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Social Frailty in the Context of Healthy Ageing in Aotearoa New Zealand

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ABSTRACT

For many older adults, maintaining optimal physical and cognitive function is more important than longevity. To optimise functional ability for older adults, developing a comprehensive understanding of the intersection of different determinants of healthy ageing from the perspectives of a group of diverse older persons is essential. The current research aimed to explore the essence of social frailty within the context of healthy ageing. We conducted seven focus groups consisting of 43 older Māori, Pacific people aged 55+ and non-Māori/non-Pacific people aged 65+, who are part of the culturally diverse landscape of Aotearoa New Zealand, to explore what social frailty meant to this cohort. The interviews were audio-recorded, and the data analysed using an inductive thematic analysis approach. Four themes emerged from the data with cultural backgrounds embedded within the intricate nexus of these: (1) physical and cognitive health, (2) mindset, (3) resources and (4) connections. Declining physical or cognitive health can impact an individual's confidence and motivation to maintain social connections, potentially leading to loneliness and isolation. Mindset, influenced by belief systems and cultural backgrounds, plays a pivotal role in activating (e.g., competency) and accessing (e.g., healthcare services) resources for physical and mental health and fostering social connections. The theme 'Connections' extends beyond family, friends and community to include aspects of whakapapa (genealogy) and spirituality. These findings informed the development of a social frailty framework that best characterises Aotearoa New Zealand. This research, conducted through interviews with older adults residing in the community, has enriched our understanding of social frailty. The cultural context lens is important because it reveals differences, both obvious and nuanced, in how people from diverse cultural backgrounds view social frailty. These insights extend a Euro-centric perspective of social frailty by acknowledging the role culture plays within the context of healthy ageing.

1 | Introduction

As the world population is ageing, the well-being of older people has become increasingly important. In Aotearoa New Zealand, older adults are expected to make up 21%–26% of the population by 2048 [1, 2]. Healthy longevity is likely to be a critical factor in reducing the healthcare burden and improving the quality of life of older adults.

Physical frailty is a complex and dynamic process that requires a multidimensional approach incorporating social and environmental elements to optimise vitality [3, 4]. Those who are

physically frail are also likely to be at risk of social frailty [5–7]. Social frailty may have a downstream effect, i.e., affecting daily living through reducing social roles, networks and activity, leading to worsening physical function and increased risk of poor health outcomes such as functional decline, institutionalisation, and mortality [8, 9]. A prospective study reported that social frailty increases the risk of developing physical frailty even among individuals described as physically robust 4 years earlier [10].

Existing studies investigating social frailty often incorporate the conceptual framework developed by Bunt et al. [11], who conducted a rigorous synthesis of 42 studies guided by Social Production Framework (SPF) theory. While these 42 studies originated from countries on different continents, Bunt et al.'s social frailty concept draws from a subset of standardised frailty tools (e.g., Frailty Index and Tilburg Frailty Indicator) developed in Western countries. Webber et al. extended the synthesis of social frailty concepts to include measures of social frailty [12]. However, the voices of older persons and the nuances of cultural backgrounds are missing in the understanding of the social frailty trajectory. Therefore, we decided to explore what social frailty means in different cultural contexts so that existing mainstream discourse and social frailty frameworks can be scrutinised in terms of their global applicability.

Acknowledging the cultural landscape and its impact on perspectives of social frailty is crucial to be able to meet the needs of older people from different cultural backgrounds. In reference to Aotearoa New Zealand, Māori (indigenous peoples of Aotearoa) and Pacific perspectives on social frailty are essential given the increase in cultural diversity and anticipated doubling of the 65+ population segment between 2018 and 2043 [13]. Elderly Māori and Pacific peoples' unique perceptions and lived experiences of social frailty have not previously been researched. Even in Aotearoa New Zealand, Māori knowledge, practices, and worldviews of 'ageing-well' have been ignored [14]. Likewise, Pacific communities living in Aotearoa New Zealand have their own unique cultural values regarding what healthy ageing means, and these views have not been rigorously documented [15]. A meaningful approach to embracing healthy ageing for kaumātua (older Māori) and Pacific elders requires a culturally encompassing concept of health and well-being, as proposed under the guiding principles of the Decade of Healthy Ageing [16].

The motivation for this research is to rectify the dearth of culturally contextualised research about social frailty. This paper gives voice to those groups who are an integral part of the cultural landscape of Aotearoa New Zealand so we are better able to understand and acknowledge their views on social frailty and what can be done to assist healthy ageing. It is evident that a deeper understanding of the intersection of the biopsychosocial framework of frailty across cultures lays the foundation for better integrated health and social care to optimise healthy ageing. This research aims to further explore and develop a social frailty framework for Aotearoa New Zealand.

2 | Methods

2.1 | Sample

We invited Māori and Pacific adults aged 55 years and above and non-Māori/non-Pacific aged 65 and above residing in Auckland and Tauranga. Auckland has the largest population segment of Pacific elders, and Tauranga has one of the largest populations of older adults [13]. A younger age group for Māori and Pacific adults was used due to their earlier susceptibility to health conditions usually linked with older age in the general populace and a lower life expectancy relative to non-Māori/non-Pacific groups [17, 18].

