

Original Research

Waka, Whanaungatanga and Water Safety: Using Indigenous Knowledge to Educate Future Aquatic Educators about Māori Water Safety in Aotearoa, New Zealand

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ABSTRACT

Waka (ancestral canoes) and water are central to Māori, the Indigenous people of Aotearoa, New Zealand, yet Māori have disproportionately high rates of drowning. New research has begun to examine Māori and Indigenous understandings of water safety; however, Indigenous approaches to water safety continue to be an underdeveloped area, particularly in a sport for development (SFD) context. In this study, we demonstrate how waka as an “Indigenous-plus” approach to SFD can provide important insights for a field in which Indigenous views are often absent or marginalized. Underpinned by a kaupapa Māori approach (generally, but not exclusively, research by Māori, for Māori, with Māori), we surveyed 74 future aquatic educators of primarily Pākehā descent (New Zealand European) who participated in a Māori water safety wānanga (cultural space of learning) led by Hauteruruku ki Puketeraki Waka Club, an Indigenous canoe club based in New Zealand’s South Island. Through our thematic analysis, we found that the participants identified the role of waka as fundamental to learning Indigenous Māori water safety in an Aotearoa, New Zealand context. In this paper, we argue that waka provides a vehicle for educating our future aquatic educators about Māori water safety, which will support more meaningful drowning prevention for all New Zealanders.

*Ko au te waka
Ko te waka ko au
I am the canoe
The canoe is me*

(A Māori proverb, cited in Mita, 2014, p. 4).

Māori have a deep and inherent connection to waka (ancestral canoes) and water. They are considered taonga (treasure, prized possession) with physical and spiritual properties attached to them. For Māori, this connection derives from whakapapa (genealogy), the genealogical links that trace Māori back to the creation of the natural world and to the ancestral canoes that brought the ancestors to the shores of Aotearoa, New Zealand (Phillips, 2020). As the late waka builder and traditional navigator Hector Busby stated, “[Māori] trace our genealogies back to the names of our ancestral canoes” (Evans, 2015, p. 91). The recital of genealogies “was an established technique in social life and served as a chronology of historical events associated with the sequence of ancestors” (Buck, 1938, p. 23). Stories of waka migration to Aotearoa, New Zealand depict the early social structures of Māori, which saw the creation of iwi (tribe) and hapū (sub-tribe) as Māori populated the land. Waka are therefore fundamental to Māori identity and, as such, critical for conceptions of health (Mita, 2014, 2016). Mita (2014) claimed, “Through reintroduction of the whakapapa that surrounds the waka we use, and the water we embark on ... I believe that communities will benefit hugely, not only physically but through a revitalisation of mental, emotional, spiritual and environmental health” (p. 10).

Keywords: Māori water safety, Indigenous drowning prevention, traditional canoes, Indigenous sport for development

In a contemporary context, waka was revived in Aotearoa, New Zealand, in 1985 when waka ama (outrigger canoe) was introduced as a sport by waka exponent Matahi Brightwell (Mita, 2014). Brightwell saw the opportunity of waka ama as a sport to “develop not only seamanship but physical fitness for whānau [families] of all ages and ethnicities” (Mita, 2014, p. 7). Brightwell added,

Māori people haven't had the opportunity for nearly seven generations to enjoy the world of Tangaroa [Māori deity of the sea]. Wind, sea, canoe, air – it's massaging the whole being of a person. It's giving the person a completely new feeling of what nature is all about on the sea and that's Tangaroa.
(as cited in Nelson, 1998, p. 60)

Despite this inherent connection to waka and the water, Māori have disproportionately high rates of drowning, accounting for 20-25% of all preventable recreational (i.e., intending to be in the water) and non-recreational (i.e., not intending to be in the water) drowning fatalities (Phillips, 2020; WSNZ, 2021). Sadly, in 2021 Māori drowning fatalities rose to a record 31% of drowning fatalities despite comprising only 16.5% of Aotearoa, New Zealand's population (WSNZ, 2021). In the same year, boating deaths accounted for 24% of all fatalities, an 80% increase from the previous year (WSNZ, 2021). The increase in boating deaths and Māori overrepresentation highlight that “water safety in New Zealand has become disconnected from Māori views to water and ... its important link to notions of health and wellness derived from the relationship Māori have to water” (Phillips, 2020, p. 1). In this paper, we present a specific case study with Hauteruruku ki Puketeraki Waka Club members (referred to herein as Hauteruruku) who taught water safety from their unique worldview to 74 future aquatic educators of primarily Pākehā descent (New Zealand European). Underpinned by a kaupapa Māori approach (generally, but not exclusively, research by Māori, for Māori, with Māori), we argue that waka as an Indigenous-plus approach to sport for development (SFD) provides a vehicle for teaching key aspects of Māori water safety that can provide more meaningful drowning prevention for all New Zealanders whilst also contributing important Indigenous scholarship to the SFD field.

