MAI Journal A NEW ZEALAND JOURNAL OF INDIGENOUS SCHOLARSHIP
DOI: 10.20507/MAIJournal.2023.12.1.6

MUKUKAI: KAITIAKI O TE AO KAUHOE

The influence of swimming on whānau engagement with the water

Terina Raureti[*]
Anne-Marie Jackson[†]
Chelsea Cunningham[‡]

Abstract

Māori consider water to be the foundation of all life; it is a valued taonga gifted by our ancestors that provides sustenance and nourishment to communities and enhances hauora Māori (Royal, 2010). For generations, Māori have participated in water-related activities such as fishing, gathering kai, diving, waka and swimming (Karapu et al., 2007). It is through these activities in and around the water that hauora Māori can be enhanced. Despite this positive relationship with water, Water Safety New Zealand (2022) statistics demonstrate high drowning rates for Māori, with the 2021 drowning toll being the highest since 2001. In that year, Māori accounted for 31% of all drownings despite only comprising 17.4% of the population (Stats NZ, 2022; Water Safety New Zealand, 2022). Most of these drownings of Māori occurred while swimming (Water Safety New Zealand, 2022). With this in mind, this article will examine the significance of swimming on Māori engagement with water and therefore hauora Māori. This examination will be done using a whānau case study that was undertaken for the purpose of the lead author's master's research. In bringing together the key findings, a framework named Mukukai: Kaitiaki o Te Ao Kauhoe draws on five main values to describe how swimming can enhance hauora Māori. These values include kaitiakitanga, ūkaipōtanga, whakatinanatanga, whanaungatanga and whakapapa. The values are symbolised by elements of pepeha in the model to demonstrate the significance for Māori of swimming for connection to whakapapa and therefore its influence on hauora Māori.

Keywords

hauora Māori, swimming, water, water safety, whakapapa, whānau

* Ngāti Raukawa. PhD Candidate, Te Koronga | Centre of Indigenous Science, University of Otago, Dunedin, New Zealand. Email: terina.raureti@otago.ac.nz

† Ngāti Whātua, Ngāti Kahu o Whangaroa, Ngā Puhi, Te Roroa, Ngāti Wai. Associate Professor, Māori Physical Education and Health, and Co-Director, Te Koronga | Centre of Indigenous Science, University of Otago, Dunedin, New Zealand.

‡ Ngāti Kahungunu, Ngāti Tūwharetoa, Kāi Tahu. PhD Candidate, Te Koronga | Centre of Indigenous Science, University of Otago, Dunedin, New Zealand.

Ko wai au? | Who am I?

Ko Tararua ngā pae maunga
Ko Ōtaki te awa
Ko Tainui te waka
Ko Ngāti Raukawa te iwi
Ko Ngāti Kapu te hapū
Ko Te Pou-o-Tainui te marae
Ko Hoturoa te tangata
Nō Ōtaki ahau

Tararua are my mountain ranges
Ōtaki is my river
Tainui is my canoe
Ngāti Raukawa is my tribe
Ngāti Kapu is my subtribe
Te Pou-o-Tainui is my home
Hoturoa is my ancestor
I'm from Ōtaki

Introduction: Why swimming?

Swimming has always been a valued part of my life, whether it was through competitive swimming when I was younger, my involvement in life guarding and surf lifesaving, or just the ability to embody and love our surrounding waterways across Aotearoa New Zealand with whānau and friends. My swimming journey began when I was taken down to the local pools in Ōtaki, in the Kapiti Coast District of the North Island, to do swimming lessons. From there I became a competitive swimmer and began competing across the country. As a young Māori and first-language te reo Māori speaker, initially I struggled to communicate with coaches until my English became better. My name was consistently said incorrectly at competitions, and with the sport dominated by non-Māori, feeling like a minority was normal. Competitive swimming was my foundation for loving the water—it gave me comfort and confidence and the water became my favourite place to be.

Even though I loved and appreciated my swimming club, swimming as a sport never met my needs as a Māori. My skillset, safety and comfort in the water was determined through a Western lens. This meant swimming was about speed, technique and competition, and my safety was based on having skills to avoid the risks and hazards of the water. Throughout my involvement in swimming and surf lifesaving, my whakapapa and connection to the water as Māori was never recognised nor considered valuable. My engagement with water was based on water being dangerous and my connection with water as whakapapa and a life source was overlooked. Therefore, the purpose of this article is to understand the value of swimming from a Māori perspective and how this can influence hauora Māori.

This article will discuss a model called "Mukukai: Kaitiaki o Te Ao Kauhoe", which I created alongside my whānau from the findings of my master's thesis. This framework conceptualises whānau perceptions of the benefits of swimming for hauora Māori. Swimming in New Zealand is predominantly understood from a non-Māori perspective and there is no explicit focus on its relevance for Māori or hauora Māori. Therefore, this model was developed to understand how swimming can strengthen our relationship with water and the impacts this has on hauora Māori.

