

# Whanaungatanga and social capital: experiences of Māori unpaid caregivers during the COVID-19 pandemic

Shinya Uekusa<sup>1</sup> , Suzanne Phibbs<sup>2</sup>, Steve Matthewman<sup>3</sup>, Marcus Tamaira<sup>4</sup>, Tyrone Barnard<sup>1</sup>, Christine Stephens<sup>4</sup> and Fiona Alpass<sup>4</sup>

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## Abstract

This article examines the experiences of Māori unpaid caregivers during the COVID-19 pandemic, focusing on whanaungatanga (relationships, kinship) as crucial components of social capital. Through 35 in-depth interviews conducted between May 2023 and April 2024, we explore how the disruption of familial gatherings due to lockdowns impacted participants in our study, but also how digital technology and strong whānau (family) and community connections helped mitigate these effects. The study situates whānau experiences within Bourdieu's capital theory, illustrating how Māori cultural values act as both social and cultural capital embedded in whanaungatanga, reinforcing unpaid caregivers' adaptability. Despite challenges posed by the pandemic, participants utilised digital forms of cultural capital to maintain whanaungatanga, while some experienced reconnections with whānau, deepening their cultural and emotional bonds. This article contributes to the understanding of Māori unpaid caregiving practices during crises, offering insights into intersections between different forms of capital in times of disruption.

## Keywords

cultural capital, pandemic, social capital, unpaid caregivers, whānau caregivers, whanaungatanga

## Introduction

Unpaid caregivers—also referred to as informal caregivers—provide care for whānau (family) members, partners, close friends and neighbours due to age-related needs, injuries, cognitive or physical decline or disability, without compensation from organisations or authorities and often without sufficient training and resources (Bom et al., 2019). As the backbone of the health system, they play a critical role in sustaining care provision—one that became even more critical during the COVID-19 pandemic. Māori unpaid caregivers, as the Indigenous population of Aotearoa New Zealand, faced unique challenges as they sought to uphold cultural traditions of caregiving while adapting to rapidly changing public health measures such as lockdowns and social distancing (Barnard, Uekusa, Phibbs, et al., 2025; Moeke-Maxwell et al., 2024). While there is a well-established body of research on Māori caregiving practices (Frey et al., 2017; McGiven & Fouché, 2025), the specific impacts of the pandemic on their informal caregiving experiences remain underexplored. This gap is significant because Māori embody uniquely holistic health beliefs and practices that are deeply rooted in tikanga (cultural values, customs), which privilege connection to whenua (land), whānau and whakapapa

(genealogy, genealogical connections to land, hapū and iwi) (see, e.g., Barnard, Uekusa, Phibbs, et al., 2025). Caregiving for kaumātua (older people), whānau and extended whānau is not only a desirable practice but also a cultural expectation for Māori (Nikora et al., 2004; Williams et al., 2018).

Aotearoa New Zealand's pandemic response was internationally recognised for its “go hard, go early” approach, which involved strict lockdowns, extensive border controls, a “bubble” system that required households to isolate together, and a nationwide vaccine rollout (Cumming, 2022; Ministry of Health, 2024). While these measures—implemented through to the end of 2021—were

<sup>1</sup>Department of Sociology and Anthropology, University of Canterbury, New Zealand

<sup>2</sup>School of Health Sciences, Massey University, New Zealand

<sup>3</sup>School of Social Sciences, University of Auckland, New Zealand

<sup>4</sup>Health and Ageing Research Team (HART), School of Psychology, Massey University, New Zealand

### Corresponding author:

Shinya Uekusa, Department of Sociology and Anthropology, University of Canterbury, Private Bag 4800, Christchurch 8140, New Zealand.  
Email: shinya.uekusa@gmail.com

effective in limiting viral transmission and achieving a lower mortality rate compared to other countries, research has shown that this has come at a price. Unpaid caregivers faced significant challenges due to these lockdowns and related COVID-19 public health measures (Allen et al., 2022; Frey et al., 2024). These challenges were particularly pronounced for Māori unpaid caregivers, who often rely on close-knit familial networks and cultural practices to support their caregiving roles. The literature argues that core tikanga Māori, such as whanaungatanga (kinship, relationships, sense of family connection, connection through shared experience, reciprocity) and manaakitanga (respect, kindness, generosity to others), serve as protective factors for kaumātua and other care recipients (Dudley et al., 2019; Dutta, 2007). However, the social and cultural capital embedded in whanaungatanga—the networks, shared values, and obligations that provide care, support and solidarity—were severely constrained by pandemic measures, and little research has been conducted into how tikanga supports the well-being and practice of unpaid caregivers, especially in the face of pandemics and disasters. The pandemic exacerbated the isolation of many unpaid caregivers—already considered vulnerable before the pandemic and often disconnected from the formal health system—as social distancing measures and disruptions to health care services separated them from whānau as their primary source of support (Egan, 2020).