Recruitment: Participants were recruited individually using purposive and network-based strategies. Venue-based convenience sampling via flyers and word-of-mouth in local communities was implemented. Flyers were distributed strategically at locations frequented by older adults, including local libraries and community groups. Word-of-mouth recruitment was also undertaken via local churches, Pacific communities, and Hauora networks (distinctive health agencies unique to New Zealand and Māori). Interested persons were invited to contact the study team via a toll-free telephone or an email communication. Prospective participants were briefed on the study aim and procedures over the phone with a follow-up visit by a research assistant for further clarification.

We recruited five to ten participants per focus group from Māori, Pacific, and non-Māori/non-Pacific populations, respectively. We aimed to maximise variation and recruited older adults from diverse socioeconomic backgrounds to capture broad perspectives on social frailty. This sample size was determined based on pragmatic reasons, resources (time, budget) and logistical considerations.

As social frailty is a new concept in Aotearoa New Zealand, we applied an exploratory approach to the research topic [19]. We reviewed the conceptual model from Bunt et al. [11] to inform the initial framing of the inquiry, while remaining cognisant of its Western origins. Bunt et al.'s model is based on SPF theory, and it aligned with the broad focus of our project. However, it was not revisited during data collection and analysis. Our work on conceptual framing of social frailty in Aotearoa New Zealand is vital for future development of a social frailty scale which can be used within primary and secondary health care environments to enable early risk identification and guidance towards appropriate interventions to optimise physical and cognitive function in older adults. Drawing on both psychological and economic theories, SPF theory asserts that humans produce their well-being by optimising the achievement of universal goals (physical and social well-being) within resources and constraints [20].

Earlier consultation with Age Concern New Zealand revealed that the term 'social frailty' may have negative connotations. 'Frailty' has a pejorative implication, such as being weak, vulnerable, elderly, prone to falls, disabled, or lacking strength. Frailty as a clinical concept has different meanings depending on how it is understood and used amongst clinical specialists, the general public, non-clinical health care providers, and older persons [21]. The research team was cautious not to frame/label an older person as socially frail; instead, we wanted to develop an understanding of its role in healthy ageing.

2.2 | Consent and Ethics

Research assistants met with age-eligible adults to go through the ethics-approved participant information sheet. They were given time to consider the participant information details, ask

questions, and consult with family and friends before signing up to the study. All participants provided written informed consent prior to the focus group commencing.

At the start of the session, the facilitator reminded all participants about the intention of the study and confirmed permission for audio recording alongside explaining its purpose and how the recordings would be used. Participants were reassured that the researchers were interested in their views about social frailty and that there was no right or wrong answers. Ground rules were established, including being respectful of others' opinions, active listening, keeping comments relevant to the topic due to time limits, and one person speaking at a time. All participants were reassured about the confidentiality of their personal details and anonymity during data analysis and subsequent reporting of the study findings.

Participants' personal details were kept confidential in a secured locked cabinet at a restricted access location at the University of Auckland. All data were de-identified at transcription—names were removed, replaced with initials and unique study IDs, which were used for data analysis and when reporting quotations.

Sessions were held in accessible community venues with adequate parking. The research team organised transportation for those who could not drive or did not own a private vehicle. Light refreshments were provided, and all participants received a NZ$50 voucher as koha/contribution for their time.

The study was approved by the Northern B Health and Disability Ethics Committee, Ministry of Health, Ethics reference 2023 EXP 139974.

2.3 | Data Collection Methods

We used focus groups to explore the meaning of social frailty in the context of healthy ageing. This approach enabled us to gather essential data towards developing a social frailty framework that could represent the views of people living in Aotearoa New Zealand. Therefore, we were able to identify and explore a range of perspectives, ideas, and opinions about social frailty in the population of interest [22]. The interview script was carefully designed to generate an 'insider' perspective of healthy ageing and socialisation, using prompts that encouraged discussion and an exchange of ideas, as well as providing participants with opportunities to listen to and share life experiences rather than relying on isolated responses. The questions and prompts presented to study participants were adapted to, and aligned with, the cultural context of each focus group. Questions explored in the focus groups included:

- *How would you define healthy ageing?*
- *What role do you think socialising has on healthy ageing?*
- *How important do you think socialising is when it comes to health?*
- *Have you heard of the phrase "social frailty"? When you think of someone being socially frail—how would you describe what this is like?*
- *How do your cultural experiences link to healthy ageing?*

We were cognisant of the importance of cultural safety and the local language used with older adults. Three experienced female facilitators conducted seven focus groups: two focus groups in South Auckland and South/East Auckland hosted by a non-Māori/non-Pacific facilitator at local community halls; two focus groups in South Auckland specific to Pacific elders' facilitated by Pacific health researchers at a local Pacific elders gathering centre; and three focus groups in Tauranga specific to Māori kaumātua (elders) facilitated by local Māori health researchers at a local health centre. These locations—South Auckland (a higher NZDep Index), East Auckland (a lower NZDep Index), and Tauranga (mid-range NZDep Index)—covered a broad spectrum of Aotearoa New Zealand's socioeconomic demographic status from the least deprived (decile 1) to the most deprived (decile 10) [23]. All focus group discussions were audio recorded.