The article consists of three key parts: an exploration of literature, a brief description of methodologies and methods, and a discussion of the key findings of this research. The first section explores literature that pertains to Māori engagement with water, the influence of mauri for engagement with water and conceptualising swimming for Māori. I then introduce the research methodologies and methods used to undertake this research, with my Ōtaki whānau as a case study. This is followed by the history of the Ōtaki River and the Waitohu Stream, the waterways that our whānau most commonly engage with. The findings of the research are then discussed through the development of Mukukai: Kaitiaki o Te Ao Kauhoe to describe the relationship between swimming and hauora Māori.

Māori engagement with water

Water is valued as one of our greatest taonga and is vital to sustaining life and well-being. Māori settled near waterways for the sustenance and nourishment that water brings whānau through its life-giving properties such as kaimoana, cleansing and healing (Selby & Moore, 2010). Māori have a long history of engaging with water, using it for survival and cultural vitality through waka, swimming, gathering kai, fishing, diving and eeling (Haimona & Takurua, 2007; Karapu et al., 2007; Wikaire, 2016).

Māori youth were also experienced paddlers with extensive knowledge of the use of canoes (Best, 1976; Haimona & Takurua, 2007). Seafood gathering and harvesting was a cultural activity amongst whānau, where they would use their knowledge of the celestial bodies and maramataka to identify the best times for fishing (Haimona & Takurua, 2007; McDowell, 2011). This meant that

particular activities were confined to certain seasons, particular times of the day and within specific water bodies (Haimona & Takurua, 2007). Māori therefore have extensive knowledge of the water environment, with unique understandings of how to engage with certain waterbodies determined by the mauri of the water (Morgan, 2006).

The influence of mauri on engagement with water

Water possesses its own mauri and wairua (Marsden, 2003; see Table 1). Mauri is an internal energy that derives from whakapapa. Harmsworth and Awatere (2013) suggest that "mauri provides life and energy to all living things, and is the binding force that links the physical worlds to the spiritual worlds" (p. 276). A water body with a healthy mauri will support a range of cultural uses, for example gathering kaimoana through its abundance (Morgan, 2006). Water has a range of classifications that reflects its status. The status of the water is established by its mauri, which is decided by its source and the history of its use (Morgan, 2006). Douglas (1984, as cited in Morgan, 2006) documented some of the water classifications, which are included in Table 1 below.

The unique mauri within the waterbody guides how whānau engage with water. For example, the Ōtaki River is considered waimāori because it is used regularly for fishing, spear fishing and swimming. The water has flowed from the Tararua Ranges and is suitable for most uses. Waitai distinguishes the ocean as salt water, which is used for fishing and gathering kai such as pipis and cockles. Waimate applies to swimming pools, for example; they are chlorinated and therefore contaminated. This means the life-giving properties of the water are no longer present, and they become an undesirable space to engage in. This waimate environment, however, is the water that swimming is most often taught and conducted in, instantly creating a disconnect between Māori and swimming. Mauri explains why Māori are drawn to the water. It is for the life-giving properties it possesses and the many activities that can be conducted within these spaces. Therefore, swimming is valuable to Māori for the comfort it provides when engaging in the many activities that the water provides.

Conceptualising swimming for Māori

Māori have always had expertise in swimming and extensive knowledge in water-related activities (Best, 1976). Traditionally, it was common for Māori to adapt their style of swimming to the environment that they were in to ensure safety whilst swimming (Haimona & Takurua, 2007). Best (1976) acknowledges that Māori had four particular methods of swimming, which included side stroke, known as kau tahoe; breaststroke, known as kau apuru; freestyle, known as kau tāwhai; and a form of backstroke referred to as kau kiore (Haimona & Takurua, 2007). Children were taught to swim at young ages, sometimes using poito to assist in developing their swimming skills (Haimona & Takurua, 2007). Through pūrākau and knowledge of past engagement with water, it is clear that swimming is a prominent part of our history as Māori.

Pūrākau demonstrate how our ancestors used swimming and how whānau enjoyed it in the past. Pūrākau about Māori swimmers such as Hinepoupou, who swam from Kapiti Island to the top of the South Island; Kahe Te-Rau-o-te-Rangi, who swam from Kapiti Island to the West Coast

TABLE 1 Water body names and mauri classifications

Water body name	Water classification
Waiora	The purest form of water, not compromised either physically or spiritually.
Waimāori	Water that has flowed from Papatūānuku, profane and suitable for most uses.
Waitapu	Water that is tapu due to its relationship with other waters, places or objects.
Waitaonga	Water that has a taonga status because of particular uses the waterway supports.
Waikino	Water whose mauri has been compromised and can cause harm.
Waitai	Tidal waters; distinguishes seawater from freshwater.
Waimate	Water whose mauri has been exhausted. The water is contaminated or polluted.

Note: Adapted from Morgan (2006, p. 47).

of the North Island with her baby; and Pānia of Hukarere, who was a provider and kai gatherer for her community, are just a few examples of how swimming was used and needed in past times (Rikihana, 2020). Today, swimming and water safety education is most often confined to the pool and does not take into consideration our history and understanding of swimming as Māori. This turns Māori away from these traditional methods and purposes for swimming that are described within these pūrākau, creating a disconnect between Māori and swimming.

