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STUDENTS' PERSPECTIVES ON A BICULTURAL VIRTUAL WHĀNAU: ADVANCING TE TIRITI O WAITANGI IN NURSING CURRICULA

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INTRODUCTION AND BACKGROUND

In 2024, the regulatory body for nursing and nursing education programmes, Te Kaunihera Tapuhi o Aotearoa Nursing Council of New Zealand (NCNZ), updated the Nursing Education Standards and in 2025 released an updated Registered Nurse Scope of Practice with new Standards of Competence for Registered Nurses (NCNZ, 2025). Understanding Te Tiriti o Waitangi and implementing it in practice are embedded throughout the standards of competence. The current curriculum at Toi Ohomai Institute of Technology, Te Tohu Paetahi Tapuhi, Bachelor of Nursing (BN), will come under review in 2028; therefore, it is timely to examine teaching and learning strategies that help prepare ākonga for safe, competent practice as registered nurses. The curriculum utilises a Te Tiriti o Waitangi perspective by imbuing Te Wheke with He Korowai Hihimā. Te Wheke is the holistic assessment framework which has been the Pou of the nursing curriculum since the first delivery of the Comprehensive Diploma of Nursing at the legacy institution Waiareki in 1986 (Pere, 1984; Riini & Lyford, 2022). He Korowai Hihimā refers to the metaphor of raranga (weaving) each ākonga tapuhi undergoes during their educative journey towards attainment of the BN. Together, they enact the bicultural commitment to meeting the needs of two distinct groups within Aotearoa New Zealand: Māori as tangata whenua and all others as tangata tiriti (Riini & Lyford, 2022; Toi Ohomai Institute of Technology, 2025).

In 2016, through the-then Waiariki Institute of Technology, an innovation award was granted to develop a "virtual whānau" of avatars that reflect the demographics of the Toi Ohomai rohe for nursing simulations. In our context, virtual whānau refers to whānau or family groups made up of members who are not real. While they have virtual representation in terms of a static avatar, there is no assumption that ākonga interact with them solely through digital means. Virtual whānau member avatars help create realism, as actors in nursing clinical laboratory in-person simulation role-plays are provided with visual cues such as clothing and accessories consistent with the virtual whānau member and which provide continuity with the virtual appearance of the avatar.

The two initial whānau, each consisting of three generations, conceptualise the bicultural relationship, aiming to foster connection with and holistic understanding of patients (Sadd & Marsh, 2024). Connections are made with the wider BN virtual whānau through relationships

between individual whānau members. Virtual whānau members experience a variety of health issues and are given fictitious names, with care taken not to use any locally related or identifiable names. In 2018, a concern was identified with the naming of Māori whānau. The significance of names within te ao Māori was acknowledged, and there was reluctance to use names that might be family names of ākonga or names from other iwi, hapū, or tribes. Therefore, in consultation with a local kuia, a positive alternative was found by using the names of native trees for whānau surnames (Sadd & Marsh, 2024). This approach minimises the risk of offending anyone and encompasses the Māori value of connection to our natural surroundings.

Whānau members are used across all years of the curriculum, with their presenting problems increasing in complexity as ākonga progress through each year and in relation to the learning outcomes for each course. Each family whānau member has a primary diagnosis that aligns with a simulation scenario. A medical history is developed to support this and may unfold over subsequent years as ākonga progress through the degree. A fuller holistic profile is developed using a Te Wheke assessment framework embedded within the degree (Pere, 1984; Riini & Lyford, 2022). In recent years, use of virtual whānau members has been extended within non-clinical theory courses for lifespan development, case studies, presentation scenarios, and examinations, increasing the realism of applied theory.

While kaiako report positive ākonga engagement, the virtual whānau as a teaching and learning strategy has not been formally evaluated. This lack of evaluation highlights the need to explore ākonga perspectives, particularly those of ākonga Māori, to understand the efficacy of this resource and to ensure its cultural appropriateness.