2.4 | Reflexivity

The research team had varied cultural backgrounds, reflecting the growing diversity of Aotearoa New Zealand's population. During the focus group interviews, facilitators communicated in a language familiar to the study participants and opened the session with appropriate cultural protocols (e.g., karakia/prayers). The facilitators reassured the participants that all thoughts were welcomed and encouraged them to be respectful of everyone's opinions.

For each focus group, the group facilitator was supported by at least one notetaker. The facilitator for the Māori groups was an established Māori researcher (AR), and she was supported by another trained Māori researcher (EK). The facilitators for the Pacific groups (TL, HNWS) were well known in their local communities and had considerable experience interviewing Pacific elders, conducted in their language (e.g., Samoan and Tongan). The facilitator for the non-Māori/non-Pacific group (PM) was a European New Zealander who had rich experience in qualitative research. She was supported by a Māori research assistant in the first focus group and a European New Zealander research assistant in the second group; both had made the initial contact with the study participants. The study lead (RT), a gerontology researcher, acted as a note-taker. All note-takers were silent observers and were able to ask for clarification when invited by the facilitators.

2.5 | Data Analysis Methods

Thematic analysis was conducted inductively, with codes and themes developed directly from participants' accounts rather than from pre-existing theoretical categories. In the non-Māori/non-Pacific groups, thematic analysis was carried out using Braun and Clarke's reflexive thematic analysis approach [24]. To interpret the data from the Māori participants, a Māori lens was used for analysis in conjunction with the thematic process. Initial codes were generated based on the focus group questions, which provided a saturated framework. Codes were grouped into themes and organised as guided by the interview questions. A Māori researcher performed coding, and then validation was undertaken by a second Māori researcher to ensure the accuracy and relevance of themes. To decipher the Pacific data, the study facilitators used a broad application of Braun and Clarke's reflexive thematic analysis [24] and overlaid this approach by applying the Fonofale model of health [25]. This framework recognises the holistic viewpoint of health from the perspective of Pacific peoples and acknowledges the contribution and

importance of all aspects of well-being and environment to achieve this. This approach allowed both a Western lens and a culturally safe Pacific perspective to be applied to the analysis, and this strategy has been used effectively in previous research projects [26, 27].

Themes from Māori, Pacific and non-Māori/non-Pacific groups were presented by respective facilitators for review, discussion, and critique at the expert group meeting consisting of a gerontologist, Māori and Pacific health researchers, Age Concern representatives, and a registered psychologist/psychometrist.

3 | Findings

The study recruited 43 older adults across seven focus groups: three in central Tauranga, three in South Auckland and one in East Auckland. These groups characterised community-dwelling older adults living in two cities with varying socioeconomic status in the North Island of Aotearoa New Zealand. Most participants were physically mobile and had retired from paid work. Interview duration ranged between 45 and 90 min. Table 1 presents participants' demographics.

3.1 | Themes

We asked a series of questions to elucidate the meaning of social frailty in the context of healthy ageing in Aotearoa New Zealand. We synthesised the key emergent findings from responses to the five questions by inspecting the transcriptions. Four themes emerged that helped us to understand the underlying notion of social frailty. These included: (1) physical health, cognitive function, and independence; (2) mindset; (3) resources and (4) connection. Cultural backgrounds and lived experiences are embedded within the essence of the themes.

3.1.1 | Physical Health, Cognitive Function and Independence

Across all groups, participants commented that physical health and social well-being are intertwined. Male participants emphasised physical fitness levels and physical dexterity and how the lack of it led to frustration. Women expressed concern about memory and physical frailty, leading to feelings of incompetency in daily activities. These factors are linked to confidence and motivation that can affect their ability to maintain or form social connections leading to social isolation by staying at home. Cognitive frailty may have a double follow-on effect on confidence levels; a non-Māori female participant described it as a *"somatic response to anxiety that you're not even consciously aware of"*. Others said,

> "...changing physical abilities and various injuries can progress on to social isolation, and then I don't try and go out unless someone else can come alongside or I make contact and motivate myself enough to go out." (RM, female, Māori)

> "Yes, I can cross that road, but your body won't meet you... I feel so silly, and lose that confidence." (MR, female, Māori)

A non-Māori/non-Pacific widow reflecting on her mum when she was in the 90s: "*...a little bit of senile dementia. Not bad, but just a little bit. And I think she just got to the stage that her courage wasn't what it used to be.*" *(RL)*

Another participant offered insight into a possible shift in social engagement that may come with ageing and related physical or psychological changes, "*I used to be out and about and that but now... sometimes I just want to stay home." (SR, female, non-Māori/non-Pacific)*"

3.1.2 | Mindset

Participants across all groups highlighted that mindset plays a significant role in physical health. Their belief systems and perspectives affect mental health and everyday life. Both males and females mentioned the inner drive (courage and confidence) to step out is a key driver to maintaining health, accessing resources and connecting with others.