Ōtaki whānau case study

This research was conducted with my own whānau in Ōtaki. It was undertaken through a Kaupapa Māori theory and pūrākau methodology (Lee, 2009; Smith, 1997). This meant that it was research conducted by Māori for Māori. The key Kaupapa Māori theory principles of taonga tuku iho and whānau were used throughout (Smith, 1997).

Whānau members involved in this research included pakeke (aged 25–55) and kaumātua (aged 56–90). I undertook six interviews with eight whānau members that I have personal relationships with. The data collected from these interviews were transcribed, and a process of thematic analysis was undertaken to establish key inductive and deductive themes (Braun & Clarke, 2006). Each participant in this research was a whānau member with whakapapa connection to Ngāti Kapu and the Ōtaki River. Through kōrero and engagement with my whānau and waterways I was able to analyse and grasp key themes that emerged to develop a framework that connects swimming to hauora Māori — Mukukai: Kaitiaki o Te Ao Kauhoe.

In Ōtaki, our whānau have had a long history of engagement with the Waitohu Stream and the Ōtaki River, using these waterways for sustenance and well-being. To encourage engagement with these rivers, our whānau valued swimming as tikanga and therefore a skill that enhances enjoyment when interacting with water. Whānau used the environment to learn to swim and to learn about the different purposes of water, while consistently experiencing the life of the moving water (Stallman et al., 2008). In the following section I will introduce the Ōtaki River and the Waitohu Stream as ūkaipō for our whānau.

The Ōtaki River

There is a lot of history around the Ōtaki River, beginning with the story of Hau, son of Popoto and Nanaia, who was searching for his runaway wife Wairaka and her lover Weku (Adkin, 1986; Kerr, 2012). It is understood that the name Ōtaki was not given to the river itself, but to a particular spot on its banks. It is also acknowledged that Ōtaki was not named by Hau, but by his followers, to honour an act by their leader at that particular area (Adkin, 1986). Hau is known to have stopped by a broad river where he noticed footprints in the sand, which he believed to be those of his errant wife and her lover.

The story of his journey is told in the oriori *Ko te Popo a Te Rangitakoru mo tana Tamahine, mo Wharaurangi* (Te Rangitakoru's Nursery Song for His Daughter, for Wharaurangi). This oriori tells of Hau's travels and how he named every place along the journey from Whanganui to the Wairarapa (Kerr, 2012). The oriori recounts how he stopped at the river's edge and began "takina te tokotoko, ko Ōtaki" or "speechmaking with his staff" (held in different positions to give emphasis) (Adkin, 1986, p. 271). Mistaken or distorted translations have arisen, and thus current renderings include "carrying his staff in a horizontal position", "carrying his taiaha at the trail", "feeling this way with a spear", to give just a few examples (Adkin, 1986, p. 271). However, in the original translation of the oriori from S. Percy Smith, Hau is described as "speechmaking to his followers" (Adkin, 1986, p. 271). Originally Ōtaki was only the name of the location of the speechmaking; however, it later became attached to all aspects of the river right back to its main source. Later, the township was named Ōtaki, thus signifying that the river is the original life-giver to the Ōtaki community (Adkin, 1986).

The majority of the iwi of Ngāti Raukawa originally settled on a stretch of sand dunes bordered by the ocean, the Ōtaki River and the Mangapouri Stream (Kerr, 2012). When discussing the Ōtaki River, we do not only talk about the river itself but also the attached streams (Kerr, 2012). The Waitohu is a stream that is sourced from the Tararua Ranges that our whānau whakapapa to and is attached to the Ōtaki River (Adkin, 1986). The Waitohu Stream was the waterway that was predominantly used by whānau in past times for swimming and water activities. The name "Waitohu" is known to have a few authoritative meanings, one of which is "the stream where a sign was set up" (Adkin, 1986, p. 409). This history of the Ōtaki River and Waitohu Stream is the foundation of why they are important to our whānau and why we want to continue to have a relationship with these spaces through engagement and swimming.

