Older Adults' Experiences of a Pandemic: How Foods, Routines, and Socialisation Have Been Impacted by COVID-19.

A thesis presented in partial fulfilment of the requirements for the degree of Master of Science
(by thesis)
in
Psychology
at Massey University, Albany,
New Zealand

Ashley Richmond

2021

Abstract

The objective of this research study was to investigate the experiences of older adults in New Zealand during the 2020 COVID-19 pandemic, with a specific focus on how food habits were impacted. A great deal of disaster research fails to recognise first-hand experience, with an even greater shortage of research investigating how older adults cope during disasters. Such research is imperative in order to fully prepare to effectively support older adult populations during such disasters as the COVID-19 pandemic. Gaining first-hand experience via semi-structured interviews is an effective way to comprehend these experiences. In the present study, semi-structured interviews were conducted with six older adults in New Zealand: four from the small town of Morrinsville and two from the large city of Auckland. A media analysis was also conducted to better understand the context of these experiences: news articles, government documents, and seniors' newsletters were analysed. Thematic analysis was used to identify common themes, with the overarching theme being that of resilience: each of the participants demonstrated a high degree of resilience throughout the pandemic lockdown. However, there existed a great deal of concern over being a burden to others as most of the participants were unable to do their own shopping due to government restrictions. All participants also experienced dramatically reduced socialisation and freedom, which proved challenging for the capable and independent people they were. The participants understood the reasons for having to stay at home and were supportive of the government's decisions. They spoke of following the rules and the strategies used to protect themselves if they did go out. The participants were proactive in maintaining their routines as part of maintaining healthy habits and eating well. They recognised the crucial importance of staying in contact with friends and family. These older adults were resilient, proactive, and accepting in the face of adversity. Implications for future research

include investigating older adults of other socio-economic statuses where resilience may be impacted by financial constraints. Additionally, investigating the role of culture, and especially the difference between collectivist and individualist cultures on the experience of a disaster would be valuable.

Acknowledgements

I want to thank my supervisor, Dr Kathryn McGuigan, for supporting me throughout the research process. She was always willing to help in whatever way she could, and to answer the many questions I had from our very first meeting. She was positive and optimistic throughout the challenges that inevitably come with such a project and provided support at times when I was feeling doubtful. She's an incredible supervisor for whom I will always be grateful.

I would like to thank my Grandma, Linda, or Granny as she is known to me. She's been with me since my literal day one, teaching me to read and write and being by my side every step of the way. She's always quick to respond to my relentless texts and emails asking her to proofread every single section of this thesis, and then to check it all again when I change one tiny thing. She's supported me through every aspect of this thesis and her love for, and pride in me has fueled my efforts. I wouldn't be where I am today without her.

I want to thank my fiancée, Rachael, for being by my side since the start of this research. She pushed me to work even harder on the days when I was feeling overwhelmed, and rationally talked through any concerns I had about what I was doing or where this project was going. Right until the end of this process, she has pushed me to be the best I can be while simultaneously reminding me that I am human, and I can't do it all.

I want to thank the participants who shared their stories with me and gave me an insight into their lives. Your willingness to partake in this research is incredibly appreciated, and your resilience through this challenging time was highly inspiring.

Table of Contents

List of Tables

Chapter 1

Introduction

During a time of uncertainty, helplessness, and unease, some populations in New Zealand were hit harder than others during the initial lockdown of the COVID-19 pandemic. Older adults have a higher risk of contracting COVID-19 and for experiencing more severe symptoms if they do contract the virus, and accordingly have had strict guidelines and restrictions; New Zealanders over the age of 70 were instructed to stay home early on in the pandemic, and thus had to rely on others to conduct their shopping and deliver their groceries.

The current research aims to explore the experiences of older adults living in New Zealand during the COVID-19 pandemic, with a specific focus on food acquisition and socialisation around eating. This includes how older adults were able to obtain food; the extent to which they had to rely on others; food security; how eating habits and routines were impacted in regard to types of food consumed, mealtimes, and with whom they ate their meals; awareness and utilisation of supports such as online shopping and delivery; and any resultant impact on livelihood and independence.

The preparedness of older adults for disasters is an important consideration, and older adult experiences have largely been discounted when implementing support strategies (Tuohy et al., 2014). There currently exists very little research on the experiences of older adults during a pandemic, particularly independent, community-dwelling older adults during disasters in general. Furthermore, Parker et al. (2016) highlight the importance of understanding the reactions of older adults during disasters, and the effects such events have on this population, to provide effective supports. As such, the current research aims to provide value by identifying the common experiences and struggles of this population during this challenging time regarding their

socialisation around eating, as well as obtaining and consuming food. This will highlight where additional support may be needed and what steps can be taken to lessen the impact on this vulnerable population, and where future disaster planning and strategies can aim their focus for better responses in the future.