Indigenous Scholarship in the SFD field

Social development through sport has a long history with the principal focus on “sport as a vehicle for broad, sustainable social development, especially in the most disadvantaged communities in the world” (Kidd, 2008, p. 370). The shift toward sport for development and peace

(SDP) and sport for social change reflects the contributions made from disciplines such as sport management, international development, and sociology feeding into these discussions overtime (Hapeta et al., 2019; Kidd, 2008). Despite the growth in the SFD field, Indigenous worldviews and perspectives continue to be underrepresented and underdeveloped (Hapeta et al., 2019).

Within the body of SFD literature, Coalter (2013) identified three approaches that can be applied: “sport-only,” “plus-sport,” and “sport-plus”. Sport-only, as its name suggests, focuses solely on the sporting opportunities, while plus-sport concentrates on developing individuals or communities first by enticing them through sport. Sport-plus augments sporting pursuits with other development opportunities, a secondary focus outside of the specific sport outcomes (Hapeta et al., 2019). Despite these three approaches, Coalter and Taylor (2010) accepted that, “within this context it has proven difficult to maintain a meaningful analytical distinction between plus sport and sport plus organisations” (p. 99). From an Indigenous lens, this distinction is especially problematic as how our Indigenous communities define the very nature of “sport” in their context and even the definition of themselves as a sport organisation delivering “development” is not always reflected in their own realities. For example, Hapeta et al. (2019) explained that from an Indigenous lens, “the practice of sport represents one of the most embodied expressions of theory that is relational and reflective of philosophical paradigms that are contested in communities and societies where they exist” (p. 481).

By nature, SFD is inherently deficit-based and marginalized people, such as Indigenous peoples, often bear the brunt of this deficit lens (Hapeta et al., 2019). As Spaaij et al. (2018) warned, “it is imperative the SFD researchers develop a heightened awareness of what types of knowledge are dominating in SFD and what types of perspectives and understandings are being privileged, as well as better understand their limitation, bias, and partialities” (p. 34). The implicit belief behind SFD initiatives, “assumes that deprived communities inevitably produce deficient people who can be perceived, via a deficit model, as to be in the need of ‘development’ through sport” (Coalter, 2013, p. 3). Indigenous SFD scholars have called for approaches and initiatives that embrace indigeneity and create meaningful transformation, considering instead an “Indigenous-plus” approach “to indigenize the theories that are used in this field of study” (Hapeta et al., 2019, p. 490).

While an Indigenous-plus approach is not explicitly defined or described in the literature, Hapeta et al. (2019) provided a strong starting point. They described a “ground-up” positioning from a distinctive kaupapa Māori perspective, “acknowledging tūrangawaewae (place of standing; place of belonging), which is terrestrially founded upon the whenua (land base, foundation) and celestially in whakapapa (genealogy)” (p. 483). These Indigenous principles of land and genealogy are the basis of a Māori worldview and underpin a kaupapa Māori ethos. Specifically in a research context, kaupapa Māori is described as a distinctive approach that stems from a Māori worldview (Moewaka-Barnes, 2000) and is reflective of underlying principles or aspects based on this worldview (Smith, 2003).

An Indigenous-plus approach in a New Zealand context is therefore grounded in a kaupapa Māori perspective that considers foremost an Indigenous worldview and the kaupapa or shared purpose of importance to Indigenous peoples. This is appropriate as Indigenous peoples can define, for themselves, who they are, and what is of importance to them. According to the *Dictionary of the Māori Language* (Williams, 1992), the word kaupapa can be broken down to “ka ū” meaning “be firm, be fixed, reach the land, arrive by water, reach its limit” (p. 464) and “papa” meaning “ground or foundation” (Marsden, 2003a, p. 66). Kaupapa, therefore, means to holdfast (be firm, be fixed) to your roots, to that which grounds you (papa). In this sense, kaupapa is about a higher purpose, one that grounds you in your own values and is intimately tied to the land, Pāpā-tū-ā-nuku (Earth Mother). Only when this thinking is considered as the central focus, does the “plus” aspect then come in. Waka is an example of an Indigenous kaupapa, a collective vision that can provide positive outcomes for Indigenous communities and indeed all peoples who are connected to waka voyaging and shared migration journeys.

Waka as an Indigenous-plus Approach

Waka are the literal and metaphysical vehicles used by the ancestors to voyage to Aotearoa, New Zealand, appearing throughout Māori cosmology and recorded in numerous traditional lore including Māori songs, incantations, proverbs, and idioms (Matamua, 2017; Mita, 2014, 2016). For example, Māori traversed the great expanse of Te Moana Nui a Kiwa (Pacific Ocean) on double hulled waka, a feat that is “arguably the most remarkable voyage in the history of humanity” (Whaanga & Matamua, 2016, p. 60). On a deeper and spiritual level, “it was their knowledge of the night sky that guided the Polynesians across thousands of kilometres of open ocean to settle in Aotearoa New

Zealand” (Whaanga & Matamua, 2016, p. 60). It is within these star constellations that waka are immortalised in the night sky (Harris et al., 2013).