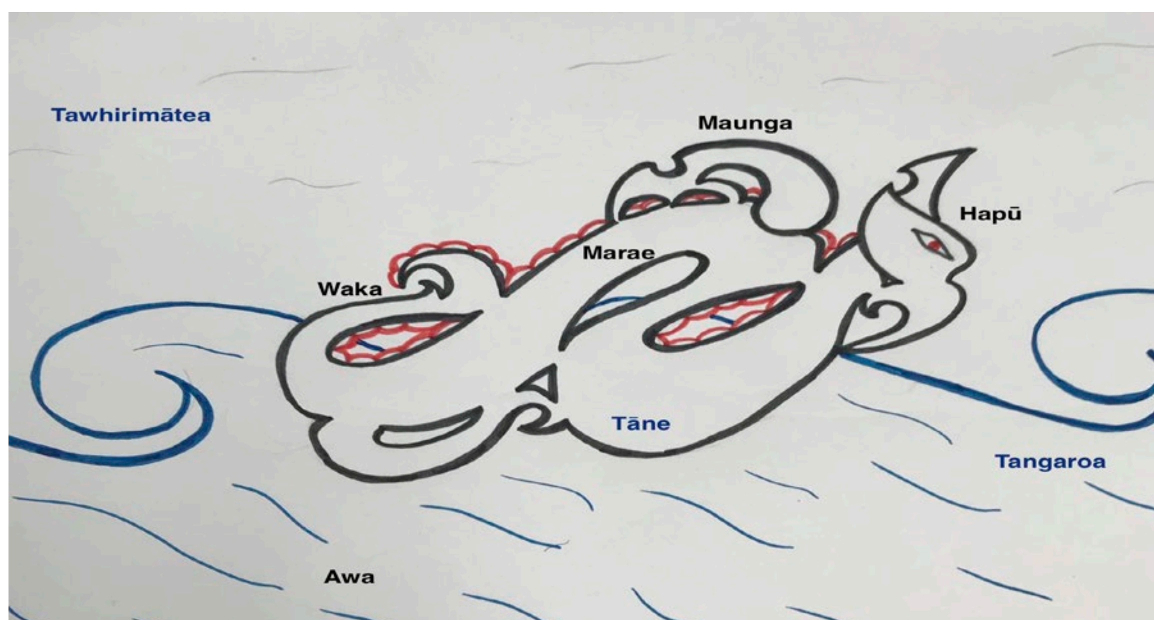

FIGURE 1 Mukukai: Kaitiaki o Te Ao Kauhoe framework

Mukukai: Kaitiaki o Te Ao Kauhoe

Mukukai: Kaitiaki o Te Ao Kauhoe is a framework designed to demonstrate the influence of swimming on hauora Māori. Mukukai is the kaitiaki taniwha of the Ōtaki waterways. He is known to be present in the water when there is an abundance of kaimoana (Moore et al., 2012). When Mukukai is seen going against the current, this indicates a good time for whānau to go fishing. Mukukai represents the importance of the water and all of its bounty for our whānau. Mukukai is used as the symbol for this framework to represent the value of connecting whānau with generations of whakapapa and its importance for hauora Māori. Pepeha situates this framework to ensure that it is driven by Māori and organically from Ōtaki. I shared my pepeha in the introduction of this article. It describes who I am and where I come from, carrying with it the story of my history and identity. The five pepeha elements of maunga, awa, waka, hapū and marae symbolise the five main values of kaitiakitanga, ūkaipōtanga, whakatinanatanga, whanaungatanga and whakapapa, as shown in Figure 1.

I will now explain this framework and its key elements in depth. I will begin this explanation by first discussing each of the three atua in the model and how they contribute to the importance of swimming for Māori communities. I will then discuss each of the model's five elements, maunga, awa, waka, hapū and marae, and how each of these demonstrates how swimming can enhance hauora Māori.

Ngā atua o te taiao | The gods of the environment

Ngā atua o te taiao is influenced by the pūrākau named "War of the Gods" (Reed, 2004). This pūrākau describes the interaction between the atua before Te Ao Mārama. For this framework, this pūrākau provides a guide to comprehending the relevance of the three realms of water, wind and forests when swimming. It describes how although atua may govern a particular realm, such as the sea (Tangaroa), wind (Tāwhirimātea) or forests (Tāne), they all have influence on each other (Reed, 2004). Thus, in relation to swimming, engagement extends beyond water to the wider environment. The influence of these atua in this framework also means whānau will recognise them when engaging with and around the water, enhancing safety precautions through understanding life beyond the moving water. I will therefore discuss Tangaroa and his significance to swimming first.

Tangaroa

Tangaroa is commonly known as the atua that governs the ocean (Reed, 2004). Our whānau recognise him as the first husband of Papatūānuku. Tangaroa was the only atua to be mentioned by whānau throughout this research in relation to swimming and the water. He is understood by

whānau as being the entirety of the ocean and the atua that governs the water environment. This promotes the whānau understanding that learning to swim can demonstrate respect for Tangaroa as you are thereby prepared to keep yourself afloat when in his realm. This expresses his influence as a key factor in this framework to highlight that when we are engaging with water, we are engaging with Tangaroa (Jackson et al., 2017).

The role of Tangaroa in this framework is understanding our relationship with water through whakapapa and therefore respecting the life-giving properties of water (Morgan, 2006; Royal, 2010). This enables whānau to reflect on the life of the water and ensure that when swimming we are interacting appropriately. The ability to swim gives respect to Tangaroa. Therefore, it is important to be aware of his many moods, to understand that his behaviour can change and to know that it is vital that you respect this before swimming (Reed, 2004; Royal, 2010). Within this framework, Tangaroa represents the water in its entirety. Through creation narratives we understand our whakapapa to Tangaroa, suggesting that swimming is a way that whānau can engage with whakapapa (Jackson et al., 2017).

Tāwhirimātea

Tāwhirimātea represents the weather that affects the water that we swim in. Tāwhirimātea is known to our hapū as the atua of the wind and storms that prevail in the sky (Reed, 2004). Described in the "War of the Gods" pūrākau are his relationships with both Tangaroa and Tāne (Reed, 2004). It is his influence on their characteristics and his ability to manipulate their behaviour that forms his prominence within recreation and swimming. The influence of Tāwhirimātea reinforces that when whānau are interacting with water, they are interacting not only with Tangaroa but with the wider environment.