Qualitative research on disasters and pandemics investigates how people identify in, and make sense of, their experience in the context of such disruption, which can further our understanding of the effects of such events in a comprehensive manner. Qualitative methods provide an important insight into the experiences of this population, which will provide value to future disaster planning by identifying how both context and individual circumstances lead to the holistic experience of a disaster. Due to population aging, it is vital that we can support our older adults during times of uncertainty and disaster. The New Zealand older adult population is expected to reach 1.44 million by 2061 (Tuohy et al., 2014). Therefore, this will be a large population that will be especially vulnerable and will need support, especially in the face of disasters, highlighting the imperative need to develop effective supports.

The objectives for this research are:

Objective 1: To document the experiences of older adults living in New Zealand during the 2020 COVID-19 pandemic to food acquisition, preparation, and consumption.

Objective 2: To identify common areas of struggle/constraint and life upheaval.

Objective 3: To identify the extent and impact of reduced socialisation around eating with this population.

The COVID-19 Pandemic

COVID-19 is a member of a large family of coronavirus (CoV), which are single-stranded enveloped RNA viruses. The outbreak of COVID-19 began in Wuhan, China, in late December 2019 where cases presented as pneumonia with an unknown etiology, and lab studies were able to show that it was a new strain of CoV (BMJ, 2020; del Rio & Malani, 2020). By February 11, 2020, this new strain was announced by the World Health Organisation (WHO) (BMJ, 2020; Hassan, Sheikh, Jamal, Ezeh, & Akhtar, 2020). On March 11, 2020, WHO declared COVID-19 a pandemic (Shahid et al., 2020).

It is hypothesised that the initial cases were a result of animal-human transmission, however human-human now remains the predominant mode of transmission. The virus is transmitted by droplets, such as through coughs and sneezes or very close physical contact (Hassan et al., 2020). This virus is more contagious than previous strains of CoV, with a reproduction rate of 2.2 (Hassan et al., 2020). The incubation period appears to be up to 14 days (BMJ, 2020).

The symptoms of COVID-19 vary greatly. Symptoms range from mild, which include a mild fever, cough, fatigue, and diarrhea, to severe, where severe pneumonia, acute respiratory distress syndrome (ARDS), multiorgan failure, and septic shock can occur (BMJ, 2020; del Rio & Malani, 2020; Hassan et al., 2020). Mild cases can rapidly turn into severe cases (Hassan et al., 2020).

Older adults and those with compromised immunity are most at risk for fatality if the virus is contracted (BMJ, 2020; del Rio & Malani, 2020; Hassan et al., 2020). This risk of fatality appears to increase with age (Shahid et al., 2020). Similarly, even if the virus does not prove fatal, this population is more likely to experience adverse or severe effects and outcomes

than younger populations (Shahid et al., 2020). As the participants of the present study are all over 70 years of age, they are part of this at-risk population.

At the time the present study was conducted (August 2020), isolation was the most efficient option to contain and prevent the spread of the virus, while treating patient symptoms and providing oxygen therapy if required was the most effective treatment option (del Rio & Malani, 2020; Hassan et al., 2020). Furthermore, good hand hygiene and the use of personal protective equipment (PPE) was identified as vital to preventing virus spread, as the virus can remain on surfaces for up to 9 days (Shahid et al., 2020). Older adult populations were therefore likely to be highly isolated and may remain isolated for a long time to come to protect themselves and others against the virus (Armitage & Nellums, 2020).

At the completion of the present study, two vaccines have been identified and authorised by the Centers for Disease Control and Prevention (CDC): Pfizer-BioNTech COVID-19 vaccine and Moderna's COVID-19 vaccine, which have begun to be rolled out across the world (Centers for Disease Control and Prevention, 2020a). There have also been mutations of the COVID-19 virus emerging and identified since the present study was conducted. Currently, the CDC has identified B.1.1.7 which is a strain existing in the United Kingdom which spreads more quickly than the other variants. A variant called 1.351 has been identified in South Africa, and in Brazil a variant called P.1 has been identified (Centers for Disease Control and Prevention, 2020b).