There is limited research on the experiences of Māori unpaid caregivers, particularly concerning how whanaungatanga was leveraged to cope with pandemic-induced challenges. This article seeks to address this gap by drawing upon Bourdieu's (1986) concept of social capital to explore the crucial role that cultural values and practices play in sustaining Māori unpaid caregivers during times of crisis. This research pays particular attention to how unpaid caregivers navigated the unique pressures brought about by the pandemic, even while whanaungatanga was disrupted.

## Theorising whanaungatanga and social capital in caregiving contexts

We aim to interlink social theory with Māori practices to shed light on the operationalisation of whanaungatanga and its application in informal caregiving, particularly during the pandemic. While whanaungatanga and social capital are distinct concepts, they intersect in meaningful ways within Māori caregiving practices. Even so, there has been limited scholarly attention to theorising these connections (see, e.g., Le Grice et al., 2017; Robinson & Williams, 2001; Tompkins, 2015 for general applications of social capital concepts in Māori research).

Social capital is traditionally understood as the value, trust, reciprocity and resources derived from network membership (Coleman, 1988), and, for Bourdieu (1986), the network itself is also a form of social capital. Bourdieu's framework posits that all forms of capital—cultural (knowledge, attitudes, experiences, skills, qualifications), economic (financial and material resources), social and symbolic (prestige and value)—are not isolated but often interconvertible and interdependent. This means that one

form of capital can be converted into another under specific circumstances - for example cultural knowledge generating social networks, and that their effects are mutually enforcing (Bourdieu, 1986, 1993). This interconvertibility and interdependence enable us to explore how Māori cultural values are not only manifestations of cultural capital but are also mobilised as social capital in everyday caregiving contexts.

Whanaungatanga is a foundational value in Māori culture, emphasising relationships, reciprocity and obligations to whānau and others (Berryman, 2008; Reilly, 2004). It plays a crucial role in Māori cultural identity, and its principles are embedded within caregiving practices. Alongside other tikanga such as whakapapa and manaakitanga, the strong familial ties inherent in whanaungatanga provide a reservoir of reciprocal support that unpaid caregivers can draw upon to access practical, emotional and material resources—or capital, in Bourdieu's term. These values thus help empower caregivers and support caregiving roles. Robinson and Williams (2001) highlight how cultural obligations and reciprocity are key to Māori lifestyles, “naturally” reinforcing caregiving practices through cultural principles.

Bourdieu's (1986) notion of the interconvertibility and interdependence of capital is particularly relevant to Māori informal caregiving. Māori unpaid caregivers mobilise cultural capital—such as whanaungatanga and manaakitanga—into social capital, using deep-rooted cultural practices and values to support caregiving roles. This conversion can enhance the quality and effectiveness of informal caregiving, ensuring that caregiving may not only be a familial responsibility but also a culturally enriching experience. In this way, Māori informal caregiving practices exemplify how cultural and social capital are activated and exchanged, reinforcing communal ties and prompting the well-being of both Māori unpaid caregivers and care recipients. The interplay between these forms of capital not only supports the immediate needs of caregiving but also strengthens the broader social fabric of Māori communities, making caregiving both a shared responsibility and a mana-enhancing experience.

## Māori unpaid caregivers

Informal caregiving within Māori communities is predominantly carried out by whānau, relatives and friends, with women taking on a significant portion of these responsibilities (Alpass et al., 2014). This caregiving is not merely a practical necessity but a culturally meaningful practice that upholds manaakitanga, whanaungatanga and aroha (compassion, love). Research emphasises the Māori cultural preference for caring for kaumātua at home (Oetzel et al., 2015; Townsend, 2011). Therefore, for Māori, caregiving is deeply embedded in cultural expectations, with caregiving responsibilities often seen as a natural extension of values that form the core of Māori society (Collins & Willson, 2008; Nikora et al., 2004).

Yet much of the existing literature on informal caregiving in Aotearoa New Zealand tends to generalise across populations, often overlooking the unique cultural contexts and needs of Māori unpaid caregivers. This underrepresentation

is concerning, as it obscures the specific challenges and strengths of Māori unpaid caregivers' experiences. What limited research exists highlights the distinctive nature of Māori informal caregiving (e.g., Lapsley et al., 2020; Simpson et al., 2022), but more studies are needed to understand the full scope of these experiences. Māori unpaid caregivers often operate within cultural obligations, which can both empower and burden them in ways that differ from non-Māori unpaid caregivers (e.g., Barnard, Uekusa, Phibbs, et al., 2025; Lapsley et al., 2020; Simpson et al., 2022). In addition, the intersection of informal caregiving with other aspects of Māori culture, such as the importance of maintaining connections to land, spiritual well-being, whānau, hapū (sub-tribe), iwi (tribe) and wider community (Barnard, Uekusa, Phibbs, et al., 2025; see Durie, 1985, 2004 for a holistic approach to Māori health and well-being), further complicates the caregiving experiences and requires deeper exploration. Understanding these dynamics is crucial for developing policies and support systems that are culturally responsive and effective in meeting the needs of Māori unpaid caregivers and care recipients.