Tāwhirimātea brings life to Mukukai: Kaitiaki o Te Ao Kauhoe beyond the importance of water alone. Durie (1985) discusses that our thoughts as Māori are holistic, reinforcing how swimming and engaging with water involves not only the water but also the wider environment. My whānau discussed how they often visited the ocean or the Ōtaki River with intentions to fish, dive or gather kai, such as for whitebait or toheroa, rather than just for swimming. This means whānau have to understand the tides and weather that best suit partaking in these activities (McDowell, 2011), with swimming being a secondary skill to enhance the enjoyment of gathering kai. In alignment with Durie (1985), who argues the need to think in a holistic manner, the influence of Tāwhirimātea within this framework is about the effect he has on the behaviour of Tangaroa and therefore the value of understanding engagement proceeding from water to the wider environment (Reed, 2004). This means that whānau will take into account the environmental factors such as weather before engaging with water.

Tāne

Tāne is represented in this framework in two forms, Tānemahuta and Te Waioraātāne. As Tānemahuta, he is known to our hapū as the atua of the trees and forests. He was also the child that separated his parents Ranginui and Papatūānuku to create light and bring us into Te Ao Mārama (Reed, 2004). He is a life-giver, fertiliser, sustainer, the god of nature and the one who brought knowledge to Earth (Reed, 2004). His form as Te Waioraātāne recognises the life-giving waters of Tāne, representing waters within the realm of Hauora, the fourth overworld (Reed, 2004). This signifies the different purposes and different whakapapa of water bodies to ensure that swimmers are aware of the uniqueness of every water body (Morgan, 2006; Reed, 2004). Pūrākau recognise Te Waioraātāne as waters that strengthen those who bathe in them to withstand Whiro, the atua of darkness and death (Reed, 2004). This also acknowledges that these waters lie in the realm of Hauora, which is the origin of health and well-being (Reed, 2004). This promotes the idea that swimming in the Ōtaki River or the Waitohu Stream enables us to reflect on pūrākau, provides strength and uplifts the health of our whānau through engaging with significant bodies of water (Panelli & Tipa, 2007; Reed, 2004).

Finally, as Tānemahuta, the atua of forests, his offspring are used to build hooks, nets and canoes to kill the children of Tangaroa (Reed, 2004). This represents recreation and all the other activities that provide sustenance in Māori communities (Karapu et al., 2007; Reed, 2004). Tāne has a prominent presence when whānau discuss whitebaiting, fishing, gathering toheroa and pipi in the sense that he provides the equipment used to partake in these activities. It also represents swimming as a foundational skill to enhance enjoyment regardless of what activity whānau are partaking in, adding the element of enjoyment and comfort when you are in the realm of water.

Tangaroa, Tāwhirimātea and Tāne are therefore all symbolic of environmental awareness, ensuring that when whānau engage with water

they are aware of all environmental elements (Button et al., 2017). Although only Tangaroa was brought up in the interviews, his interactions with Tāne and Tāwhirimātea in the "War of the Gods" pūrākau provide an understanding for why it is important to acknowledge atua beyond water alone (Reed, 2004). Whānau pūrākau talk about daily engagement with water through numerous activities, acknowledging equipment such as nets, hooks and baskets that stem from the realm of Tāne. They also discuss environmental elements, including sunshine, rain and wind from the realm of Tāwhirimātea and its impact on their activities. This means that although Tāne and Tāwhirimātea were not directly mentioned as atua, they are still prominent within whānau pūrākau and whānau engagement with water. Their presence strengthens this framework in the sense that it is formed around the Māori world of creation, stemming from a Māori lens (Reed, 2004). Next I will describe the five elements of pepeha that are incorporated into this framework: maunga, awa, waka, hapū, marae, which symbolise the values of kaitiakitanga, ūkaipōtanga, whakatinanatanga, whanaungatanga and whakapapa.

Maunga

Maunga represents the guardianship and kaitiakitanga that is strengthened through engaging with and swimming in local rivers and streams (Selby & Moore, 2010). The maunga is the initial source of sustenance, with water coming from Ranginui, down the maunga, into streams and awa, and ultimately out into the ocean. This whakapapa of maunga is reflected through Tāne through his union with the mountain maiden Hinetūparimaunga. When Tāne wedded Hinetūparimaunga they created Parawhenuamea (Reed, 2004). Parawhenuamea is the guardian of freshwater with knowledge that the water will not flow without the rock from which the water derives (Reed, 2004). This reinforces the idea that the water will not flow without the sustenance of the mountain ranges.

Ngā pae maunga o Tararua are the source of both the Ōtaki River and the Waitohu Stream (Kerr, 2012). Whānau consistently talked about how their involvement in swimming and just being down by the water not only strengthens their relationship with the Ōtaki River, but also enables them to feel a sense of belonging and guardianship over the water (Kawharu, 2010). The physical embodiment of swimming was also explained as a way to sustain waterways through disturbing the dirt in the water and allowing the water to flow.

This element of the framework describes how we need to revive whānau pūrākau to understand swimming as a taonga tuku iho that keeps us present in the water environment to ensure that the water continues to flow for many generations to come (Selby & Moore, 2010). This expresses a Māori way of thinking and understanding that swimming not only keeps people safe, it also keeps our waterways safe and healthy, which impacts the health of whānau (Durie, 1985, 2003; Selby & Moore, 2010).