VIRTUAL FAMILY AND COMMUNITIES IN NURSING LITERATURE

Literature regarding virtual patients predominately refers to virtual patients or families as a purely digital or online resource, whereby ākonga engage through animated case studies or virtual simulations. Virtual patients are a recent addition to nursing pedagogy aimed at developing non-technical skills in undergraduate health professionals (Peddle et al., 2019), commonly presented as clinical cases for ākonga to work through and more recently associated with virtual simulation,

Shahtahmasebi and Liddell (2011) described the development and use of a virtual family to simulate different stages throughout the lifespan including the creation and developmental process of their family and its use within a single nursing course. Within a problem-based learning nursing curriculum, Sharp and Primrose (2003) found that having a longitudinal approach over a four-year curriculum enabled ākonga to recognise the long-term effects of healthcare. Positive outcomes relating to knowledge acquisition and clinical reasoning have been reported when using virtual patients or families when compared to traditional non-virtual health profession education (Kononowicz et al., 2019). Padilha et al. (2024) evaluated the integration of virtual patients into their nursing degree, reporting a positive effect on ākonga decision making. However, this study, as with most of the literature examined, used virtual patients in a simulated online environment only.

The integration of an intergenerational virtual family used in Sezer and Sezer (2019) most closely aligns to the virtual whānau integration in our curriculum, although this research was interested in the design and development of a virtual family. Having an intergenerational and multicultural virtual family was reported by Waters (2014) as increasing cultural awareness in nursing ākonga. Similarly to the BN virtual whānau, Levett-Jones et al.'s (2015) Wiimali virtual community and

Wright et al.'s (2021), interprofessional virtual community reflect the local communities and residents, prompting ākonga insights on the impact of community resources and culture on health.

RESEARCH QUESTIONS

The aim of this research is to increase our understanding of how Bachelor of Nursing (BN) ākonga perceive and experience a BN virtual whānau, and how virtual whānau support ākonga learning and preparation for practice. This study seeks to answer the following research questions:

- In what ways does the BN virtual whānau support ākonga to integrate theory into clinical practice?
- How well does a bicultural virtual whānau incorporate Te Tiriti o Waitangi and culturally safe practice into the BN curriculum?
- Do ākonga Māori perceive that Māori virtual whānau members reflect te ao Māori?

RESEARCH METHODS AND DESIGN

This study utilised a sequential exploratory mixed method design where qualitative focus group data was collected and analysed to inform the quantitative data collected using an online survey (Creswell & Plano Clark, 2017). The initial qualitative phase allowed for in-depth exploration of ākonga experiences with the virtual whānau which was then validated for generalisation by quantitative data analysis (Creswell & Plano Clark, 2017).

Current year 2 and year 3 ākonga enrolled in the Bachelor of Nursing degree were invited to participate in focus groups (N = 237). A total of four focus groups were held (two on each campus site (n = 21). A further two focus groups were held at each campus for ākonga Māori (n = 9) in relation to research question three.

Data from focus groups was analysed using conventional content analysis, which is suitable to explore and describe experiences within complex situations encountered within nursing and healthcare (Hsieh & Shannon, 2005; Vaismoradi et al., 2013). Themes were confirmed and corroborated based on steps followed by Vaismoradi et al. (2013). This was undertaken concurrently by researchers, separately and together. This process was repeated for ākonga Māori focus groups, facilitated by the kaiako Māori researcher.

Emerging themes were used to develop confirmatory survey items and gain further insights. Content and face validation of the survey questions was confirmed by subject matter experts and a survey pilot. An invitation to participate in the survey was extended to year 1 BN ākonga in addition to the year 2 and 3 ākonga. A total of 79 ākonga completed the online survey (Table 1).