### Informal caregiving during the COVID-19 pandemic

The pandemic exerted unprecedented pressure on global health systems, including for unpaid caregivers who often found themselves in short supply of necessary health and social services and resources (Barnard, Uekusa, Stephens, et al., 2025; Schmitz et al., 2024). International studies have documented this increased workload—which included not only the physical demands of caregiving but also heightened emotional and psychological stress—exacerbated by lockdown measures and other restrictions (Budnick et al., 2021; Monahan et al., 2020). Despite the crucial nature of their role, the full implications of pandemic-related restrictions on the physical and mental well-being of unpaid caregivers remain unclear (Allen et al., 2022; Ngamasana et al., 2023).

The literature to date presents a divided picture regarding the experiences of unpaid caregivers during the pandemic in Aotearoa New Zealand and overseas (e.g., Allen et al., 2022; Lightfoot et al., 2021). While many studies emphasise strain, such as limited formal support access, increased financial pressure, and emotional exhaustion, others highlight more nuanced experiences. Some caregivers reported enhanced connection with care recipients, emergent support networks and a renewed sense of purpose or cultural connectedness within caregiving relationships (Allen et al., 2022; Barnard, Uekusa, Stephens, et al., 2025; Morrison & Williams, 2020; Uekusa et al., 2025). These divergent findings suggest that informal caregiving experiences were shaped by a range of intersecting social and cultural factors, including cultural context, access to (in)formal support and resources, location, household composition and existing community or neighbourhood ties (e.g., Allen et al., 2022). Given these mixed findings, there is a pressing need for more theoretical and empirical exploration, using more critical perspectives, that delves into the diverse experiences of unpaid caregivers,

particularly within specific cultural contexts. This approach is especially relevant for Māori unpaid caregivers in Aotearoa New Zealand, whose caregiving practices are deeply intertwined with cultural values. Understanding how these cultural practices shaped informal caregiving experiences during the pandemic can offer valuable insights into both adaptability - The term “adaptability” (Mihaere et al., 2024) is preferred over “resilience” as it is a culturally-driven process where mental strength, resilience and resourcefulness are cultivated within the context of robust community capability, support and whanaungatanga - and vulnerabilities of Māori unpaid caregivers in times of disasters and crises.

### Research methods

This present study forms part of a larger project exploring the experiences of informal caregivers in Aotearoa New Zealand during the pandemic ( $n=81$ ), with a specific focus on Māori participants ( $n=35$ ). Acknowledging Māori perspectives and ways of being, the research team, which includes a Māori adviser and Māori peer researcher (both co-authors of this paper), employed a Māori-centred research framework (Cunningham, 2000)—research conducted by, with and for Māori. Further, to ensure cultural sensitivity and adhere to the principles of Te Tiriti o Waitangi and The Treaty of Waitangi, the Māori peer researcher led the research team to conduct most interviews with Māori participants.

From May 2023 to February 2024, the research team travelled across Aotearoa New Zealand, from Paihia to Invercargill, conducting face-to-face kōrero (conversations) with participants. Participants were recruited from the New Zealand Health, Work and Retirement (HWR) study cohort, a longitudinal study of individuals aged 55 and over by Massey University's Health and Ageing Research Team (HART), based on the following inclusion criteria: a) self-identified as informal caregiver during the pandemic; b) reported caregiving experiences during the pandemic; and c) expressed interest in participating in in-depth interviews. From the survey cohort ( $n=4351$ ), eligible participants ( $n=407$ ) were identified and invited by mail. More than 80 individuals responded via email or phone, and 81 interviews were subsequently conducted. For this paper, we analysed the narratives of participants who self-identified as Māori ( $n=35$ ).

Of the 35 participants, 23 were women, and 12 were men, with 15 residing in rural areas. While some participants cared for multiple people simultaneously, most were caring for their spouses or partners. Data collection involved semi-structured interviews, enabling participants to share their caregiving experiences, concerns and challenges. The interview guide was informed by our previous research and relevant literature and included a mix of closed and open-ended questions, with prompts and follow-ups, focusing on their social relationships, caregiving experiences during the pandemic, and the influence of cultural practices, social networks and social/environmental factors. Interviews lasted approximately one hour, with some extending to two hours. Although the primary focus was on caregiving experiences during the pandemic, in most interviews,

discussions often extended to broader issues of well-being and everyday experiences such as government vaccine mandates and tangihanga (Māori funeral rites) restrictions, reflecting caregiving as an integral part of participants' everyday life. After the interviews were transcribed by the research team, we used thematic analysis (Braun & Clarke, 2006), which involved familiarising ourselves with the data and identifying key recurring themes. The role of whanaungatanga emerged as one of the central themes explored in this paper, while other themes are addressed in separate papers (please see Barnard, Uekusa, Phibbs, et al., 2025; Barnard, Uekusa, Stephens, et al., 2025; Uekusa et al., 2025). Throughout the analysis, the research team worked closely with the Māori scholars on the team to ensure that the analysis was conducted in a culturally appropriate manner, with interpretations reviewed by them.