> "You've got to go out and look for the things yourself as an older person ... if you don't have that ability to do that, your health can deteriorate quite quickly." (IB, female, Māori)

Building on this view, another participant acknowledged how upbringing influences the inner drive,

> "It's a matter of just being proactive. But it's hard to do that. When it's not instilled in us or *when* you've had one or two brick walls or speed humps, you kind of reverse back a little bit." (MR, female, Māori)

Across all groups, participants discussed the necessity of adapting to change, a process intertwined with the ability to adjust to varying circumstances. This adaptability necessitates both competency and a degree of self-sufficiency (autonomy).

> "...the biggest difficulty for me was the moment I became on my own. It's a hard learning process. I don't consider myself fragile. But even from what I consider a fairly *well*-adjusted aspect or point of view, I still found it very challenging. And I think that's where we look for the motivation, digging deeper to make it worthwhile. I guess we have to jump in the deep end and make our little groups that we join [and] belong to, a substitute family in a way..." (SC, widow, non-Māori/non-Pacific living in a retirement village)

TABLE 1 | Participants' demographics.

Ethnicity	Māori ($n = 20$)	Pacific ($n = 15$)	Non-Māori/non-Pacific ($n = 8$)
Sex	60% female, 40% male	33% female, 67% male	87% female, 13% male
Age	63–72	53–87	75–92
Location of residence	Tauranga and South Auckland	South Auckland	East Auckland

"Things are going to change, or recognise change when it happens, and being able to make a positive adjustment to that change... cognitive function, physical ability and good relationships... would be the three things [for healthy ageing] and a modicum of independence... for as long as you're able to do that." (RL, widow, non-Māori/non-Pacific)

Mindset is shaped by expectations of values and beliefs from respective cultural backgrounds. Maintaining independence and drawing on their own capacities was highly valued by non-Māori/non-Pacific participants. Contributing to and using resources within local communities was also considered important, and connection to local community groups was seen as vital to having a sense of belonging.

"My cultural *background* is to look after yourself and to have a firmer, upper lip sort of thing (RL, widow, non-Māori/non-Pacific)"

"My children look at me as if I'm still the same, 40 years ago, and I can still do the same things *back* then." (CP, widow, non-Māori/non-Pacific)

Māori and Pacific participants in all groups revealed the importance of being among people with similar cultural backgrounds, living out the expectations and fulfilling obligations (both social and cultural) that shape one's identity and impart a sense of belonging.

"It's those *values* and beliefs that we see role modelled and grow up with that... we carry throughout our life, what the unspoken expectations might be upon us. (RM, female, Māori)"

"A lot of us will embrace our culture because it's something that we're not frightened of because it's all around us. So I think we're really blessed to have our Māoritanga and the way we look at whānau." (ARA, female, Māori)

Experience of discrimination and perception of cultural awareness in the health system are some of the keys determining factors in seeking and accessing health care.

"...there are differences in the health system that affects Māori, they are treated *differently* in the hospital, you may not think so. But as Māori, I know. I've seen the journeys." (IB, widow, Māori)

"...historically, the only time you go to a hospital is when you're going to die. Also it's *around* the travel. It's also around being proud." (MR, female, Māori)

A non-Māori/non-Pacific widow married to a Māori man offered an interesting insight in response to experiences shared by Māori participants.

"...my [late] *husband* was Māori, and when I look back now, he did really well in the system, he was well taken care of...I wonder if he got more help simply because I was his advocate, I was there to ask the questions and make sure he was followed through? (GH, widow, non-Māori/non-Pacific)"

3.1.3 | Resources: Environment, Local Facilities, Transportation and Healthcare

This theme refers to the capacity to make lifestyle choices and access resources which can facilitate socialisation. In several groups, participants built on one another's reflections, reinforcing a collective understanding of this issue. Participants consistently commented that access to local facilities and groups was integral to socialising. However, this is linked to motivation—*"a person needs to want to access these facilities"*. A safe environment and availability of resources can be a catalyst to intrinsic motivation and vice versa. In one of the focus groups, a male participant was particularly vocal about concerns regarding law and order, and his comments temporarily steered the group discussion toward neighbourhood safety. Several participants responded by agreeing and highlighting and offered their own examples of how they keep themselves safe.

"...no way would I be walking whenever it's getting dark. I've got a dog, and it's a Labrador and *it's* a big dog, so I'm safe or safer." (RL, widow, non-Māori/non-Pacific)"

Neighbourhood safety (law and order) affects older adults' community movement.

Two focus groups with Pacific elders described differences between community structures in their birth countries and Aotearoa New Zealand; and shared how these have shaped the way socialisation occurs. In the Pacific Islands, the village environment is central to social interaction, whereas in Aotearoa New Zealand, local social groups (church) have now become a proxy 'village social hub'.