Data was analysed using IBM Statistical Package for Social Sciences (SPSS), Version 31. Demographic data, multiple response items, and preference items (more/same/less) were examined using descriptive statistics to summarise participant characteristics and responses. Likert-scale items were coded on a four-point scale (1 = not at all to 4 = a lot) and screened for missing values prior to analysis. Conceptually related items were grouped into four composite scales: Q.5 cultural and professional learning, Q.9 knowledge understanding, Q.10 application, and Q.11 clinical preparedness. Internal consistency and reliability of each scale were validated with an

		N	%
Age	18–24	26	32.9%
	25+	52	65.8%
	Unknown / not declared	1	1.3%
Ethnicity	Tangata whenua / Māori	21	26.6%
	Tangata tiriti / Non-Māori English first language (EFL)	29	36.7%
	Tangata tiriti / Non-Māori English as speakers of other languages (ESOL)	20	25.3%
	Unknown / not stated	9	11.4%
Year of Study (BN)	Year 1	30	38.0%
	Year 2	27	34.2%
	Year 3	22	27.8%

Table 1. Demographic characteristics of survey participants (N = 79).

overall Cronbach's alpha coefficient of .938 (Table 2). Given the ordinal nature of the data, non-parametric tests were used. Spearman's rank-order correlation examined relationships between composite scales and Kruskal–Wallis tests compared group differences. Areas of convergence are explored in the discussion section (Creswell & Plano Clark, 2017).

Scale	Cronbach's alpha	N. of items
Cultural & Professional concepts (Q.5)	.906	4
Knowledge understanding (Q.9)	.886	6
Application	.901	6
Clinical practice	.837	5
Combined scale items	.938	21

Table 2. Reliability statistics.

Ethical considerations

Ethics approval was gained from the institute's Research and Human Ethics Committee, approval number TRC 2025.007. The application process included review by a Kaihautu Rangahau (Māori research advisor). Ākonga Māori specific focus groups were facilitated by the kaiako Māori member of the research team.

FOCUS GROUP THEMES

Four themes were identified from the open focus groups (year 2 and 3 ākonga).

Bridging the gap – From simulation to clinical reality

The virtual whānau serve as a transitional mechanism, bridging the divide between theoretical knowledge and practical application in the clinical environment. "It's actually like a simulation scenario that will prepare you for the real world," one participant stated. Participants found that the virtual whānau assisted them in recognising and responding to clinical cues: "So I think it was

good as mental priming or conditioning to notice these kinds of things. Like ah, okay, I remember then the virtual whānau with this person in front of me."

The virtual whānau allow for experimentation without adverse consequence, which was consistently compared to fear surrounding the high-stakes clinical environment. "At least," one participant reported, "it prepares you in a learning environment where it's not like real life." The ability to practice communication and clinical skills in a controlled setting builds confidence. "I feel like I will never forget what I did," another ākonga said, "Yeah, so it did prepare me. Because in the end, we all have to work independently."

Cultivating cultural safety and holistic care

Cultivation of cultural safety was reported to be a significant strength of the virtual whānau. The virtual whānau facilitates an understanding of patients within broader familial and cultural contexts and the need for safe, holistic care. Participants frequently praised the inclusion of Māori virtual whānau and Māori health models. One ākonga, identifying as being tangata tiriti (ESOL), highlighted the virtual whānau's utility: "It gives ... a good idea or like a knowledge around how, for me as a person from a different culture, it really helped me to understand the culture better … how to keep the patient culturally safe." Participants called for enhanced diversity in the virtual whānau to better reflect the multicultural landscape of New Zealand: "I think because we are a country that is expanding, maybe so does our virtual whānau. I think that as well, like, with the LGBTQ+ community, like, kind of building on that more, because it is common to see that in practice."

Scaffolding professional identity and critical thinking

The virtual whānau play a pivotal role in the progressive development of a professional nursing identity. The continuity of the characters allows for a layered learning experience, where ākonga revisit familiar cases with increasing complexity:

> The virtual family grew with us as well. So from first year, we were only given a tiny snapshot of who they were and what they did. And then more got added into it as our complexities and our understanding grew. So did their background. So they grew with us.

The virtual whānau also encourages self-reflection and the development of a unique nursing philosophy for ākonga. One participant noted:

> it's taught me a lot about me and about how I am actually quite forward in what I do when it comes to patients and [I] needed to learn ... to like step back and … speak with the patient, you need to speak with them and be like, 'I'm going to do this, is that okay?'