This research, classified as low risk, received ethics approval from the Health and Disability Ethics Committee (reference #: 2022 EXP 13416) as of 22 October 2022. To protect participants' privacy, all identifiers were removed, and Māori names for manu (birds) were chosen as pseudonyms for participants in the analysis - the pseudonyms reflect their connections with atua (deities, ancestors) and the significance of manu within cosmogonical narratives as carriers of te reo (language), messengers and tohu (signs, symbols).

## Findings

As Segall et al. (1998) observed, while family support systems are universal, how they are manifested and experienced are shaped by cultural and other forms of capital. For Māori unpaid caregivers in this study, whanaungatanga formed a vital aspect of their caregiving experience, as they frequently identified whānau as their primary source of mutual support. However, this form of cultural capital—deeply rooted in tikanga—extends beyond the nuclear family to encompass the broader whānau, hapū, iwi and community, creating Māori-specific social capital that enhances adaptability in the face of adversity (e.g., Kenney & Phibbs, 2015; Phibbs et al., 2022). It was whanaungatanga that took on heightened importance during the pandemic, particularly for whānau living in proximity - for example on the same street, next door - to care recipients. The lockdowns significantly disrupted relational bonds between whānau, highlighting how whanaungatanga functioned as an interdependent form of social and cultural capital, offering sources of emotional and practical support that underpinned pandemic-related strength and adaptability.

In the following sections, the findings are organised around three key themes identified in our sub-analysis of whanaungatanga: a) the central importance of whanaungatanga in shaping participants' caregiving experiences and support networks; b) the disruption of whanaungatanga and social capital due to pandemic-related restrictions; and c) the strategies participants used to maintain or restore whanaungatanga, including the use of digital technology and reconnection with whānau. Through the lens of Bourdieu's (1986) capital theory, we see whanaungatanga as an interdependent form of cultural

capital that is converted into or from social capital, which was challenged by the pandemic's constraints but negotiated by participants and their whānau.

### *Importance of whanaungatanga for Māori unpaid caregivers*

References to whanaungatanga were common in our interviews. Tūi, a participant in her 70s, living in a rural area and caring for her husband, underscored the familial obligation to ensure the well-being of (extended) whānau members:

I would not say [family support system] is specifically Māori. But I just think it's our family, we wanted to make sure that we were all OK, you know? We and [our extended whānau] were all okay. And because we had a whole lot of meat, we wanted to make sure that they had meat too.

This reflection highlights the deep interconnection between whānau members and the shared responsibility embedded in tikanga and whanaungatanga.

Kōkako, a participant in his 70s, caring for his grandchildren and partner's sister, also recalled neighbours and friends supporting each other through dropping off kai (food):

I did not find [lockdowns] all that troublesome. The neighbours and friends were very good, bringing kai in the early stages, you know? They came and dropped off food for us. And some more distant friends were dropping food and things. There is an outfit, normally meets down in town, where you take your veggies in, and if you've got a surplus of silverbeet, or whatever it is we have got a lot of, you just take it in and people were doing that and dropping it off at one another's places.

In Māori culture, kai is inherent to manaakitanga and other tikanga such as kotahitanga (unity); as such, participants overwhelmingly spoke about whanaungatanga in relation to the sharing of food. Preparing and dropping off meals was also common among tauwi (non-Māori) communities, with the particular context of the pandemic creating a space for altruism and what has been described as "disaster *communitas*" (Matthewman & Uekusa, 2021) where people temporarily adopted communal values and practices - rather than individualistic ways of being and seeing the world - typically associated with Indigenous and ethnic minority communities. These practices were long-established in Māori culture, and supporting each other by sharing and delivering kai during lockdowns emerged as a culturally significant act when other traditional ways of gathering together, such as hui, became unavailable. Through this emergent social capital (Uekusa et al., 2022), acts of care and networks of mutual support were strengthened, ensuring not just physical sustenance but also social cohesion. For Māori, these connections are not only about material support but also about affirming identity and solidarity within whānau and community structures (Gilchrist, 2017). The exchange of resources, such as kai, functioned as both a material and symbolic exchange, reinforcing bonds within whānau and neighbours. Kiwi, a participant in her 60s, living in an urban area and caring for her flatmate, further or explained:

The guy next door was great. He was dropping over vegetables or fruit because he worked for [a national grocery chain], delivering food, and would occasionally bring fresh vegetables and fruit for us. He left a bag by the gate and say: “There are fresh veggies and fruit for you”. It was great.