The constellation known to Māori as Matariki (Pleiades) is said to be the prow of a great canoe in the sky (Matamua, 2017). This canoe is known as “te waka o Rangi,” meaning the canoe of Rangi, and its captain, Taimaranuku, was said to own a large net. According to Māori lore, this net is cast across the earth and hauls to the sky all those who have died, the spirits of loved ones suspended at the stern of the canoe so that “they hang like the kura, the plumes of decorative feathers that adorn Māori canoes” (Matamua, 2017, p. 63). When it is time, “Taimaranuku gathers the spirits of the year from the stern of the canoe and casts them into the heavens to become stars” (Matamua, 2017, p. 64). This is reflected in a common Māori saying when mourning the deceased, “kua whetūrangihia koe,” meaning “you have become a star” (Matamua, 2017, p. 65). This intimate connection to waka elucidates the many roles it plays in our lives: a symbol of great strength and fortitude, a marker of cultural identity and belonging, or a time of sorrow and remembrance for those who have passed.

Returning to the starting point for an Indigenous-plus approach from Hapeta et al. (2019), waka provides Māori with tūrangawaewae, a cultural place of belonging that is terrestrially founded upon the land of Aotearoa, New Zealand, that the ancestors voyaged to and celestially in the whakapapa of waka evident in our night sky from which the ancestors used to navigate with. Waka is a kaupapa that is central to many Māori communities, including Hauteruruku ki Pūketeraki Waka Club.

Hauteruruku ki Pūketeraki Waka Club: A Waka Kaupapa

Hauteruruku is a Māori canoe club of Kāti Huirapa ki Pūketeraki, a sub-tribe of Ngāi Tahu, the principal tribe of New Zealand’s South Island. The vision of Hauteruruku is to connect and reconnect all of its members and wider community with the local awa (river) and moana (ocean) through the heritage of ngā waka (canoes) and Te Ao Takaroa (The world of Takaroa, deity of the ocean) (Flack et al., 2015; Mita, 2016). Waka are a taonga to Hauteruruku who are steeped in their own tribal waka traditions and stories of Ngāi Tahu (Evans, 2015; Flack et al., 2015; Mita, 2016). The importance of waka to Hauteruruku stem from their tribal Ngāi Tahu traditions and stories that explain how waka are imbued within the landscapes of the South Island (Evans, 2015; Flack et al., 2015; Mita, 2016). The Ngāi Tahu story of Aoraki sheds light on the club’s spiritual connection to the lands and waters of the South Island that

similarly shapes their waka and water safety practices and beliefs today.

According to the southern tribe, another name for the South Island is Te Waka o Aoraki (The Canoe of Aoraki), which follows the story of Aoraki descending the heavens in a waka to seek out their stepmother Papa-tū-ā-nuku. Flack et al. (2015) provided a shortened account:

One version of the story explains that the brothers explored the land and seas to find empty southern oceans. In their effort to launch their waka and return to the heavens, Aoraki was unable to properly perform the appropriate karakia. This brought misfortune and disaster for the waka causing the waka to fall and smash into pieces. The remnants of this waka now make up many prominent landscapes throughout Te Waipounamu or Te Waka o Aoraki: Te Tau Ihu o Te Waka [the prow of the canoe] or the Marlborough sounds; the hull of the waka making up the rest of the South Island; and Aoraki and his brothers petrified on the hull of their overturned canoe imbedded as the lofty mountains of the Southern Alps. (p. 26)

This brief account shares how Aoraki and his brothers turned to stone on top of their overturned canoe and became the Southern Alps in the South Island, with Aoraki forming the highest mountain peak amongst them (Flack et al., 2015). This story reveals the inherent connection Hauteruruku have with waka, a vehicle that connects them to their ancestral landscapes and the stories embedded within them. It is from this worldview that Hauteruruku encourage a holistic and meaningful connection to water, also described as Māori water safety (Phillips, 2020). The story of Aoraki teaches us to respect the mana (prestige) and mauri (life force) of these special places to Ngāi Tahu and provides important water safety messages in their Southern waters. For example, if we do not adhere to the correct tikanga (cultural practices, customs) and rituals of respect, the story is a reminder that even the mightiest of chiefs can fall. The story of Aoraki demonstrates that waka is an empowering vehicle for teaching Māori water safety, emphasizing the inextricable link between Hauteruruku, waka, and their ancestral landscapes. Derived from the root word “tika” meaning to be “correct”, “right”, “true”, tikanga in a water safety context refers to the practices and protocols that keep you safe in, on and around the water, like reciting karakia to show respect (Phillips, 2020). In a research context, tikanga refers to the correct way of conducting and designing your research (Smith, 2003). The following methods section describes the tikanga of our study, the research design and methods we adhered to that align with a kaupapa Māori approach.

