd ed.; Penguin Books: London, England, 2004.
8. Smith, G. H. The development of kaupapa Maori : theory and praxis. PhD Dissertation, The University of Auckland, New Zealand, 1997.
9. Durie, M. *Whaiora*, 2nd ed.; Oxford University Press: Oxford, England, 1994; pp. 68-74.
10. Mikaere, A. Maori women: caught in the contradictions of a colonised reality. *Waikato Law Review : Taumauri* 1994, 2, 125.
11. Marsden, M., & Royal, T. *The woven universe: Selected Writings of Rev. Maori Marsden*. Estate of Rev. Māori Marsden: New Zealand 2003; pp. 26-28.
12. Pere, R. (1991). *Te wheke : a celebration of infinite wisdom*. Ao Ako Global Learning New Zealand: Gisborne, New Zealand, 1991

13. McNeill, H. Maori Models of Mental Wellness. *Te Kaharoa* 2009, *2*(1). https://doi.org/10.24135/tekaharoa.v2i1.127

14. Wilson, D.; Moloney, E.; Parr, J. M.; Aspinall, C.; Slark, J. Creating an Indigenous Māori-centred model of relational health: A literature review of Māori models of health. *Journal of Clinical Nursing* 2021, *30*, 3539–3555. https://doi.org/10.1111/jocn.15859

15. Lacey, C.; Huria, T.; Beckert, L.; Gilles, M.; Pitama, S. The Hui Process: A framework to enhance the doctor-patient relationship with Māori. *New Zealand Medical Journal* 2011, *124*, 72–78. https://www.nzma.org.nz/journal-articles/the-hui-process-a-framework-to-enhance-the-doctor-patient-relationship-with-maori

16. Robinson, J.; Moeke-Maxell, T.; Parr, J.; Slark, J.; Black, S.; Williams, L.; Gott, M. Optimising compassionate nursing care at the end of life in hospital settings. *Journal of Clinical Nursing* 2020, *29*, 1788–1796. http://dx.doi.org/10.1111/jocn.15050.

17. Pitama, S.; Robertson, P.; Cram, F.; Gillies, M.; Huria, T.; Dallas-Katoa, W. Meihana model: A clinical assessment framework. *New Zealand Journal of Psychology* 2007, *36*, 118-125. https://optforwellbeing.org/sites/default/files/events/Foundations/NZMJImprovingMaorihealththroughclinicalassessment1.pdf

18. Stevenson, K. Mā te wāhine, mā te whenua, ka ngaro te tangata. Wāhine and whānau experiences informing the maternal-infant health care system. PhD Dissertation, University of Otago, Dunedin, 2018. https://ourarchive.otago.ac.nz/handle/10523/8474

19. Barton, P.; Wilson, D. Te Kapunga Putohe (the restless hands): A Maori centred nursing practice model. *Nursing Praxis of New Zealand* 2008, *24*, 6-15. https://www.nursingpraxis.org/242-te-kapunga-putohe-the-restless-hands-a-maori-centred-nursing-practice-model.html

20. Murray, L. Tau ora for our people. *Toroa-te-Nukuroa, 5: Ako Wānanga*; In Hoani, S.; Davis, S., Eds.; Te Wananga O Aotearoa, 2010, pp. 112–117.

21. Mark, G. T.; Lyons, A. C. Maori healers' views on wellbeing: The importance of mind, body, spirit, family and land. *Social Science & Medicine* 2010, *70*, 1756–1764. https://doi.org/10.1016/j.socscimed.2010.02.001.

22. Durie, M. Te Pae Māhutonga: a model for Māori health promotion. *Health Promotion Forum of New Zealand Newsletter,* October 21, 1999 (accessed 2024-02-27 from community and public health Te Mana Ora). https://www.cph.co.nz/wp-content/uploads/TePaeMahutonga.pdf

23. McMeeking, S.; Kururangi, H. K. *He Ara waiora report*; The University of Cantebury, Cantebury, 2019. https://ir.canterbury.ac.nz/server/api/core/bitstreams/03068ee7-50c2-4cea-8b18-ef82281c5ce3/content

24. Heke, I.; Rees, D.; Swinburn, B.; Waititi, R. T.; Stewart, A. Systems thinking and indigenous systems: Native contributions to obesity prevention. *AlterNative : An International Journal of Indigenous Peoples* 2019, *15*(1), 22–30. https://doi.org/10.1177/1177180118806383

25. McLachlan, A. Whiti te rā : a guide to connecting Māori to traditional wellbeing pathways. *Journal of Indigenous Wellbeing* 2021, *6*, 78–97.

26. Kim, U., & Berry, J. W. *Indigenous psychologies : research and experience in cultural context*, Sage Publications: California, United States, 1993.

27. Braun, V.; Clarke, V. Using thematic analysis in psychology. *Qualitative Research in Psychology* 2006, *3*, 77–101. https://doi.org/10.1191/1478088706qp063oa

28. Braun, V.; Clarke, V. Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health* 2019, *11*, 589–597. https://doi.org/10.1080/2159676X.2019.1628806

29. Tracy, J. S. Qualitative Quality: Eight "Big-Tent" Criteria for Excellent Qualitative Research. *Sage Journals* 2010, *16*.

30. Smith, T. *HE ARA URU ORA: Traditional Māori understandings of trauma and well-being*; Report for Te Atawhai o Te Ao: Whanganui, 2019.

31. Te Rito, J. Te tīhoka me te karo : Struggles and transformation of Ngāti Hinemanu of Ōmāhu. PhD Dissertation, The University of Auckland, New Zealand, 2007. https://researchspace.auckland.ac.nz/handle/2292/17970

32. Fox, R.; Ward, C.; Neha, T.; Jose, P.E. Modelling cultural embeddedness for colonised indigenous minorities: The implicit and excplicit pathways to culturally valued behaviours. *Culture & Psychology* 2021, *27,* 189-207. https://doi.org/10.1177/1354067X20976503

33. Fox, R.; Fraser, G.; Neha, T.; Jose, P. E. Tuia i roto: A qualitative exploration of Māori cultural embeddedness. *MAI Journal* 2022, *11*, 140-156.

34. Fox, R.; Johnson, F. N.; Winter, T.; Jose, P. E. The Māori Cultural Embeddedness Scale (MaCES): Initial evidence of structural validity. *Cultural Diversity & Ethnic Minority Psychology* 2023, *29*, 551–563. https://doi.org/10.1037/cdp0000590

35. Valentine, H.; Tassel-Mataamau, N.; Flett, R. Whakairia ki runga: The many dimensions of wairua. *New Zealand Journal of Psychology* 2017, *46*, 64-71. https://www.psychology.org.nz/journal-archive/Whakairia-ki-runga-private-2.pdf

36. Durie. M; Fitzgerald, E.; Kingi, T.K.; McKinley, S.; Stevenson, B. *Māori Specific Outcomes And Indicators*; A Report Prepared For Te Puni Kōkiri The Ministry Of Mäori Development; School of Mäori Studies, Massey University: Wellington, 2006.