Similarly, Korimako, a participant in her 60s, living in a rural area and caring for her father-in-law and neighbour, also talked of mutual support through dropping off food:

[a neighbour] who lives across the road had a lot of complications. And it was COVID. So people were saying to her, “You have to look after yourself”. But I said, “No, we’ve got to set up [something for her]. Everybody’s got to take a meal down to her every night”. [My husband] was like, “We can’t come in contact with her because we can get COVID”. I said, “Let’s put it on the porch”. You can’t leave these old people just like that, which potentially a lot of elderly people were left like that.

The exchange of kai was a culturally significant act that, as Bourdieu (1986) would argue, represents an interplay of multiple capital. Such acts of reciprocity reinforced existing social networks, ensuring that, even during the lockdowns, participants could rely on their whānau and community for support. Bourdieu’s capital theory illuminates how these exchanges, while often informal, implicit and culturally embedded, constitute crucial forms of capital—both material resources (like food) and symbolic resources, such as the relationships and social networks that affirm identity, connection, and cultural continuity—that enhance adaptability and foster collective care. Thus, it is not surprising that participants indicated that they did not find the lockdowns particularly challenging, largely due to the sense of togetherness and adaptability embedded in whanaungatanga—cultural expectations of looking after whānau and others, and strong networks of mutual aid. These acts of mutual support exemplify the conversion of cultural capital into or from social capital and its interdependence, a dynamic central to Bourdieu’s framework, where caregiving practices both draw from and reinforce collective identity and network-based response.

While social distancing and lockdown measures meant participants focused largely on their hononga (joining, connection) within their immediate bubbles, neighbours and community members, many also mentioned organised community support. Such support, an emergent form of social capital during disasters (Uekusa et al., 2022), was relatively widespread, with groups like the Student Volunteer Army providing a well-publicised nationwide shopping service for individuals who could not easily leave their houses (Nadkarni, 2020). Interestingly, however, participants spoke only of Māori-led organisations, suggesting participants were perhaps either unable to look beyond their immediate support systems, remained unaware of other services, or had a clear preference for culturally informed support. Huia, a participant in her 60s, caring for her husband, recalls the support provided by a Māori social service organisation:

Without my daughter, I wouldn’t have known [names agency]. After we got that sort of help, it was nice. They started coming out, and it was just through [names agency]. They started saying things like, “Oh, have you got this?” And then I got food parcels, and then they brought my mum a food parcel. I felt . . . the word is grateful because you didn’t feel quite alone, and I was starting to get that help for my husband.

In contrast to the localised social capital generated and shared within bubbles and among neighbours in proximity, these organised supporting efforts—both pre-existing and emergent—played a crucial role, especially for those whose familial and neighbourly connections provided limited economic and social capital (e.g., Cram, 2020; Nadkarni, 2020; Wynn, 2021). For participants like Huia, access to essential resources would have been constrained without the organised support from social service agencies, underscoring the importance of institutional support in bridging gaps where localised familial and communal networks were unable to provide sufficient economic and social capital. These forms of capital—both individual (within bubbles) and collective (through organisations and community groups)—interacted to help sustain unpaid caregivers (and care recipients) during the pandemic, reinforcing the value of manaakitanga and whanaungatanga that transcend the immediate whānau.

It was not surprising, then, to see a recurring emphasis on whanaungatanga in the interviews. Both whanaungatanga and manaakitanga seem to serve as vital, both interdependent and interconvertible, forms of cultural and social capital, reinforcing Bourdieu’s notion that social networks and shared cultural norms can convert into tangible resources. As with the participants quoted above, whanaungatanga fostered strong connections within immediate whānau, neighbours and community, while, in some cases, organised support networks supplemented the social and economic capital required to navigate the challenges of the pandemic.

### *Disruption in whanaungatanga*

Despite the paramount importance of whanaungatanga, participants lamented the disruption of their regular family gatherings and connections due to COVID-19 restrictions. These heightened feelings of isolation, particularly among older Māori unpaid caregivers (and presumably care recipients) are given the strong cultural ties and significance of whānau. This section focuses on how whanaungatanga and social capital were disrupted during the pandemic.

Kiwi expressed her distress at being unable to connect with her whānau and mokopuna [grandchildren]:

Not seeing my whānau, not seeing my kids and my moko [grandchildren], I hated it. We couldn’t see each other. I was looking after [my moko] every week, and I was going over to [my son’s]. I was going to see everybody’s face. I’m in everybody’s face [laughs]. I got the right to see them all the time, but I couldn’t see anyone.

Kiwi’s emotional struggles around not being able to see her children and grandchildren during the lockdowns are evident

here, highlighting how the disruption to whanaungatanga directly impacted her sense of well-being. This was particularly challenging for many Māori since, as Le Grice et al. (2017) noted, children are an integral part of everyday life. Similarly, Pīwakawaka, a participant in her 60s living in a rural area and caring for her husband, shared her sentiments about the importance of familial connections and traditions, which were disrupted by the pandemic:

As a whānau, as you get older, you realise how important connections are. Whānau connections and family. And stopping to see them, everybody being available for fish and chip night, and we celebrated Matariki [Māori New Year]. Everybody in whānau, marae style, we make an effort to get together.