METHODS

This research was underpinned by a kaupapa Māori approach. Marsden (2003b) described kaupapa as deriving from two Māori words, “kau” meaning “to appear for the first time, to come into view” and “papa” referring to “ground or foundation” (p. 66). Hence kaupapa means “ground rules, first principles, general principles” (Marsden, 2003b, p. 66). Methodologically, kaupapa Māori frames the study in the broader aims of our own values as Māori and, moreover, is used to reflect the importance of the natural environment, of which, water is a central part. Further to this, kaupapa Māori is about putting into practice the shared aims and goals of the communities we work alongside of, such as the goals and aspirations of Hauteruruku waka club. Pihama (2015) supported this, explaining that kaupapa Māori is,

a theoretical framework that ensures a cultural integrity is maintained when analysing Māori issues. It provides both tools of analysis and ways of understanding the cultural, political and historical context of Aotearoa. ... there must be a theoretical foundation that has been built from Papatūānuku [Earth Mother], not from the building blocks of imported theories. Kaupapa Māori theory provides such a foundation. (p. 11)

Stemming from a kaupapa Māori foundation, the qualitative methods employed in this research that align to a kaupapa Māori approach include wānanga (cultural place of learning) and surveys.

Research Participants

We surveyed 74 second-year Physical Education students from the University of Otago in Dunedin who participated in a water safety wānanga led by Hauteruruku. Hauteruruku adopted an “educate the educators” approach to water safety and focused on the need to educate New Zealand’s future aquatic leaders in Māori water safety and Māori views around the water. Students’ ages ranged from 19 – 23 years. Over 81% (n=60) were of European descent and less than 15% (n=11) were Māori. Pacific Island (n=2) and Other (n=1) were also self-identified ethnicities.

Water Safety Wānanga

Wānanga is a Māori cultural method of knowledge sharing and means “to discuss, debate, impart knowledge” (Marsden, 2003a, p. 58). Barlow (1991) described wānanga as esoteric learning that is credited to Tāne (Māori deity of the forest) who ascended the heavens and retrieved the three baskets of knowledge.

Marsden (2003a) explained, “The legend of Tāne’s ascent into the heavens provide the sanctions, protocols and guidelines upon which the Wānanga was to be conducted and determined the subject content to be taught” (pp. 57-58). While wānanga in a traditional sense is considered an institution of higher learning steeped in esoteric knowledge, wānanga today can be described as a dedicated space of learning and sharing, as well as the process of knowledge and wisdom. Hakopa (2011) described wānanga as, “special learning sessions set aside for a specific kaupapa or theme, over a number of years where participants would be acculturated with a unique style of learning; a Māori style of learning based on the spoken word without script” (p. 298). It is in this expression that wānanga is the method described here – a dedicated learning space set aside for the specific kaupapa of waka and water safety.

The water safety wānanga took place at the Otago Harbour in Dunedin. Hauteruruku shared the local tribal history of the area and the cultural stories associated with the ocean. The students were told the Ngāi Tahu creation story and learned why water is important to Hauteruruku and their iwi. Stories about the importance of waka for Hauteruruku were also shared. Key water safety practices were adhered to, such as correct fitting of life jackets and wearing appropriate clothing for water activities. A PowerPoint presentation inside the rowing club was also presented by guest speaker Mr. Rob Hewitt, who has close connections with members of Hauteruruku. His presentation focused on the philosophy of Kia Maanu Kia Ora, a Māori water safety message that means to stay afloat to stay alive. Key principles of Māori water safety such as karakia (incantation, prayer) as spiritual life jackets and respecting the water were shared throughout the presentation.

Following the discussion, Hauteruruku then took the students down to the water’s edge where members taught students a karakia for Tangaroa (Māori deity of the ocean), a cultural practice of acknowledging and paying respect to the water. Hauteruruku then divided students across multiple waka vessels including waka unua (small double hulled sailing canoe), waka ama (outrigger canoe), and stand-up paddle boards. Students spent 1-2 hours on the water in these various vessels. The wānanga ended with an in-water survival session in which students were taught, from a cultural perspective, the key survival strokes (i.e., side stroke, survival breaststroke) and survival positions (i.e., huddle and Heat Escape Lessening Position – also known as H.E.L.P.) to adopt in emergency situations (Smith, 1982). The in-water survival was an important part of teaching the students about the sudden cold shock response they would experience should they accidentally fall into the water and how to use culturally relevant tools

(such as reciting karakia to reduce panic) and messaging (kia tau tō wairua – balance your spirit with the spirit of Tangaroa) to reduce the onset of panic, which decreases the risk of physiological responses to the cold shock response, which has led to numerous drowning fatalities (Barwood et al., 2006; Barwood et al., 2007; Croft et al., 2013; Tipton, 2003).