COVID-19 in New Zealand

COVID-19 arrived on New Zealand shores on February 28, 2020, and the New Zealand Government introduced the Alert Levels system on March 21, 2020 (New Zealand Government, 2020). This system involves four levels: Level One – Prepare, involving border restrictions. Level Two – Reduce, which includes restrictions on gatherings and social distancing of two

metres between strangers. Level Three – Restrict, which involves restricting contact to an exclusive "bubble" of people and limited capacity at schools and workplaces, as well as intra-regional travel only. And finally, Level Four – Lockdown. This level includes a severely restricted "bubble" of contact, only essential workers are permitted to go to work, and one can only travel within one's own neighbourhood. When these alert levels were introduced on March 21, New Zealand Prime Minister, Jacinda Ardern, also instructed adults over the age of 70 to stay home effective immediately and to remain cautious even as restrictions eased after lockdown (Cheng, 2020). According to the New Zealand Ministry of Health (2020a) this includes staying home as much as possible to limit interactions with other people, and especially avoiding places such as supermarkets where there are likely to be many people. As of the end of April 2020, all 18 of New Zealand's COVID-19 related deaths were over the age of 60, and 16 of those were over the age of 70 (Cheng, 2020), emphasising the vulnerability of this population.

Communication During Disasters

Journalists and public health officials play a pivotal role in the communication of information during disasters. The media has the power to influence public understanding of an event, the subsequent levels of risk attributed to it, and the resulting behaviours of the public (Berry et al., 2007). However, it has been suggested that they lack the relevant expertise to be able to accurately communicate messages to inform the public and elicit an appropriate public response (Lowrey et al., 2007). Furthermore, there is often a lack of consistency and communication between journalists and public health officials. The job of the journalist is to write in a way that captures attention and draws readers in, and to produce many articles quickly. Hence, their writing can be sensationalised and dramatized, therefore providing an inaccurate, or at least exaggerated, message that does not capture the relevant details or context of the story

(Lowrey et al., 2007). This can lead to the public misunderstanding the actual risks, and often cause undue fear and anxiety. This is important at a time where the public needs to change their behaviour accordingly, to reduce the risk of contracting and/or spreading the virus.

Information about COVID-19 is coming from myriad sources: family, friends, social media, news outlets, and the government. It is suggested that the effectiveness of the message depends on who is communicating it, as well as the actual structure and grammar use of the message (Berry et al., 2007; Everett et al., 2020). Messages from more trustworthy sources are more likely to be listened to, and have a greater persuasive effect (Berry et al., 2007). Furthermore, the amount of information can sway the public to attribute greater importance or risk to the topic, and can distract from other considerations (Berry et al., 2007). Therefore, both the mode and source of the information can impact on its effectiveness.

During the 2003 SARS epidemic, there were much greater volumes of information in the media about the virus than about other health issues with greater prevalence, such as diabetes (Berry et al., 2007). This led to fear and anxiety in the population. The authors also found that media messages spoke about risk three times as often as preventative measures regarding contracting the virus. This is likely to have exaggerated the risk and led to an increased fear response from the population. Cheung et al. (2008) explain that the high volume of information about the epidemic and subsequent increases in fear and anxiety led to the record rates of suicide in Hong Kong, especially among the older adult population. This highlights the large impact that media can have on coping ability and the response of the public.

Barari et al. (2020) investigated how residents in Italy understood and either complied with or did not comply with the messages communicated by the government during the COVID-19 pandemic. All age groups studied understood the messages, but this effect was especially

observed in the older adult subgroup. This subgroup was also the most likely to comply with the rules, leaving their house only for essential reasons such as procuring food items. However, the authors found that the Italian population was experiencing high levels of stress and anxiety during this time, with no participant saying they were not feeling anxious. Older adults were among those feeling the most anxious, which may have been a result of their vulnerable status, and which may have further motivated them to comply with the messages.

It is therefore evident that the media has considerable power over what messages are portrayed to the public, and the framing of these messages can lead to risks being both underestimated and overestimated, resulting in an ineffective public response, and sometimes undue anxiety. It is important to understand the behaviour of older adults and the general population within the context in which it is happening. Media and government communication appear to be highly influential in the reactions of the public and the subsequent behaviours, such as compliance or non-compliance. The present study has included a media analysis to better understand the context of the older adults' experiences and to highlight the media and government messages the participants were exposed to.