In some cases, the pandemic presented formidable challenges by severing ties between caregivers and their care recipients, as well as disrupting the support networks of whānau. Tūi described the emotional toll of being unable to accompany her husband during hospital visits:

The experience of not being able to go into ED [the emergency department] with him was difficult. I realised actually how important it is that you can be there and that it's really important [for him] to have that support person there.

In November [2021], after the first chemotherapy, his heart failed. I took him into ED at [name of city] hospital, but I wasn't allowed to stay with him. I could only drop him, and it's a bit of a worry when you can't be there to make sure that the right message gets through, and I think everyone, no matter what the situation, should be allowed to have a support person with them. I just dropped him at ED.

Throughout the pandemic, hospital protocols enforced stringent isolation measures, severing the vital connections between some care recipients and their family support. These disruptions had far-reaching consequences, not only for the health and emotional well-being of the care recipients but also for the caregivers themselves (see also Masters-Awatere et al., 2023). The disconnection from whānau struck at the core of Māori well-being, and these accounts reflect the profound disruption in kinship ties and caregiving responsibilities. It signifies a temporary rupture in both the cultural and social capital that typically flows through whānau networks.

### *Minimising the impact of whanaungatanga and social capital disruption*

As with many other social groups, urbanisation and increased mobility - including forced internal migration - among Māori have meant that immediate and extended whānau do not necessarily live in proximity and, in these cases, there are less intensive support networks (Durie, 2004; Le Grice et al., 2017). This situation posed a significant challenge during the lockdowns, when Māori unpaid caregivers were physically separated from their whānau and, in some cases, their care recipients. However,

according to participants, some mediating factors helped minimise the impacts of whanaungatanga disruption, including the use of digital technology and reconnection with whanaungatanga.

As restrictions limited physical expressions of whanaungatanga, many participants turned to digital tools to maintain relational ties. Within Bourdieu's framework, this reflects a shift from embedded cultural capital to what scholars term "digital (cultural) capital" (Ignatow & Robinson, 2017)—technological skills and resources—that sustained social cohesion in the pandemic context. While Māori were already exploring creative ways of using technology to maintain cultural connections (e.g., O'Carroll, 2015), the pandemic magnified the importance of digital capital in regaining social capital, especially a sense of social inclusion and belonging (e.g., Newman et al., 2019). In addition to Bourdieu's original idea, digital capital can be understood as a subset of cultural capital, referring to one's ability to use and navigate digital technologies for various purposes, including communication (like telehealth and other digital health interventions) accessing or sharing information, and using social media platforms and other digital services (Villanueva-Mansilla et al., 2015). Social distancing and lockdown measures necessitated the use of technology for receiving health care delivery (Egan, 2020; O'Connor et al., 2023) and for maintaining social connections for caregivers.

Many participants found that digital tools like FaceTime, Zoom and social media were essential for maintaining whanaungatanga during isolation periods, as illustrated by Toroa, a participant in her 60s living in a rural area and caring for her husband and mother-in-law: "I think just staying in contact with people over the phone or FaceTime. I think that's always so satisfying, you know? When you can sort of reach family like that." Kōkato, a participant in his 70s, living in a rural area and caring for his grandchild and partner's sister, also recalled their creative use of Zoom and video games as a way to maintain contact with whānau and mokopuna:

There was a stage when the kids were in lockdown. They were all up in Auckland and could not get down here, and we could not get to them. But there was a nephew who was keen on computer games. And we used four to five [video games] every day. We also had the Zoom meetings, and he switched to something called Jackbox and played that together as a family.

Similarly, when asked to identify the biggest challenge she had faced as a caregiver, Toroa responded:

Probably the fact that I could not just go and visit my mother. We did go into town to get groceries. I've driven up to her place and I'd stand outside the gates. She'd stand at her backdoor, and we'd just say hello. But you still had the contact of face to face through FaceTime and stuff like that to keep me in contact with all my kids, and that was actually okay.

For these participants, technology became, or already had been, cultural capital for maintaining social capital through

interactions and connections to whānau. In this way, digital capital supported the preservation of social capital.

It is evident that technology, as in digital capital, was an important tool for maintaining or even enhancing social capital, including connections with whānau and support networks, during the pandemic. However, while many participants seemed comfortable with digital technology and demonstrated some level of digital capital, it is important not to generalise these findings. As noted by Wójcik et al. (2021), digital capital varies across age, gender, and education levels, influencing individuals' ability to navigate technology. Interestingly, as we also observed during our recruitment and data collection interviews, while computer use tended to decline with age, smartphone use and acceptance seemed to be feasible across all age groups, suggesting that mobile technology may offer a more accessible platform for health interventions and maintaining connections, regardless of age (Zhai et al., 2023).