The power of familiarity in reducing cognitive load

The consistent use of virtual whānau members throughout the nursing programme reduces cognitive load. The familiarity with whānau creates a sense of comfort and reduces anxiety, enabling ākonga to focus on applying clinical skills and critical thinking. "In a learning environment," one ākonga confirmed, "when you're learning something new, it's nice to have that familiarity already there. So, it's not, like, super, super overwhelming when you're learning something new." This comfort extends to emotional engagement, with ākonga often referring to the characters as if they were real individuals: "We walk into a lab and … they're like, oh, we're doing Lucy today. We're like, oh, yeah, how is she today? Is she sick? And we actually speak about her, like she's a person."

This emotional connection and familiarity aids in memory retention:

> Because as soon as you saw L [whānau member], I know L has COPD or asthma, like she's always got one of those two. So you know straight away what the situation is and it helps you, go back, oh yeah my understanding of that was this …

The consistent exposure to the evolving health narratives of whānau members supports ākonga to build frameworks and scaffold understanding. This makes the learning process more intuitive and less daunting.

ĀKONGA MĀORI PERCEPTIONS OF MĀORI VIRTUAL WHĀNAU

A further four themes were identified from ākonga Māori focus groups in relation to their perceptions of Māori whānau, representation of te ao Māori, and cultural appropriateness.

Authenticity versus stereotyping

Ākonga Māori highlighted tension between authentic representation and reliance on stereotypes. Some virtual whānau members were praised for having realistic backgrounds, others felt like a "real stereotype": "Because not all Māori are like that, my family, personally, we're not like that."

Marginalisation of tikanga in virtual whānau simulations

Participants highlighted a disconnect between the cultural focus of te ao Māori and the task-orientated clinical focus of simulations. Tikanga in the latter context is often marginalised or treated like an afterthought. "What I've noticed," one participant said, is that "the … te ao Māori part of … the person you're role-playing isn't really prominent in the script, like it's actually not in the script at all." The task-orientated nature of simulation labs can override opportunities to practice culturally safe care unless specifically identified in the session outcomes. Participants felt at times that tikanga was incorporated as a "box-ticking" exercise.

Absence of whānau and whanaungatanga

These essential tenets of te ao Māori were identified by ākonga Māori to be lacking. In clinical environments, Māori often have whānau members present, whereas virtual whānau typically present alone in simulations. "When I was in the hospital and we were surrounded by Māori patients, it was so much different and slower," one ākonga noticed, "the whanaungatanga part is, yeah... that's a big part of it compared to here [the lab]."

Matauranga Māori integration

A need for more profound and nuanced integration of mātauranga Māori into the virtual whānau profiles was highlighted. Virtual whānau members need detailed backgrounds that go beyond superficial traits: "A bit of, you know, whakapapa history would be good ... whānau, hapū, iwi ... because also with iwi, all [have] different dialects." Whakapapa, iwi, hapū, and dialect details need to be accurate for learning culturally safe care, with different regions having different customs and dialects. "It's about being culturally safe and approaching whānau," another participant said, "understanding [for example that] you're in Te Arawa region, so they do things different[ly]." Māori health models were preferred. Te Wheke, a Māori holistic model applied as an assessment framework throughout the programme (Riini & Lyford, 2022), was praised, as ākonga felt this provided deep understanding of the patient: "I really enjoy that framework [Te Wheke]. It pulls out a lot of knowledge from the case study...."

SURVEY RESULTS

Overall, ākonga reported high familiarity with the concept of virtual whānau and reported widespread exposure to its use across multiple teaching and learning contexts. Generally, ākonga had positive perceptions of how the virtual whānau contributed to learning and clinical application.

Nearly all respondents reported being able to identify virtual whānau groups (97.5 percent) and perceived them as representative of real-life situations (96.2 percent). The majority also reported exposure across multiple learning environments, including clinical labs (94.9 percent), tutorials (92.4 percent), and assessments (92.4 percent). However, fewer ākonga (59.5 percent) considered virtual whānau members to be "real people" (Table 3).

Item	Agree n (%)	Disagree n (%)
Can name at least two virtual whānau groups	77 (97.5)	2 (2.5)
Can name at least four members	61 (77.2)	18 (22.8)
Consider virtual whānau members to be real people	47 (59.5)	32 (40.5)
Representative of real-life situations	76 (96.2)	3 (3.8)
Used in clinical labs/simulation	75 (94.9)	4 (5.1)
Used in tutorials/workshops	73 (92.4)	6 (7.6)
Used in assessments	73 (92.4)	6 (7.6)

Table 3. Ākonga familiarity with and exposure to virtual whānau.