"Social *groups* are very important in villages in Samoa... There are no villages here in New Zealand, churches are now the unifying entity that acts as a village like how we were back home. The cultural way of life is practiced and enforced in churches. (GI, female, Pacific)"

Transportation is a key factor in getting to a social group/gathering/meeting with friends. All participants recognised that being financially viable enables them to connect and socialise; for example, owning and maintaining a car can make catching up with friends or attending meetings or interest groups more accessible.

"I like to *go* out, I still like to drive, I need the money to put the petrol in the car, I want to go to my groups, I need to be able to afford to do that, because some of them require an annual fee. (SC, widow, non-Māori/non-Pacific)"

For Pacific elders, younger family members are their main transportation providers for connection to social groups (church). However, it was noted that work demands impacted on the ability of the younger generation to provide transportation for the elders.

Female participants expressed the challenges financial constraints bring and how this impacts accessibility to health care. A non-Māori/non-Pacific female voiced her frustration with the care she received from her GP (general practitioner) and the resources available for managing her health and financial circumstances.

> "I drove I use my petrol, I'm paying for the doctor, but [the GP] still haven't addressed the *issue* ... I don't know if it's just aged people or that might be other walks of life as well. There's nowhere for us to go for the help." (YM, female, non-Māori/non-Pacific)"

> "Old people have not enough resources to find things for themselves, we have to go *discovering* it, we have to lift rocks up and lift things up to find things. (IB, widow Māori)"

3.1.4 | Connection

This broad theme across the groups encompasses connection with family, friends, community groups and beyond, i.e., whakapapa (genealogy) and spirituality. It is inextricably linked to the themes above. While each group had unique ways to describe connection, mindset was considered important when it came to making new or re-establishing connections. A female participant highlighted the impact of COVID-19 on social isolation and how she had to get used to reconnecting again. The following quotes expand on this theme.

> "I noticed when we got *locked* down [during] COVID, things changed. Well, my family were not in Auckland. So, there was just no contact really. And it was a time of reflection of coming out of that, it was a thing I tried to get back into the how you were before, took a lot of adjusting to it. (SR, widow, non-Māori/non-Pacific)"

> "I moved to a place *where* I knew nobody... I'm a joiner... I will find a group to join that serves my interests because I know I need that connection." (GB, female, non-Māori/non-Pacific)

As societies evolve, the dynamics between generations change. This shift impacted the lifestyle and social connections of Pacific elders more profoundly than the other groups in this study. Assumed responsibilities within Pacific cultures can influence how healthcare support and resources are sought. Pacific cultures prefer to rely on familial assistance rather than resorting to 'external' caregivers. With their adult children at work, Pacific elders often found themselves managing most household chores and caring for their grandchildren. In some instances, they also became the primary caregiver for an ill spouse. This situation hampered their ability to take time off from responsibilities to socialise with others. Moreover, there were instances where family members were unable to look after their parents or in-laws at home. Consequently, some Pacific elders had been relocated to aged residential care facilities, despite cultural preferences for the elderly to stay within the family circle. Such arrangements can diminish connection with their family.

> "My husband is a very sick person and my kids all work, so the weight of our home duties falls *upon* me. It gets very difficult to even have a life other than what I do at home. What I need is to have a break. I am getting old, but I am still doing my duties that I did when I was much younger. (LV, Female, Pacific)"

The caring role was also seen as a valued family connection with the younger generation and a source of motivation to keep active.

> "I'm fortunate in *that* I've got a mokopuna (grandchildren) to look after during the week. And that gives me a lot of motivation to get up and keep me occupied during the day ... it's just wonderful to have them around and be responsible for them." (ARB, Male Māori)

Connection is also about whakapapa (genealogy), a fundamental principle in Māori culture. Whakapapa is a way of forming a deep connection to one's ancestry and heritage through placing oneself in a wider context linked to the hapu (subtribe), the iwi (tribe), the land, the earth and the sky. It provides a sense of belonging and identity that goes beyond immediate family and friends.

"Whakapapa is everything. It is important for me to build relationships, happy relationships with your whānau, with your partner, but you also have your social relationships like coming to the gym or going into the kids' sports... And I think those are the things that will sustain us until the old age." (ARC, female, Māori)

> "I go back home sometimes to the marae (Māori meeting ground that symbolises history *and* genealogy), I do a lot of things at the marae, and so if there are tangihanga (funeral), I'm probably busy for three, four days, and that takes a big chunk out of my week. I get my social interaction between those things." (ARD, female, Māori)

There is also a connection to a higher state of consciousness in the form of spirituality. Pacific elders believed that connection with God was important in healthy ageing. For Māori participants practising spirituality connects all social aspects of *life*. In one group, A Māori male summarised their discussion and interactions saying that individuals' spiritual journeys are intrinsic to a holistic approach to health because beliefs are *"...like welding... the strongest chain is [its] weakest link"* (MF).

"We need to put God first in all we do. If we do that, healthy ageing, our well-being together with our faith in God, we will be more than alright." (GI, female, Pacific).

"I have a spiritual life. So, finding my spirituality, and I'm constantly in a community of people where we have a common interest, and I find that my heart gets fill from that." (ARE, female, Māori).

Although this subtheme did not emerge from non-Māori participants, a non-Māori male reflected on the role of the church as a gathering place when he was younger, indicating a different but parallel source of spiritual or communal grounding.