Reconnecting with whānau and whanaungatanga was another key theme in relation to minimising the impacts of social capital disruption. Tauhou, a participant in her 60s, living in an urban area and caring for her brother, recognised that lockdowns provided opportunities for restoring and enhancing social capital:

The lockdown actually gave us time to bond. It also gave me time to do kai [cook], proper kai, because I had time, you know? Like if [her brother] wanted scones, I made scones. If he'd go, "Can you make some pikelets?" I made pikelets for him. Things like that. You're at home all day.

Similarly, Ruru, a participant in her 60s, living in a rural area and caring for her mother, recalled: "It was a special time for me with mum. During that period of time, I'm talking about whakapapa. She continued to show how the pandemic provided an opportunity to engage with whanaungatanga—the deeply ingrained cultural expectations for Māori to care for their kaumātua and whānau—and reconnected with her mother:

I am the mātāmua (oldest sibling) and, being the oldest granddaughter on both dad's side and on mum's side, I felt like I'd been ignoring my responsibilities as being the oldest one [to care for my mother]. But I think I felt a lot more confident because I was more informed about having this time with mum, and she was able to share that information with me. That was great.

The reasons for Ruru's feelings about neglecting her "responsibilities" are unclear. However, as Gilchrist (2017) points out, many Māori are unable to connect with support systems or fulfil their caregiving obligations to kaumātua and whānau due to living far away. This issue was further exacerbated by the COVID-19 restrictions, which heightened physical isolation. While this reconnection is not unique to Māori (Barnard, Uekusa, Phibbs, et al., 2025), for some whānau who had been disconnected due to employment, education or other commitments, the pandemic offered a unique

opportunity to reconnect with whānau and reengage with whanaungatanga.

By leveraging digital tools and embracing the time available during the lockdowns, many participants in our study were able to mitigate the negative impacts of the disruption of both cultural and social capital. However, the pandemic also underscored the enduring importance of whanaungatanga in Māori caregiving and in tikanga more broadly, as well as the need for equitable access to digital technologies and broader support systems. As Bourdieu (1986) would suggest, while strong social capital is crucial, these findings illustrate that it must be complemented by efforts to enhance other forms of capital, such as digital, cultural and economic capital, to fully support Māori unpaid caregivers during a period of social rupture.

## Conclusion

Grounded in Bourdieu's (1986) theory, this study explored how Māori unpaid caregivers in our study activated and adapted various forms of capital, particularly whanaungatanga, to navigate the unprecedented challenges of the pandemic. The disruption to whānau gatherings and face-to-face connections posed significant emotional, cultural and practical challenges. However, many participants found ways to maintain—and, in some cases, even *enhance*—their whanaungatanga through digital technology, reaffirming their cultural values and connections. These strategies underscored the adaptability embedded within cultural capital—Māori cultural practices. The mobilisation of whanaungatanga and manaakitanga highlights how social and cultural capital can be actively and interdependently leveraged to support caregiving even in times of crisis. While the use of digital cultural capital offered new pathways for maintaining social connections, its accessibility and types of devices varied among participants due to factors like age and digital literacy, though all participants had smartphones. Nevertheless, for those with access, digital tools provided essential support in sustaining whanaungatanga.

By integrating Bourdieu's framework, this study emphasised the complex interplay of capital in sustaining Māori caregiving practices, offering valuable insights into how culturally embedded support systems can foster adaptability in the face of external disruptions. These findings have important implications for hapū, iwi and wider Māori communities, as well as for health and social service providers and policymakers. Strengthening culturally grounded informal caregiving practices—such as whanaungatanga and manaakitanga—requires investment in resources, or various forms of capital, that support whānau-based caregiving, digital inclusion and community empowerment. While the key contribution of this research is the theorisation of whanaungatanga and social capital in the caregiving context, it also broadens understanding of Māori caregiving and underscores the importance of culturally informed interventions and policies to better support them. Co-producing knowledge and co-designing policies and services that reflect the relational and collective nature of Māori caregiving are essential to ensuring culturally

responsive and practical support systems (Barnard, Uekusa, Stephens, et al., 2025; Oetzel et al., 2024; Rolleston et al., 2022). Future research should explore the long-term impacts of the pandemic and other crises and disasters such as Cyclone Gabrielle, on Māori unpaid caregivers, particularly how cultural, social and other forms of capital are sustained and adapted across generations and caregiving contexts.

### Authors' note

**Shinya Uekusa** is currently a Senior Lecturer in Sociology at the University of Canterbury—Te Whare Wānanga o Waitaha in Aotearoa New Zealand. His research focuses on disaster sociology, migration, linguicism and linguistic minorities, and gerontology. He is particularly interested in how the socially disadvantaged groups, such as (im)migrants, (former) refugees, and linguistic minorities experience and navigate cultural, economic, environmental, political and social changes and challenges. With Steve Matthewman, he published an edited volume, *A Decade of Disaster Experiences in Ōtautahi Christchurch: Critical Disaster Studies Perspectives* (Springer/Palgrave). He currently serves as a co-editor of *New Zealand Sociology* and as an associate editor for *Critical Disaster Studies*.