Awa

The awa reflects the connection we have as whānau to the Ōtaki River and the Waitohu Stream. The Ōtaki River is an ūkaipō for our whānau; it is the original place in which Ngāti Kapu settled and has provided sustenance and nourishment for generations (Kerr, 2012; Selby & Moore, 2010). This element recognises the importance of understanding the water for our well-being as whānau, and therefore learning to engage with it appropriately.

Whānau have used the river for the purposes of both kai and recreation, implying that sustenance comes in many forms, as does well-being (Durie, 2003). Whānau talked about the different forms of water, each water body carrying with it their own elements of mauri and well-being (Morgan, 2006), such as the ocean for pipi and the river as a playground. This portion of the framework acknowledges the importance of valuing these life-giving properties of the water and understanding water as a taonga tuku iho that has been gifted to us from our ancestors (Smith, 1990). It reinforces the importance of continuing to engage with the water so that the river will provide sustenance to communities for generations to come.

Waka

Waka describes the physical benefits of swimming, not only for the health of the body but for the idea of comfort when embodying water (Moran, 2008; Raureti, 2016). Whānau have expressed that the importance of swimming is inspired by the value of the water (Panelli & Tipa, 2007). The value of the water is articulated through the many activities they engage in, such as fishing, diving and gathering kai. Therefore, the collective vision of swimming is conveyed as a safety mechanism so that whānau are able to enjoy the life-giving properties of the water (Selby & Moore, 2010; Stallman et al., 2008).

Whānau talked about learning to swim in the river, experiencing the currents and the reality of the moving water. Similar to te taha tinana in

Te Whare Tapa Whā (Durie, 1985), this element expresses the physical benefits swimming provides, such as the ability to engage with and enjoy water. It implies that the ability to swim will encourage whānau to engage with water regularly, continuing to strengthen the relationship between whānau and whakapapa (Durie, 2006).

Hapū

The hapū component of this framework represents whānau and the whanaungatanga that is strengthened when in and around the water. Whanaungatanga is the process of strengthening relationships that Durie (2006) discusses as a source of health and well-being. Whānau talked about how spending time at the awa strengthened their relationships with those who were there engaging with them, as well as their relationship with the Waitohu Stream and the Ōtaki River. They described numerous days when the Ōtaki community would gather at the Waitohu Stream to swim and enjoy the presence of each other and the stream.

Whanaungatanga was also acknowledged by whānau as a way to keep each other safe at the water (Moran et al., 2011). This means that whānau would go together and care for one another, ensuring that everyone remained safe (Durie, 2006). The hapū therefore represents swimming as a form of uplifting well-being by strengthening bonds between people as well as between people and the environment (Duncan & Rewi, 2018; Jackson et al., 2018).

Marae

Marae represents whakapapa and our connection to the environment through past, present and future generations of whānau engagement (Graham, 2009). Whakapapa can be expressed through pepeha, connecting our whānau to the Ōtaki River. As Marsden (2003) states, "The resources of the earth did not belong to man but rather, man belonged to the earth" (p. 67). This strengthens our relationship with the river in the sense that we are people who stem from the environment (Jackson et al., 2018).

Whakapapa grounds this framework to understand that swimming extends beyond the value of engaging with water to acknowledging it as a kaupapa that encourages whānau to understand and feel the close association to the environment (Durie, 2003). This framework is symbolised by Mukukai, the kaitiaki of the water that we whakapapa to. Therefore, swimming provides the opportunity for whānau to learn, engage and understand the value of our whakapapa, similar to the attributes of Mukukai (Graham, 2009; Harmsworth & Awatere, 2013; Moore et al., 2012).

Conclusion

The aim of this article was to examine the significance of swimming on whānau engagement with water and how swimming can enhance hauora Māori based on a whānau case study in Ōtaki. What was discovered was that the value and sustenance of the water is what influences whānau to swim and engage with it. This value and sustenance of the water develops the whānau understanding that knowing how to swim is tikanga and always significant regardless of why you are at the water. The Ōtaki River and Waitohu Stream have always had a vital role in the history of our whānau, through the life within the water and the life of the water itself. Using a literature review, Kaupapa Māori theory and pūrākau methodologies, and interview data I was able to create the Mukukai: Kaitiaki o Te Ao Kauhoe model. This model was developed as a way to connect swimming to hauora Māori, based on the key findings from the whānau interviews.

Incorporating Māori values such as kaitiakitanga, ūkaipōtanga, whanaungatanga, whakatinanatanga and whakapapa, the Mukukai: Kaitiaki o Te Ao Kauhoe framework focuses on strengthening swimming within a Māori and whānau context. It draws on pepeha to connect swimming to whakapapa and therefore to hauora Māori. This is to ensure that Māori feel comfortable when engaging in water-related activities. My aspiration for this research was to contribute to guiding and supporting Māori communities to learn to swim through valuing the water environment and continuing to experience the life of the water, and therefore whakapapa.