Survey

Surveys are a form of empirical study based upon questionnaires and are often used in qualitative research (Tomlinson, 2010). The purpose of the survey was to gauge the students’ experience of Māori water safety after taking part in the water safety wānanga led by Hauteruruku waka club. The open-ended questions asked in the survey included the following:

1. Do you have a connection to the water (or a particular river/beach)? Please explain/share.
2. How is having a connection to water important/relevant to water safety?
3. What do you know (if anything) about Māori connection to water?
4. What is your understanding of whanaungatanga?
5. How is whanaungatanga important for water safety?
6. What is your understanding of the kaupapa (purpose, goal) of Hauteruruku ki Puketeraki Waka Club?
7. What have you learnt about Māori water safety at the wānanga?

These open-ended questions were formulated alongside members of Hauteruruku, which aligns with kaupapa Māori. Members of Hauteruruku expressed the importance of the Māori concept of whanaungatanga in their water safety knowledge and practice, hence the questions focused explicitly on this key idea. The surveys were provided in a printed format and filled out onsite by the students at the conclusion of their participation in the wānanga. Their written responses were then entered into a digital spreadsheet for inductive coding and thematic analysis (Blackstone, 2012; Saldaña, 2009).

Data Analysis

We employed an inductive thematic analysis of the data (Blackstone, 2012; Saldaña, 2009). The survey responses were coded into key themes and relevant participant quotes were appropriately grouped under these themes. The results of this study are presented under five key themes, each depicted by a word cloud image and supported by a selection of participant quotes. We have bolded key phrases within the participant quotes to add emphasis of the significant ideas.

Inductive Thematic Analysis

Inductive thematic analysis is the process of seeing patterns in the data and drawing out emergent and new themes from these that allows the researcher to draw links between the key themes and the research questions (Mita, 2016). Mita (2016) argued that thematic analysis “is a valuable tool used alongside Kaupapa Māori theory as it allows for the acknowledgment of inherently Māori kaupapa or themes throughout the data” (p. 45). We analyzed the survey responses from our kaupapa Māori lens, meaning we read and unpacked the data from a Māori worldview and placed Māori knowledge at the center of our analysis. This resulted in the emergence of five Māori themes around whanaungatanga as water safety.

Word Cloud Images

Word cloud is an image composed of multiple words from text in which the size of each word indicates its frequency or importance. The purpose of producing word cloud images is to “present a visual overview of a collection of text ... a vernacular visualization” (Veigas & Wattenberg, 2008, p. 49). We produced the word cloud images using a generic online word cloud generator. We entered the survey responses into the online generator, producing a word cloud image of the most frequented words and reflects a content analysis approach. We selected a sailing canoe as the main “shape” of our word cloud image to better represent the experiences of the participants in a visual form. Word cloud images are consistent with kaupapa Māori for two reasons. The first is that it provided a way for all students’ voices to be visually represented in the research as not all participants had their quotes showcased. This is important because of the cultural concept of manaaki (care, respect), which is about uplifting the mana (power, authority) of your research community. Secondly, the use of images to depict participants’ voices resonated with the importance of symbolism in a Māori worldview. Marsden (2003a) explained,

The world of symbol is a deliberate creation of the human mind. Man creates symbols to depict, represent and illustrate some other perceived reality. Words, formulae, forms, ritualistic ceremonies, legend and myth are created by the human mind as maps, models, prototypes and paradigms by which the mind can grasp, understand and reconcile the worlds of sense perception and the real world behind that. (p. 62)

Word cloud images in the shape of a waka helped us to

make sense of the data in a way that resonated with our Māori worldview and reflected the core kaupapa or purpose of the study.

RESULTS

The results of this study recognized waka and whanaungatanga (a Māori concept of relationship building) as critical for teaching and learning Māori water safety. Students identified that waka ultimately facilitated a whanaungatanga connection to water and that whanaungatanga was relevant to Māori water safety in five key ways: (a) whanaungatanga strengthens connection to the environment, (b) whanaungatanga builds connection to people, (c) whanaungatanga encourages a knowing and understanding of the water, (d) whanaungatanga elicits a sense of respect, and (e) whanaungatanga promotes water confidence. These findings are presented first by word cloud images that depict the most frequently mentioned words in the survey responses, accompanied by a selection of student quotes.