When we asked what social frailty looked like, participants were contemplative about it. They described social frailty as vulnerability or feeling frail in social settings—a lack of confidence and motivation to connect. This stems from self-awareness of physical capacity or feelings of anxiety or experiencing panic attacks when being away from their home. Māori participants talked about being awkward in social settings. Non-Māori/non-Pacific participants discussed the innate ability to socialise.

> "I would see [social frailty] as someone that is alone, that may look like they have everything, but are actually alone." (IB, female, Māori)

> *"My* interpretation *of social frailty is being afraid to go out or hesitant.*" (RL, female, *non-Māori/non-Pacific*)

Figure 1 depicts the interconnection between cultural perspective, cumulative lifetime exposure (cultural background) and mindset and how these might influence a person's access to and utilisation of resources to achieve/maintain physical and cognitive health and social and spiritual connections. Our findings suggest that to maintain optimal health (physical, mental and social), each component must function in concert to maintain an equilibrium of these tightly woven connections.

4 | Discussion

Loneliness, social isolation and frailty are all factors which can mitigate against healthy ageing. These terms are often conflated or used interchangeably; however, there are subtle differences. Loneliness is subjective and occurs when a person feels alone or unconnected to others; social isolation, however, is an objective concept whereby a person lacks connection, contact and interaction with others [28]. Frailty comprises physical and social realms, and this study aimed to explore how people construct the meaning of social frailty in Aotearoa New Zealand. Our findings resonate with the work of Bunt et al. [11], who state that the concept of social frailty is complex and multifaceted. Nonetheless, we extend Bunt et al.'s framework to provide a more holistic understanding of social frailty in older adults, creating more applicability to the Aotearoa New Zealand context.

First, physical and cognitive functions are integral to our social frailty framework. For example, participants' awareness of physical or cognitive frailty (a combination of physical frailty and impaired cognitive function) impacts their confidence in social settings, which likely creates a downward spiral. A healthy cognitive function is required for communication and interaction, decision-making and navigating complex social norms, and supporting emotional regulation. From this perspective, physical and cognitive health is an essential precursor to participation in social interactions.

Second, we observed how cultural background adds another layer moderating the interconnection between mindset (motivation, confidence, adaptability and self-determination) and access to health care resources. Navigating a complex healthcare system requires social skills, psychological resilience and the competency to connect with multiple healthcare providers. Furthermore, the (de)activation of these attributes lies in past experiences, including close or indirect encounters of discrimination or feeling culturally unsafe in healthcare. The impact of discrimination is multifaceted, especially within collective cultures such as Māori and Pacific peoples, where wellbeing of the family and whānau are central. It affects how and when healthcare resources are accessed in the context of the collective psyche. Studies show that access to healthcare differs across ethnic groups, with persistent disparities experienced in Aotearoa New Zealand by Māori and Pacific people [27, 29], and discrimination is recognised as an important determinant of health [29, 30]. It is imperative to embed cultural safety when developing intervention programmes to provide a 'safe' environment for older adults to access healthcare services [27, 29, 30].

Mindset, underpinned by cultural background and lived experience, also influences how one might attain and maintain connections. Cultures which are predicated on individualistic or collective models differ in their emphasis. For example, individualism privileges the importance of personal aspirations and responsibilities over those of a group, whereas separating the self, goals and responsibilities from family or community is less distinguishable in collectivistic cultures [31]. In our study, in general, non-Māori/non-Pacific participants reflected values associated with individualistic culture insofar as personal responsibility is concerned. Participants shared sentiments of not burdening their families and striving to maintain independence (for as long as possible). Participants engaged with community groups for regular social connections while emphasising the importance of family and their close relationships despite not always being 'close' geographically. This observation aligns with the hierarchy of resources attained to achieve well-being proposed in the SPF theory [11].

Māori and Pacific participants exhibited attributes associated with a collectivist culture. Family ties (nuclear and extended family) and tribal affiliation form the primary regular social connections, and the role of elder and kaumātua (Māori elder) is considered integral to the collective functioning and well-being of the community and family. An in-depth investigation on the happiness of older Māori reported that whanaungatanga (family relationships), more specifically being closely connected and involved in mokopuna (grandchildren) activities, caring or imparting mātauranga Māori and observing them by embracing Māori culture and identities, was central to happiness in Māori octogenarians [32]. Similarly, in a report on Pacific peoples' perspectives on ageing, Samoan and Tongan elders said increased responsibilities towards their families and continued involvement within community activities provided them with a sense of purpose and contentment together with opportunities to pass on cultural knowledge to younger generations [15]. However, as reported previously [27], Pacific participants described tensions which existed between fulfilling assumed family responsibilities and personal needs.