Acknowledgements

To my whānau, thank you for your contribution to this research, firstly for sharing your stories and for your connection to and your love for our waterways. Secondly, for supporting me on this journey, encouraging and challenging me to think deeply about my own connection to water, and always giving me a home to return to. To my supervisors, Anne-Marie Jackson and Hauiti Hakopa, thank you for the endless support, the many opportunities, and for creating a safe and comfortable environment for me to undertake this mahi. To my Te Koronga whānau, thank you for all the support and encouragement. I would also like to thank

Te Wānanga o Raukawa for the resources when I returned home and the University of Otago for the resources and the Māori Master's scholarship that financially supported this research. It takes a village.

Glossary

atua	deity
awa	river
hapū	subtribe
Hauora	the fourth overworld, the Heavens
hauora	health and well-being
Hinetūparimaunga	female ancestral deity of mountains
iwi	tribe
kai	food
kaimoana	seafood
kaitiaki	guardian
kaitiakitanga	guardianship; cultural and financial guardianship; accountability
kaitiaki taniwha	spiritual guardian
kau apuru	breaststroke
kau kiore	freestyle/backstroke
kaumātua	elders
kaupapa	purpose
Kaupapa Māori	research methodologies that are "by Māori, for Māori"
kau tahoe	side stroke
kau tāwhai	freestyle
kōrero	to speak
Māori	Indigenous peoples of New Zealand
marae	courtyard
maramataka	Māori calendar
maunga	mountain
mauri	life force
Mukukai	kaitiaki taniwha of the Ōtaki waterways
ngā atua o te taiao	the gods of the environment
ngā pae maunga o Tararua	the Tararua Ranges, mountain range in the North Island
Ngāti Kapu	a hapū of Ngāti Raukawa
Ngāti Raukawa	iwi with traditional bases in the Waikato, Taupo and Manawatu/Horowhenua regions of New Zealand
oriori	lullaby
pakeke	adults
Papatūānuku	earth mother
Parawhenuamea	female ancestral deity of fresh water
pepeha	tribal saying
pipi	*Paphies australis*, a common edible bivalve
poito	floats
pūrākau	traditional stories
Ranginui	deity of the sky
taha tinana	physical well-being dimension of Te Whare Tapa Whā
taiaha	close quarters combat weapon
Tāne/Tānemahuta	deity of man, forests and birds
Tangaroa	deity of the ocean and marine life
taonga	treasure
taonga tuku iho	treasures passed down from ancestors
tapu	sacred
Tāwhirimātea	deity of wind and weather
Te Ao Kauhoe	the world of swimming
Te Ao Mārama	the world of light
te reo Māori	the Māori language
te waioraātāne	water that strengthens those who bathe in it
Te Whare Tapa Whā	Māori health model, based on a four-sided house
tikanga	values, beliefs, custom, rule, principles
toheroa	a large bivalve mollusc
ūkaipō	origin
ūkaipōtanga	sense of belonging
waikino	compromised water
waimāori	pure water
waimate	contaminated water
wairua	spirit, soul; attitude
waitai	tidal waters
waitaonga	treasured water
waitapu	sacred water
waka	Māori canoe
whakapapa	genealogy
whakatinanatanga	embodiment, fulfilment
whānau	family
whanaungatanga	building relationships
Whiro	deity of evil and illness

References

Adkin, G. L. (1986). *Horowhenua: Its Maori place names and their topographic and historical background.* Capper Press.

Best, E. (1976). *Games and pastimes of the Maori.* A. R. Shearer.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/fswdcx

Button, C., McGuire, T., Cotter, J., & Jackson, A.-M. (2017). *Assessing the water survival skills competency of children.* School of Physical Education, Sport and Exercise Sciences, University of Otago.

Douglas, E. (1984). *Land and Māori identity in contemporary New Zealand. Waiora, waimāori, waikino, waimate, waitai: Māori perceptions of water and the environment.* University of Waikato.

Duncan, S., & Rewi, P. (2018). Tikanga: How not to get told off. In M. Reilly, S. Duncan, G. Leoni, L. Paterson, L. Carter, M. Rātima & P. Rewi (Eds.), *Te kōparapara: An introduction to the Māori world* (pp. 30–47). Auckland University Press.

Durie, M. (1985). A Māori perspective of health. *Social Science & Medicine, 20*(5), 483–486. https://doi.org/bmnd48

Durie, M. (2003). *Ngā kāhui pou: Launching Māori futures.* Huia.

Durie, M. (2006). *Measuring Māori wellbeing.* New Zealand Treasury Guest Lecture Series. https://www.treasury.govt.nz/sites/default/files/2007-09/tgls-durie.pdf

Graham, J. (2009). Na Rangi taua, na Tuanuku e takoto nei: Research methodology framed by whakapapa. *MAI Review*, (1), Article 3.

Haimona, M., & Takurua, N. (2007). Kia maanu, kia ora: Stay afloat, stay alive—acknowledging the significance of tikanga Maori in formulating and communicating water safety policies and practices. *He Puna Korero: Journal of Māori and Pacific Development, 8*(2), 83–90.

Harmsworth, G. R., & Awatere, S. (2013). Indigenous Māori knowledge and perspectives of ecosystems. In J. R. Dymond (Ed.), *Ecosystem services in New Zealand* (pp. 274–286). Manaaki Whenua Press.