Waka Facilitates a Whanaungatanga Connection to Water



Figure 1

In response to the survey question asking about students' understandings of Hauteruruku and what they believed was the core kaupapa of the club, the primary concepts of waka, whanaungatanga, and Māori beliefs about water emerged. One student explained that Hauteruruku “give people a **visual representation of whanaungatanga with the waka.**”

Whanaungatanga Builds Connection to People

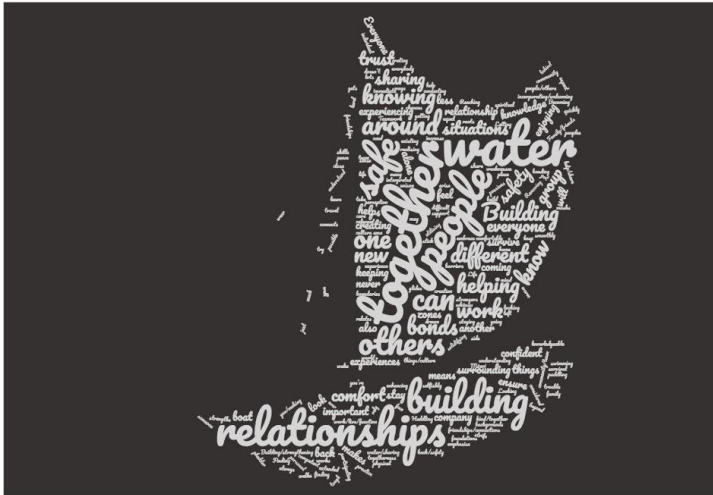


Figure 3

The importance of building connections to people was the second theme of whanaungatanga derived from the survey data. Like the importance of building a relationship to the environment, whanaungatanga created opportunities for constructing relationships between people who then engage in water activities together. Emerging from the survey data was the idea that building better relations between your peers had positive results when engaging with the water. For example, when asked how whanaungatanga was important for water safety, students responded that water safety is about “**creating bonds with people**” (Male, 22). Another student explained water safety is about “realising there is **more to the world than just yourself** and that **others** need to be considered” (Male, 19). In addition “**building relationships and connecting with others** to share how the water works and emphasize the safety surrounding it” (Female, 19) is how whanaungatanga was important for water safety understandings. These responses reflect the multiple iterations of people-to-people relationships which can be bonds amongst friends, immediate and extended whānau/family, team, and others. Some students identified the practical side of a whanaungatanga connection between people regarding power in numbers. They noted you need to “**stick together, work as a team** in the water as difficult situations can arise very quickly” (Male, 20). Another student argued that whanaungatanga “is about **utilising everybody to increase survival chances**” (Male, 19) and it is also about “**not swimming alone**” (Male, 26). These examples highlight the pragmatic aspect of working with others to increase your chances of survival. Others commented that whanaungatanga was about helping others and supporting the collective. Students described the impact of whanaungatanga for water safety as “**helping those around**

you **to survive**, huddling keeps you warm” (Female, 19). Similarly, it “can take a **community/team** to ensure safety of the individual” (Female, 19). Whanaungatanga as helping others is an important water safety consideration as one student noted “in tough situations that people may face it is important to **work together and help each other** to ensure **everyone** is safe and **makes it home**” (Male, 19). These quotes shed light on the role of whanaungatanga for supporting the safety of the individual and the collective.

Whanaungatanga Encourages Knowing and Understanding of Water

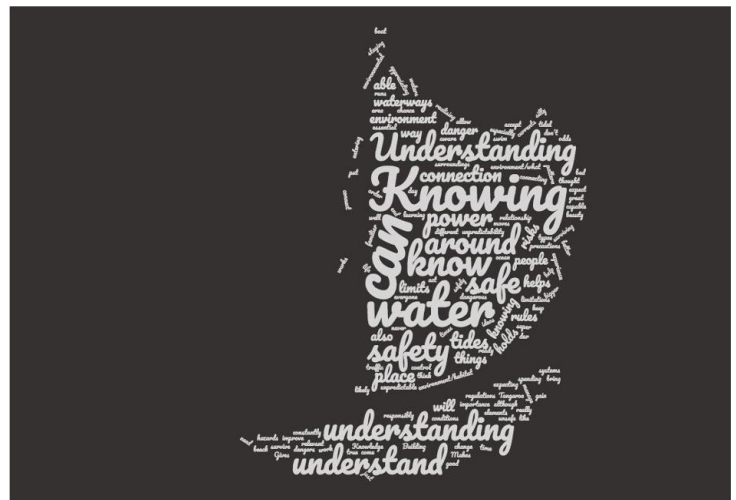


Figure 4

The third theme focused on how whanaungatanga encouraged a knowing and understanding of the water. One survey question asked students how having a connection to water was relevant or important for water safety. They explained that being connected to water helped them to know and understand the water more. For example, one student stated “**knowing the tides and also water hazards** is important to water safety” (Male, 20). Similarly, another student added “I think **knowing more about different types of waterways** and the danger they can bring can really help with water safety” (Female, 20). This resonated with another student who wrote “**knowledge of your environment and surroundings and realising that having a connection to the water can improve your odds of safety** if you know how to manage yourself in the water” (Male, 19). Closely linked with knowing the water is the importance of understanding the water. Students explained, “if you can **understand and accept the water** and what it can do, you will have a better chance of surviving and staying safe” (Male, 20).