Study participants also attribute physical, mental and social wellbeing to connection with the transcendent spirituality and whakapapa (genealogy connections). In a systematic review, Koenig [33] found a positive relationship between spirituality and mental health and that the effect of spirituality on physical health is through an intermediary of psychosocial and behavioural pathways [33]. Whakapapa, in which whanaungatanga is built and maintained, provides a foundation for the inherent connectedness of the creation of the universe to people and the

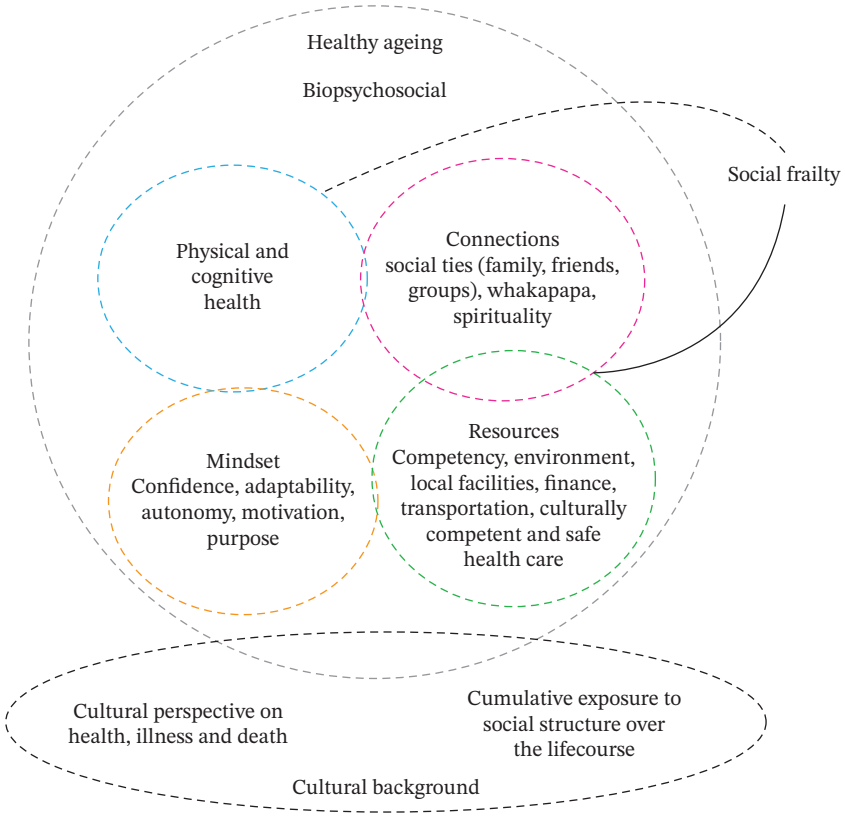

FIGURE 1 | Cross-cultural social frailty framework depicting the interconnection of domains contributing to healthy ageing where the belief systems and social structure influence the capacity to draw on resources. Disruption to the tightly linked resources, mindset, connections and physical and cognitive health domains contributes to social frailty.

interconnectedness between humans and the environment. For Māori participants, whakapapa operated as a foundational mechanism of connection, grounding identity and relational belonging. Through these connections, relationships are developed with people, place, the natural and spiritual worlds, and the Māori language [34]. Language is both a communication tool and carrier of cultural values, traditions, and worldviews, thereby embedding identity in communication. When individuals of shared culture and language greet and speak with familiar styles or colloquial expressions, they reinforce social bonds and cultural affiliation, contributing to a sense of inclusion and belonging—a participant described it as *'my heart gets filled'*. Although positioned here as a subtheme, we acknowledge that whakapapa is a comprehensive Māori framework, and its presence in the data signals the depth of relationality central to Māori experiences of ageing and well-being.

Our study provides insights into how older people from diverse cultural backgrounds mobilise the available resources to attain healthy ageing. Within the framework of SPF theory, resources can be classified as either tangible (e.g., physical health, mental capacities and material assets) or latent (social networks and hobbies) to achieve physical and social well-being [20]. Among non-Māori/non-Pacific older adults, independence is a highly valued goal achieved through physical and cognitive fitness, as well as mental capacities. Māori and Pacific older adults emphasised whanaungatanga and spirituality as central to health and well-being. While the concepts of whanaungatanga and spirituality are not explicitly discussed in SPF theory, they could be interpreted as latent resources. In some cases, spirituality functions as a substitute resource when other (tangible) resources are constrained, thereby supporting well-being. Our findings show that the different emphasis placed on instrumental activities to attain well-being in different cultural groups indicates the fluidity of the order of mobilising different types of resources that optimise healthy ageing.