**Suzanne Phibbs (Kāi Tahu, Kāti Māmoe, Waitaha)** is a Māori health sociologist and Associate Professor in public health in the School of Health Sciences at Massey University. She has published extensively in the field of disasters and is an expert on Sociological and Kaupapa Māori research methodologies, Māori community resilience, disaster risk reduction, response and recovery.

**Steve Matthewman** is a Professor in Sociology at the University of Auckland, Waipapa Taumata Rau. His research interests include the sociology of disasters, STS and social theory. Recent book projects include edited collections on COVID-19 and the social sciences, and a decade of disaster experiences in Ōtautahi Christchurch (with Shinya Uekusa and Bruce Glavovich). Theoretically, his current work explores the connections between Critical Disaster Studies and Critical Future Studies. Practically, it looks at what happens after “managed” retreat.

**Marcus Tamaira (Ngāti Tūwharetoa)** began his professional journey as a veterinarian, working for 20 years across the North Island as a farm clinician, practice and corporate manager, and government veterinarian. Today, he dedicates his time to advancing hauora Māori and Māori tino rangatiratanga. He is passionate about tāne ora—the mana and mauri of Māori men and boys—and is completing a Master of Public Health focused on this emerging and vital area. Marcus thrives on tackling complex challenges and developing innovative solutions to address pressing issues such as Indigenous inequality, guided by kaupapa Māori research principles. His research experience includes working with kaumātua Māori and tāne on matters of hauora. He also contributes his expertise to several organisations, including Environmental Health Intelligence New Zealand, the Health Coalition Aotearoa, the Massey University Postgraduate Advisory Group, and the Auckland University of Technology Lived Experience Research Team.

**Tyrone Barnard, MSc**, is a Research Associate for the University of Canterbury, focusing their research on older-aged informal caregivers and their experiences caregiving during the COVID-19 pandemic. Tyrone has a Master's in Psychology from Massey University and is an emerging researcher. Their research will help provide insights into the needs and challenges of informal caregivers when faced with disasters, and more specifically, the recent global pandemic. This research delves into the complex needs of caregivers amid the COVID-19 pandemic.

Tyrone has a background working with youth and older adults as a Mental Health Support Worker, where they have obtained a personal understanding of the needs and challenges caregivers face in their daily lives. Through his empathetic approach and commitment to amplifying caregiver voices, Tyrone strives to advocate for the recognition and support of older caregivers who are vital to New Zealand's health system.

**Christine Stephens** is co-leader of the cross-disciplinary Health and Ageing Research Team in the School of Psychology at Massey University, where she is a Professor of Social Science Research. The focus of the team's activity is a longitudinal study of quality of life in ageing (Health, Work and Retirement study), which has conducted biennial surveys of a population sample of older people for 18 years. The research also includes in-depth qualitative studies on topics such as informal caregiving, palliative care, and housing needs. Christine's research is located at the intersection of health psychology and gerontology. She is the author of *Health Promotion: A Psychosocial Approach* (Open University Press, 2008) and, co-authored with Mary Breheny: *Healthy Ageing: A Capability Approach to Inclusive Policy and Practice* (Routledge, 2018).

**Fiona Alpass** is currently Professor of Psychology at Massey University. Dr Alpass co-leads the Health and Ageing Research Team (HART) in the School of Psychology. She is also co-Principal Investigator of the longitudinal Health, Work and Retirement study, a population-level study which aims to identify the health, economic, and social factors underpinning successful ageing in New Zealand's community-dwelling population. Dr Alpass's research focuses on a variety of topics related to ageing, including older workers and their transitions to retirement, and the impact of combining work and caregiving on health and well-being.

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### ORCID iD

Shinya Uekusa  <https://orcid.org/0000-0003-2694-5144>

### Ethical considerations

This research, classified as low risk, received ethics approval from the Health and Disability Ethics Committee (2022 EXP 13416) as of 22 October 2022. All participants provided written informed consent before participating.

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### Data availability statement

The data is not publicly available due to privacy and confidentiality considerations surrounding participants' personal information.

## Glossary

aroha	compassion, love
atua	deities, ancestors
hapū	sub-tribe
hononga	joining, connection
iwi	tribe
kaumātua	older people
kai	food
kōrero	conversations
kotahitanga	unity
manaakitanga	love, respect, kindness, generosity to others
mātāmua	oldest sibling
Matariki	Māori New Year
manu	birds
mokopuna	grandchildren
tangihanga	Māori funeral rites
tauiwi	non-Māori
tikanga	cultural values, customs
tohu	signs, symbols
whakapapa	genealogy, genealogical connections to land, hapū and iwi
whānau	family
whanaungatanga	kinship, relationships, sense of family connection, connection through shared experience, reciprocity
whenua	land

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