Older Adults in Disasters

Older adults are consistently identified as being at greater risk of mortality and adverse consequences than younger populations during natural disasters and events such as epidemics (Allen et al., 2018; Johnson et al., 2014; Tuohy & Stephens, 2012). This population may also be more likely to experience disruption to their normal lives because of such disasters compared with younger populations (Rajeev, 2016). For example, after Hurricane Katrina in New Orleans, 71% of deaths were older adults (Johnson et al., 2014). Similarly, 70% of the deaths during the heat wave in Chicago in 1995 were older adults. There are multiple suggested mechanisms for

this effect. Older adults are more likely than other populations to have chronic health conditions, reduced cognitive capacity as well as the presence of cognitive impairments, reduced sensory ability, reduced physical ability, and increased occurrence of mental distress (Allen et al., 2018; Johnson et al., 2014). All of these factors greatly increase the risk for adverse consequences in the face of disaster. It has also been suggested that the negative outcomes in the older adult population during disasters can be at least partly attributed to the lack of planning and research with this population (Tuohy et al., 2014). This emphasises why it is crucial that we understand the experiences of older adults during disasters, and from this, identify the most effective ways to support this population during these challenging times. First-hand experience is therefore incredibly valuable to gain insight into what strategies would be most effective in supporting the wellbeing of older adults.

Disasters often lead to periods of displacement, such as in evacuations for fires or floods, but other disasters, such as COVID-19, require quarantines, often for extended periods of time. There are therefore unique aspects to pandemics which can increase the distress experienced as people face uncertainty and fear, especially in the early stages of the disaster where there is unclear communication (Johal, 2009). Therefore, the impact of quarantine is an important consideration. For example, during the 2003 SARS quarantine, people reported feeling loneliness, boredom, fear, and anger (Johal, 2009). As discussed above, these effects were particularly prominent among the older adult population, with suicide rates being the highest in the over 65 population than any other (Cheung et al., 2008). Therefore, particular attention must be paid to the older adult population during times of quarantine and isolation in response to outbreaks. It is evident that this population may need more support than others to maintain physical and mental wellbeing.

Older adults are an incredibly diverse population and how they respond and cope with disasters is highly individual and contextual. Disaster research has shown that physical and cognitive health prior to the disaster is a good predictor of how the older adult will cope, and other social factors such as socioeconomic status and social inequalities can also have an impact (Tuohy et al., 2014). This highlights the heterogeneity of this population, and how responses to disasters are likely to vary greatly. Some older adults may be highly resilient in the face of adversity, whereas others may struggle to deal with the events. There will be increased demands on cognitive capacity during a disaster, having to assimilate a lot of new information quickly, adapt to new situations, and deal with change (Allen et al., 2018). Those with reduced cognitive capacity, such as in dementia or mental health conditions, may have a greatly diminished ability to cope as they may not be able to accurately understand and adapt to the changing situation. This highlights how pre-disaster mental health can impact on how older adult's cope. Allen and colleagues (2018) found that older adults experiencing poor physical health prior to an earthquake experienced greater distress after the earthquake. Ferraro (2003) found a similar effect during floods: pre-flood depression was the greatest predictor of post-flood depression. In addition to this, post-disaster, older adults are at a greater risk than younger populations of developing post-traumatic symptoms (Allen et al., 2018), and are often identified as being at an increased risk for developing mental health issues (Parker et al., 2016). Parker et al. (2016) found that older adults were 2.11 times more likely to experience post-traumatic stress disorder (PTSD) symptoms following a disaster than younger individuals experiencing the same disaster. The authors suggested older adults may experience a greater sense of loss following a disaster than the younger populations due to a fear of losing independence or self-efficacy, which may explain the reduced coping within this population. Therefore, pre-disaster vulnerability is an important

predictor of post-disaster coping, and post-disaster distress may be more of an indication of prior vulnerability than of the effects of the disaster. This is important to consider when looking at the experiences of older adults during disasters, as it is evident that consideration of pre-disaster wellbeing is imperative for understanding the experiences of this population and highlights how experiences will be highly individual.

It is also suggested that older adults are more likely to be affected by a disruption in daily life during disasters than younger generations and may have more trouble re-establishing their lives and themselves afterward (Parker et al., 2016). This is relevant to the present study in that older adults have had a forced loss of independence and self-efficacy, being unable to acquire their own groceries and other essential items due to government restrictions. Furthermore, older adults, as well as the general population in New Zealand, likely experienced significant disruptions to their daily lives because of these restrictions. However, Parker et al. (2016) are suggesting that older adults may have more difficulty than other populations in re-establishing a sense of normalcy once restrictions ease. This is an important issue to highlight, as although the population has been given their freedom back as restrictions have been reduced in New Zealand, older adults may struggle more than younger populations to return to normal, suggesting that this population may need increased support for some time to come.