Our research shows that participants shared common ideas about social frailty (i.e., resources and social connections), as described in the framework by Bunt et al. [11]. Moreover, study participants consistently recognised that intrinsic aspirations/life goals (e.g., physical health and meaningful relationships) served as a protective strategy against social frailty. Although extrinsic aspirations (e.g., material wealth) were not explicitly identified by participants, financial sustainability nonetheless emerged as a critical condition enabling individuals to maintain and engage in social connections. From these comments, we interpreted that the concept of social frailty extends beyond the loss of tangible and latent resources or diminished adaptive capacity; it also encompasses the diminishment of identity and sense of purpose. Studies show that the attainment of intrinsic aspirations is positively related to physical, mental, emotional and social health [35]. Intrinsic aspiration is related to life purpose but is not the same. Aspiration (e.g., keeping fit) can lead to a broader existential life purpose (e.g., contributing socially); a life purpose (e.g., contributing to the community) motivates specific goals (e.g., mentoring younger generations). Life and living are guided by individuals' belief systems which are often predicated through a cultural lens, and which operate subconsciously, informing aspirations and life purpose. The availability of resources is vital,

but when an older person is unable to access them in a timely manner, their health and well-being are impacted. Under a condition of having sufficient tangible resources, an individual's aspiration and life purpose, mediated through determination, serve as a catalyst for achieving health and well-being. Self-determination theory posits that autonomy, competence and relatedness are fundamental psychological needs integral to intrinsic motivations (e.g., enjoyment, fulfilment and satisfaction) [36, 37].

Several reviews helped to clarify our understanding of social frailty, its impact on health [38, 39], and existing measurements of social frailty [12, 40]. The majority of these reviews were derived from a previously published framework, and as a consequence, a narrow perspective on the concept of social frailty has arisen. Our study characterises social frailty as a prolonged disruption to the interaction of physical and cognitive health, connections, mindset, and resources, underpinned by determination, a sense of purpose, and the preservation of cultural identity. All these facets are essential for promoting healthy ageing. We hypothesise that the four domains in the framework interact dynamically to restore disruptions and achieve equilibrium for optimal physical and cognitive function. The ability to timely identify domain(s) that are needed to support and restore the equilibrium with specificity requires a tool that can account for cultural needs. Findings from this study can inform the development of a social frailty scale from a ground-up approach, i.e., themes emerged from the lived experience of older adults from diverse cultural backgrounds. Once validated, it has the potential to identify targeted areas for intervention for older adults at risk of accelerated deterioration in health. This will enhance the sensitivity of the tool and create greater global applicability. To our knowledge, this is the first study to explore the concept of social frailty with older adults from different cultural backgrounds.

4.1 | Study Limitations

Although the study included seven focus groups across two regions, the participants may not fully represent the diverse experiences of all older adults in Aotearoa New Zealand. The findings reflect the lived experiences of the study participants and the cultural communities about which they spoke. The study involved participants from multiple cultural backgrounds, and while we sought to meaningfully incorporate Māori and Pacific perspectives, we acknowledge that the research design was not fully kaupapa Māori or Pacific-led. Thus, some cultural concepts may warrant deeper exploration using culturally grounded methodologies. As with all qualitative research, the findings are not intended to be generalised but offer insights that may be transferable to similar contexts with cautious interpretations.

4.2 | Recommendations

These findings were gathered from community-dwelling older adults identified as Māori, Pacific and New Zealanders of European descent. The concept of social frailty might be different for other ethnic communities, aged care residents, homeless communities, disabled populations, LGBTQI + community and younger adults. Further inclusive research is mandated to explore the full cultural landscape of Aotearoa New Zealand and beyond.

5 | Conclusion

This research, conducted through interviews with older adults, has enriched our understanding of social frailty as it applies to the Aotearoa New Zealand ageing context and thus adds to existing models developed within a European context. These findings informed the development of a social frailty conceptual framework for Aotearoa New Zealand, which has potential to better facilitate integrated and optimal care in primary and secondary care settings for older adults.

Author Contributions

Conceptualisation—Ruth Teh; data curation—Ruth Teh, Anna Rolleston, Tulua Leaumoana, Philippa Miskelly, Karen Campbell; formal analysis—Anna Rolleston, Tulua Leaumoana, Philippa Miskelly, Ruth Teh; funding acquisition—Ruth Teh, Matire Harwood, Anna Rolleston, El-Shadan Tautolo; investigation—Philippa Miskelly, Anna Rolleston, Tulua Leaumoana, Hoy Neng Wong Soon; methodology—Ruth Teh, Philippa Miskelly, Anna Rolleston, Tulua Leaumoana, El-Shadan Tautolo, Matire Harwood; project administration—Karen Campbell, Tulua Leaumoana, Hoy Neng Wong Soon, Anna Rolleston, Erina Korohina; resources—Ruth Teh, Karen Campbell; supervision—Ruth Teh, Matire Harwood, Marcus A. Henning Anna Rolleston, El-Shadan Tautolo; validation—Ruth Teh, Matire Harwood, Anna Rolleston, El-Shadan Tautolo, Tulua Leaumoana, Hoy Neng Wong Soon, Philippa Miskelly; visualisation—Ruth Teh; writing–original draft; Ruth Teh, Philippa Miskelly, El-Shadan Tautolo, Anna Rolleston; writing–review and editing—All authors.

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Disclosure

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Ethics Statement

The study was approved by Northern B Health and Disability Ethics Committee, Ministry of Health, Ethics reference 2023 EXP 139974.

Consent

All participants provided written informed consent to publish the study findings in scientific journals, excluding any personal information.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data used for this study include personal and identifiable information from participants, and so the transcripts of interviews and focus group discussions are not publicly available due to privacy or ethical

restrictions. Sections of transcripts are able to be shared on application to the corresponding author.

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