Most ākonga reported that the virtual whānau supported their understanding of key concepts of "Te Tiriti o Waitangi," "Te ao Māori," "Cultural safety," and "Legal – ethical practice" (Table 4). at least "somewhat," particularly for legal and ethical practice (45.6 percent "a lot") and cultural safety (36.7 percent "a lot").

Area	Not at all n (%)	A little n (%)	Somewhat n (%)	A lot n (%)
Te Tiriti o Waitangi	9 (11.4)	20 (25.3)	34 (43.0)	16 (20.3)
Te Ao Māori	5 (6.3)	26 (32.9)	30 (38.0)	18 (22.8)
Cultural safety	5 (6.3)	15 (19.0)	30 (38.0)	29 (36.7)
Legal/ethical practice	7 (8.9)	11 (13.9)	25 (31.6)	36 (45.6)

Table 4. Perceived contribution of virtual whānau to conceptual understanding.

Ākonga reported strong support for the application of learning, particularly in clinical simulation and holistic care, where the majority indicated the virtual whānau helped "a lot" (Table 5). While virtual whānau were widely used across teaching contexts, most ākonga indicated a preference for maintaining current levels rather than increasing use. Presentations were the only context where a notable proportion of ākonga preferred their reduced use (20.3 percent) (Table 6).

Application area	Not at all	A little	Somewhat	A lot
Understanding new concepts	2	14	23	40
Applying concepts	2	8	33	36
Clinical labs/simulation	1	6	21	51
Case studies	2	7	21	49
Holistic approach	4	4	21	50
Clinical reasoning	1	6	22	50

Table 5. Perceived support for learning application.

Context	Currently used	Want more	Same	Less
Clinical labs	93.7%	30.4%	65.8%	3.8%
Simulation	87.3%	30.4%	65.8%	3.8%
Tutorials	89.9%	34.2%	60.8%	5.1%
Assessments	81.0%	25.3%	65.8%	8.9%
Presentations	46.8%	26.6%	48.1%	20.3%
Exams	87.3%	22.8%	67.1%	10.1%

Table 6. Current and preferred use of virtual whānau.

To provide a clearer overview of the relative impact across different domains on learning and knowledge application, Table 7 summarises the proportion of ākonga reporting strong perceived impact ("a lot") for each learning area.

Domain category	Specific area	n (%) reporting "a lot"
Clinical application	Clinical simulation / labs	51 (64.6)
	Clinical reasoning	50 (63.3)
	Holistic care	50 (63.3)
	Case-based learning	49 (62.0)
Applied knowledge	Patient presentations	34–42 (43.0–53.2)
	Social determinants of health	35–40 (44.3–50.6)
	Developmental concepts	35–36 (44.3–45.6)
	Patient deterioration	33–38 (41.8–48.1)
Foundational knowledge	Anatomy and physiology	19–21 (24.1–26.6)
	Pathophysiology	20–23 (25.3–29.1)

Table 7. Perceived strong impact ("a lot") of virtual whānau on learning and knowledge application. Note: Ranges reflect multiple related items (for example, application and understanding domains).

Relationships between and across groups

The relationship between composite scales knowledge and understanding, application of knowledge, and clinical preparedness was investigated using Spearman Rank Order Correlation (rho). All three composite scales were positively and significantly correlated ($p < .001$). The strongest relationship was between knowledge and application ($rs = .872$), with application showing the strongest association with clinical preparedness ($rs = .609$). These results support progression from knowledge acquisition to application, with application of knowledge playing a key role in perceived clinical preparedness.

A Kruskal–Wallis test was used to see whether ethnicity groups differed in their responses to two familiarity items (Q.4):

> "I consider virtual whānau members to be real people."
>
> "Virtual whānau are representative of real-life situations."