The synthesized findings align to Phillips' (2020) description.

Finding 1: Waka is a Vehicle for Māori Water Safety as it Facilitates a Whanaungatanga Connection to Water

A whanaungatanga connection to water is about understanding our relationship to water and treating this taonga as we would our family. Marsden (2003a) explained,

Māori thought of himself as holding a special relationship to Mother Earth and her resources ... Man is an integral part therefore of the natural order and recipients of her bounty. He is her son and therefore, as every son has social obligations to fulfil towards his parents, siblings and other members of the whānau, so has man an obligation to Mother Earth and her whānau to promote their welfare and good. (p. 66)

Whanaungatanga is a fundamental principle that embraces whakapapa and places value on maintaining and preserving relationships and connections (Duncan & Rewi, 2018; Kidd, 2015). Derived from the root words “whānau” meaning “family” and “whanaunga” meaning “relative, blood relation”, whanaungatanga encourages us to treat all relationships as if they were a member of our own family (Duncan & Rewi, 2018; Patterson, 1994). For Māori, the value of maintaining and preserving relationships and connections also extends beyond people. Whanaungatanga includes our connection and relationship with nature, as whakapapa dictates the genealogical ties Māori have with the natural world. This resonated with the responses shared earlier, including one that stated whanaungatanga is about “building relationships beyond person to person, also building a strong spiritual and cultural relationship.”

A whanaungatanga connection to water encourages everyone to consider their relationship with and connection to the water – which is crucial for Māori water safety (Hauteruruku et al., 2016; Phillips, 2020). One student agreed, “if your relationship is strong, you will be safe.” Despite most students not being of Māori descent, it was encouraged that “within all of us is a connection to Tangaroa. We are all descended from seafarers. Part of our role as kaitiaki (guardians) is to re-awaken that connection” (Hauteruruku et al., 2016, p. 26). As one student noted above, the kaupapa or vision of Hauteruruku is “to help bring people together through their sport and help teach the Māori culture and beliefs through being out on the waka.” Waka is a vehicle for Māori water safety as it facilitates a whanaungatanga connection to water and also permits others to consider their own creation stories and migration journeys that illuminate their distinct connection to water.

Finding 2: Waka is a Vehicle for Māori Water Safety as it Fosters Connections to People

Waka is a vehicle for Māori water safety as it fosters connections to people, which helps to keep people safe. On a waka, whanaungatanga encourages a sense of cooperation and working together to move seamlessly *with* the water as well as with one another. As one of the students noted above, Hauteruruku taught them to “work together as one, paddle together, [we] have to work together to achieve greatness.” This is supported further by a well-known Māori proverb,

*Kaua e rangiruatia te hāpai o te hoe;
E kore tō tatou waka
E ū ki uta
Do not lift the paddle out of unison
Or our canoe
Will never reach the shore.*

(A Māori proverb cited in Mead & Grove, 2001, p. 193).

Whanaungatanga is an essential mechanism for survival and water safety education as described through the collective responsibility. According to Thompson et al. (2017), “whanaungatanga embodies the values of sharing, unity and collective responsibility, and is built upon the foundations of support, caring, aroha [love], and tūrangawaewae [standing place/home]” (p. 35). Kidd (2015) endorsed this, explaining whanaungatanga “means connecting, [and] establishing your identity in relation to others, a process of finding common ground” (p. 135). She expressed its primacy, “like breathing; the need to connect with people and to understand where they come from” (p. 135). This act of bonding and connecting with others is reflected in the students' survey data. As one student noted above, whanaungatanga was about “building relationships and connecting with others to share how the water works and emphasize the safety surrounding it.” From a Māori perspective, this idea of bonding and connecting with others while on the water is about being good kaitiaki (protectors, guardians) of the people around you. One student echoed, whanaungatanga is “helping those who are less competent in the water and sharing skills that you know to others.” This statement is a clear example of being a good kaitiaki and using your knowledge and skills to help those less competent in the water.

Another student claimed that whanaungatanga was “helping those around you to survive, huddling keeps you warm.” From this statement, being a good kaitiaki or guardian is about helping those around you to survive, but there is also an element of being kaitiaki of yourself, ensuring you are

also safe and protecting yourself. The student's comment that "huddling keeps you warm" is one example of helping others and yourself to ensure everyone gets home safely. During the in-water survival portion of the wānanga where students jumped off the waka into the water to simulate an accidental immersion, students were told to adopt the appropriate heat conserving positions whilst Hauteruruku members communicated cultural concepts to enhance the retention of these formations. For example, when teaching the huddle position, Hauteruruku encouraged the concept of whanaungatanga and the importance of looking after one another. While this position is foremost about conserving heat and energy (Smith, 1982), from a Māori perspective, it is more so about whanaungatanga and ensuring that everyone in your group is warm and alert. These examples validate how waka fostered the collective responsibility of whanaungatanga, which reinforced Māori water safety practice.