Jackson, A.-M., Baxter, J., & Hakopa, H. (2018). Hauora Māori: He tīmatanga: Māori health: An introduction. In M. Reilly, S. Duncan, G. Leoni, L. Paterson, L. Carter, M. Rātima & P. Rewi (Eds.), *Te kōparapara: An introduction to the Māori world* (pp. 324–342). Auckland University Press.

Jackson, A.-M., Mita, N., & Hakopa, H. (2017). *Hui-te-ana-nui: Understanding kaitiakitanga in our marine environment.* National Science Challenge Sustainable Seas | Ko Ngā Moana Whakauka.

Karapu, R., Haimona, M., & Takurua, N. (2007). DrownBaseTM—identifying at risk factors: Strategies and issues around Māori practices and activities towards water safety. In M. Levy, L. W. Nikora, B. Masters-Awatere, B., M. Rua & W. Waitoki (Eds.), *Claiming spaces: Proceedings of the 2007 National Maori and Pacific Psychologies Symposium* (pp. 132–140). Māori and Psychology Research Unit, University of Waikato.

Kawharu, M. (2010). Environment as a marae locale. In R. Selby, P. Moore & M. Mulholland (Eds.), *Māori and the environment: Kaitiaki* (pp. 221–237). Huia.

Kerr, R. (2012). *Ko Ōtaki te awa. Ōtaki River.* Pub Charity.

Lee, J. (2009). Decolonising Māori narratives: Pūrākau as a method. *MAI Review*, (2), Article 3.

Marsden, M. (2003). *The woven universe: Selected writings of Rev. Māori Marsden* (T. C. Royal, Ed.). Estate of Rev. Māori Marsden.

McDowell, R. M. (2011). *Ikawai: Freshwater fishes in Māori culture and economy.* Canterbury University Press.

Moore, P., Royal, C., & Barnes, A. (2012). *Kāpiti Coast Water Supply Project. Te ati āwa ki whakarongotai: Cultural impact assessment.* Te Āti Awa ki Whakarongotai Iwi and the Water Working Group.

Moran, K. (2008). Will they sink or swim? New Zealand water safety knowledge and skills. *International Journal of Aquatic Research and Education, 2*, 114–127. https://doi.org/jz3f

Moran, K., Quan, L., Franklin, R., & Bennett, E. (2011). Where the evidence and expert opinion meet: A review of open-water recreational safety messages. *International Journal of Aquatic Research and Education, 5*(3), 251–270. https://doi.org/jz3g

Morgan, T. B. (2006). Waiora and cultural identity. *AlterNative*, *3*(1), 43–67. https://doi.org/ckm6

Panelli, R., & Tipa, G. (2007). Placing well-being: A Maori case study of cultural and environmental specificity. *EcoHealth*, *4*(4), 445–460. https://doi.org/fcr3zz

Raureti, T. (2016). *He ara wai, he puna whakapapa* [Unpublished manuscript]. University of Otago.

Reed, A. W. (2004). *Reed book of Māori mythology.* Reed.

Rikihana, K. (2020). *Manawa hine: He wāhine i tohe ki te tai (Women who swam against the tide).* Te Tākupu, Te Wānanga o Raukawa.

Royal, T. C. (2010). Tangaroa the sea. In J. Phillips (Ed.), *Te taiao Māori and the natural world* (pp. 72–77). David Bateman.

Selby, R., & Moore, P. (2010). Nōku te whenua o ōku tūpuna: Ngāti Pareraukawa kaitiakitanga. In R. Selby, P. Moore & M. Mulholland (Eds.), *Māori and the environment: Kaitiaki* (pp. 37–57). Huia.

Smith, G. (1990). *Research issues related to Maori education* [Paper presentation]. NZARE Special Interest Conference, Massey University, Palmerston North, New Zealand.

Smith, G. H. (1997). *The development of Kaupapa Maori: Theory and praxis.* [Unpublished doctoral thesis]. University of Auckland.

Stallman, R. K., Junge, M., & Blixt, T. (2008). The teaching of swimming based on a model derived from the causes of drowning. *International Journal of Aquatic Research and Education*, 2(4), 372–382. https://doi.org/kfj3

Stats NZ. (2022, 30 June). *Māori population estimates: At 30 June 2022.* https://www.stats.

govt.nz/information-releases/maori-population-estimates-at-30-june-2022/
Water Safety New Zealand. (2022). *Live statistics. Updated weekly*. Retrieved 9 June 2022, from https://watersafety.org.nz/live-statistics-2021
Wikaire, R. (2016). Ngati Porou Surf Life Saving Incorporated: Maori, empowerment, water safety, and surf lifesaving. *Physical Educator—Journal of Physical Education New Zealand*, *49*(1), 23–25.

This article is developed from lead author Terina Raureti's Master of Physical Education thesis. Terina completed her master's in 2018, and her thesis was titled *Kia Mārama ai te Ihi, te Wehi o Mukukai: The Influence of Swimming on Whānau Engagement with Water*. This article is a dissemination of some of the key findings from this research. Terina has recently submitted her PhD thesis, which is titled *Kauora: A Theory and Praxis of Swimming for Māori*.