A significant difference across ethnicity groups in perceptions of virtual whānau as real people was indicated, $H(3) = 15.56$, $p = .001$. Median scores indicated that ākonga Māori (tangata whenua) and tangata tiriti English-second-language (ESOL) ākonga, strongly agreed that virtual whānau members are real people ($Md = 1$), while tangata tiriti English-first-language (EFL) ākonga showed comparatively lower agreement ($Md = 2$). In contrast, there was no statistically significant difference between ethnic groups in how they rated virtual whānau as representing real-life situations, $H(3) = 5.31$, $p = .151$, with all ethnic groups reporting identical median scores ($Md = 1$) suggesting consistent responses across groups.

Kruskal–Wallis tests were also undertaken across composite scales (cultural and professional learning, knowledge understanding, application, and clinical preparedness) to compare ethnicity and ākonga year of BN responses. Significant differences across ethnicity were observed for cultural and professional understanding ($p = .001$) and knowledge understanding ($p = .045$), with tangata tiriti ESOL ākonga reporting higher scores than tangata tiriti EFL ākonga. Tangata whenua ākonga demonstrated similarly strong scores but did not differ significantly from other groups. No significant differences were found for application of knowledge or clinical preparedness.

DISCUSSION

This study shows that the BN virtual whānau supports ākonga to integrate theory into practice. Results of the survey reinforce the themes revealed during focus groups. Overall, ākonga expressed a very positive view on the virtual family as a learning tool. Most respondents indicated that the virtual family supported the understanding of concepts and their application, especially in areas like clinical reasoning, holistic care, and simulated practice contexts. Exposure to the virtual family was common among the teaching approaches across clinical and non-clinical theory courses. Lower perceived impact was found for foundational science topics (such as anatomy and pathophysiology). The ethnic group differences in perceptions of virtual family as "real people" are indicative of cultural-linguistic perspectives shaping how the ākonga relate to simulated or constructed learning stories. This is consistent with cultural learning theory (Leiberman & Kizis, 2026), which maintains that learners are situated in social and cultural contexts, from which meaning is mediated through prior experiences of learning, language, and cultural frameworks.

The general agreement in perceptions of virtual family as reflective of real-life situations indicates mutual recognition of the educational usefulness of such scenarios. Although ākonga may have different emotional or relational ties to virtual family, what they all agreed upon is that they have a usefulness in reflecting real-world clinical contexts. From a bicultural perspective, the virtual whānau enables tangata tiriti (non-Māori) ākonga to consider their own cultural assumptions and apply te Tiriti principles in simulation, while aiming that ākonga Māori see their own cultural reality reflected rather than marginalised. Nursing kaiako can support ākonga reflection through facilitated exploration of bicultural dynamics when using the virtual whānau in relation to their own cultural understanding.

While the virtual whānau supports students from all backgrounds, it needs to focus on a true bicultural partnership rather than just general diversity. This means honoring Māori as tangata whenua so their worldview is not treated as just "one of many" cultures. Findings indicate that the bicultural virtual whānau approach embeds Te Tiriti o Waitangi and culturally safe practice within the BN curriculum, consistent with expectations that cultural safety is grounded in relational practice, critical reflection, and responsiveness to inequity, as emphasised in the Nursing Council of New Zealand's updated guidance (NCNZ, 2026). It is also in line with Tiriti-led curriculum approaches that embed mātauranga Māori and relational ways of knowing in programme design (Severinsen et al., 2023). This suggests that while the virtual whānau model operationalises Te Tiriti o Waitangi within the curriculum, its impact is shaped by learners' cultural positioning, reinforcing the need for intentionally designed, culturally responsive pedagogy that supports reflexivity, inclusivity, and equitable engagement in culturally safe nursing practice. Intentionally embedding tikanga Māori into course delivery and lesson planning can prevent cultural practices being secondary to clinical tasks and theory application.