Finding 3: Waka is a Vehicle for Māori Water Safety as it Encourages Respect, Understanding, and Confidence in the Water

Waka is a vehicle for Māori water safety as it encourages respect, knowing and understanding, and confidence in the water. This relationship Māori have to water is why the idea of respect is vital. While the foundation of respect afforded comes from a spiritual connection between Māori and the environment, the students' responses demonstrated the practical implications respecting the water had for their physical safety in, on, and around the water. For example, the young woman who explained that through respecting the "sheer power and untamedness that the water presents, only then can you appreciate and take safety seriously." From a Māori perspective, respect is referred to as manaaki (to support, take care of), which is closely associated with whanaungatanga. Kawharu and Newman (2018) concurred, "because it is inclusive, the functioning of kinship is, therefore, concerned with manaaki (or manaakitanga) which in turn invokes responsibilities and duties to care for" (p. 54). Carter (2018) added, "manaakitanga also governs the moral obligations and responsibilities that go hand-in hand with respect and care" (p. 351). Water is to be given the utmost respect, as one student claimed, "you have to respect the water and it will respect you."

One way to respect the water is by deepening your understanding and knowledge of it. Knowing and understanding your water environments on a mental and spiritual level provides a manner of wisdom that influences your actions or behaviours within these spaces, a wisdom

that keeps you safe based on appropriate decision making (knowledge of the head), and a wisdom that keeps you safe based on intuition, emotional intelligence, and a sense of spirituality (knowing of the heart) (Marsden, 2003a). As one student cautioned, "you will never understand the true power, danger and beauty it [water] holds; which is important to your safety." Wisdom in the context of water safety encompasses the notion of truly understanding your place within nature. Indigenous philosopher Māori Marsden claimed,

When illumination of the spirit arrives ... then one truly knows, according to your ancestors. When the illumination of the spirit arrives in the mind of the person that is when understanding occurs – for knowledge belongs to the head and knowing belongs to the heart. When a person understands both in the mind and in the spirit, then it is said that that person truly "knows." (Marsden, 2003a, p. 79)

Knowing and understanding water is critical for water safety. As another student commented, "knowledge of your environment and surroundings and realising that having a connection to the water can improve your odds of safety if you know how to manage yourself in the water." Further to this point, respect for the water and knowing/understanding it subsequently cultivates water confidence.

Water confidence is perceived as an important aspect of water safety because it correlates to having a stronger connection to the water. According to Jackson, "if we can get to a place where whānau are confident, with a strengthened relationship to the water, then we can see if we can solve this issue of drowning" (as cited in University of Otago, 2019, n.p). One student noted, "feeling confident in a place or knowing it well, not being frightened by the feeling of being in the water is important." The first half of this quote highlights that confidence means knowing the water well. As an added benefit, waka provides a safer way to engage on water to help build one's confidence and connection overtime. Particularly for young kids who may be scared to get in the water, engaging with waka provides another mode to nurture their connection.

CONCLUSION

In this paper, we argued that waka as an Indigenous-plus approach to SFD provides a vehicle for teaching key aspects of Māori water safety that can provide more meaningful drowning prevention for all New Zealanders

whilst contributing important Indigenous scholarship to the SFD field. From a Hauteruruku perspective, waka and whanaungatanga are vital to Māori water safety and to life. The multiple iterations of whanaungatanga provided a medium for students to learn about Māori views on the water and water safety. For Hauteruruku, waka is their kaupapa, a collective vision for bringing people together, and bringing people closer to Tangaroa and the water. Waka expresses their Indigenous-plus approach for Māori water safety and drowning prevention in Aotearoa, New Zealand. The findings of this paper demonstrated the “plus” aspect, whereby the kaupapa of Hauteruruku and their worldview comes first, and the outcome of Māori water safety teachings and learnings second. The premise of kaupapa, holding to the core and center of who you are, is embraced in the closing proverb,

*E kore e ngaro he takere waka nui
The keel of a great canoe cannot be lost*

(A Māori proverb cited in Pomare, 1987, p. 224)

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And what is it to work with love? It is to weave the cloth with threads drawn from your heart, even as if your beloved were to wear that cloth. It is to build a house with affection, even as if your beloved were to dwell in that house. It is to sow seeds with tenderness and reap the harvest with joy, even as if your beloved were to eat the fruit. It is to charge all things your fashion with a breath of your own spirit, and to know that all the blessed dead are standing about you and watching (Khalil Gibran, 1926, p. 34).

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