Ākonga Māori identified significant gaps in the application of Māori avatars and virtual whānau. Specifically, ākonga Māori noted an incongruence between authentic representation and reliance on cultural stereotypes, emphasizing that oversimplified profiles do not reflect the diversity of Māori experiences. Participants also felt that tikanga was sidelined in simulation labs, as task-focused clinical goals often took priority, reducing tikanga to a "box-ticking" exercise (Marsh, 2020). Additionally, ākonga highlighted the lack of whānau involvement and whanaungatanga. In actual clinical settings, Māori patients are surrounded by collective support networks, whereas virtual whānau members in simulations usually appear alone, removing key relational elements. Finally, participants called for deeper integration of mātauranga Māori. They advocated for region-specific details, such as whakapapa, hapū, iwi, dialect, and local tikanga, and praised the use of frameworks like Te Wheke (Pere, 1984) for supporting comprehensive holistic care. "Whanaungatanga" and having a "culturally responsive environment that affirms cultural identity," have been identified as positively supporting ākonga Māori nurses' achievement (Gray, 2021, p. 68). Purposeful application of tikanga requires consideration of how profiles and backgrounds information for Māori virtual whānau members best reflect te ao Māori with purposeful inclusion of tikanga practices in the development, planning, and delivery of teaching that includes the virtual whānau to avoid "tick-box Māori" (Marsh, 2020) approaches.

No genuine engagement with kaiako or ākonga Māori external to Māori course lecturers has occurred since 2018 when the Māori virtual whānau family names were reviewed, other than as part of this research. The authors were concerned that Māori virtual whānau must represent te ao Māori as authentically as possible, being cognisant of potential cultural appropriation. Aspects of the BN virtual whānau are seen by ākonga Māori as supporting mātauranga Māori, yet there

are many areas where authentic representation could be improved. This tension is particularly evident in face-to-face actor simulations. When non-Māori actors depict Māori virtual whānau members, it creates a potential breach of bicultural integrity that ākonga Māori readily identify. This does have limitations, especially within the simulation environment using actors, which ākonga Māori recognised that for practical reasons authenticity could not always be overcome. Ongoing engagement and partnership with ākonga Māori, kaiako Māori, and external hapū and iwi is needed to guide authenticity to avoid cultural appropriation.

Together, these findings suggest that while virtual whānau are effective in supporting shared understanding of clinical realism, educators should consider how authentic representation can strengthen a sense of connection and authenticity for ākonga. Resolving these practical limitations requires pedagogical transparency and intentional debriefing that explicitly addresses bicultural dynamics, power structures, and the boundaries of simulation. Enhancing authentic representation, incorporating diverse narratives, and explicitly supporting cultural meaning-making may help ensure that all ākonga can engage with virtual whānau in ways that are both educationally meaningful and culturally responsive. Further development of Māori whānau members may include whakapapa, and discussions of how we best represent Māori whānau members within kanohi ki te kanohi (face to face, in person) simulations in partnership with ākonga Māori, kaiako Māori, and external hapū and iwi.

LIMITATIONS

This research involves a specific teaching and learning strategy and resource within our BN programme. Nonetheless, we believe the findings indicate the benefit of an all-curriculum approach to virtual whānau across all theory and clinical courses. Participant recruitment for focus groups was impacted by timing of clinical practicums, and for the survey end of year exams and holiday breaks. The survey response rates were less than 30 percent for the potential participant group. However, the high percentages of positive responses indicate that these may still reflect the overall ākonga group.

CONCLUSION

Overall, despite differences in perceived authenticity and cultural learning, all groups demonstrated consistently strong agreement that virtual whānau are representative of real-life situations, indicating shared recognition of their clinical relevance. When considered alongside the strong correlations between knowledge, application, and clinical preparedness, these findings suggest that virtual whānau effectively support cognitive and applied learning across groups, while also revealing variation in relational engagement. Collectively, this research underscores the importance of designing learning experiences that are not only clinically authentic but also culturally responsive, ensuring that diverse learners can meaningfully connect with, and benefit from, educational approaches grounded in Te Tiriti o Waitangi principles and culturally safe practice. Authentic representation within the virtual whānau serves a clear pedagogical purpose: it moves beyond mere realism to embed Te Tiriti o Waitangi directly into nursing education. By incorporating bicultural co-design, tikanga, and structured self-reflection, this platform evolves from a routine simulation tool into a transformative model for teaching bicultural safety and health equity in Aotearoa.

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