Furthermore, research has suggested that older adults are subject to numerous vulnerabilities which can impact their ability to cope in the face of disaster. The older adult population is vulnerable to factors such as financial, sexual health, and emotional issues, which have been linked to coping ability (Rajeev, 2016). Moreover, older adults are at an even higher risk of experiencing adverse consequences if they have a low income and low social support, as these increase vulnerability (Cherry et al., 2015). The social isolation that often results from

disasters can also lead to increased vulnerability in older adults, which is especially relevant in the COVID-19 pandemic (Rajeev, 2016). However, Cherry et al. (2015) found that social support acted as a protective factor against developing generalised anxiety disorder (GAD) after a disaster and was associated with less incidence of PTSD, highlighting the importance of social support during such times. It is this very vulnerability of the older adult population that singled out this population early in the pandemic: it was well established that older adults are more at risk of contracting the virus and experiencing adverse consequences. However, what is neglected to be mentioned is the vulnerability to other experiences such as abuse, financial difficulty, sexual health issues, and reduced coping abilities. It must be recognised that older adults are vulnerable to more than just the virus during this time if we want to ensure they are well supported.

In contrast to the research mentioned above, numerous studies have shown older adults to be particularly resilient after disasters compared to younger populations (Allen et al., 2018; Cherry et al., 2015; Ferraro, 2003). Allen et al. (2018) found in their study of the New Zealand Canterbury region 2010–2011 earthquake series that unless there were pre-disaster issues with both physical and mental health, older adults did not exhibit any change in wellbeing post-earthquake from pre-earthquake. Furthermore, Ferraro (2003) found that older adults with experience of prior disasters were protected from distress after a flood. This is similar to what Cherry et al. (2015) found, with older adults with prior disaster experience being able to cope more effectively than those without disaster experience, and Parker et al. (2016) suggest that prior disaster experience decreases the reactivity of experiencing another disaster. Older adults may develop coping strategies from these previous experiences, thus allowing them to be more resilient if they experience another disaster. Tuohy and Stephens (2012) state, “A lifetime of

experience provides resources for psychological resilience and strength rather than vulnerability in the face of disaster" (p. 33). It is therefore important to explore older adults' experiences of living through a disaster, not just assuming a deficit model. The research indicates that older adults can be more vulnerable but also more resilient than other populations, meaning that disaster experience is highly personal. The present research aims to achieve this through collecting first-hand experiences of older adults.

A sense of community is important when coping with disaster, and Roberto et al. (2010) found that the sense of community was increased following a disaster, which aided in increasing social connections at a time when regular social contact was greatly impacted. This is relevant to the present study in that while older adults had decreased social contact with their family and other regular contacts, they may have increased contact with those in their neighbourhood as no one was able to leave their area. This sense of community can improve resiliency and rebuilding after the disaster (Bhandari, 2014). This effect may be related to social capital; the social resources, such as family and friends, that one can call on when disaster strikes (Bhandari, 2014). Those with a stronger social capital are therefore better able to cope with disaster. Bhandari (2014) found that communities with higher social capital are better able to prepare and respond to disaster, and that higher social capital leads to reduced stress in the community. One's immediate network can buffer the response to disaster, and aid in coping with stress and anxiety. Networks can utilise resources with each other, whether practical or emotional. This social capital can come from an online community, or via communicating with family and friends on the internet (Szabo et al., 2018). Social capital and social networks therefore appear to be promising ways to increase coping abilities in the face of disaster, through an increased sense of community.

There is an emphasis in the research on the importance of maintaining independence and self-efficacy in the face of disaster and remaining a valuable part of the community (Johnson et al., 2014). There is also a sense of pride in being able to take responsibility for one's own health and wellbeing in the face of such events (Tuohy & Stephens, 2012). Roberto et al. (2010) identified four main challenges faced by older women in the aftermath of Hurricane Katrina: maintaining social connections, family connections with a loss of independence, re-establishing a sense of place, and managing health. The authors found that there was difficulty in retaining a sense of self in the aftermath of the disaster. Sometimes, coping with the disaster involved altering this sense of self in response to the changes they were facing, especially about a changed social network. The authors found that social networks were highly important in an older adult's sense of self and maintaining connections during this time was challenging. Older adults felt disempowered in the aftermath of a disaster, as they were unable to make decisions about their future because of the high levels of uncertainty. This is an important consideration in the present study, where levels of autonomy and independence have been reduced due to the government restrictions. Furthermore, older adults will have experienced greatly diminished social contact because of isolation and may therefore experience an altered sense of self. This is important to note, as the research indicates that maintaining, rather than altering, this sense of self is important for coping.

Similarly, older adults who were previously independent prior to the disaster, and who now needed to rely on others, feared being a burden to their families, who were also experiencing the disaster (Roberto et al., 2010). The older adults experienced discomfort when relying on others which may be due to having their identity as an independent person being threatened, as well as their sense of self and autonomy. This is similar to the present study, where

many older adults had to rely on family to bring groceries, who were also having their own experience of the pandemic. It is evident that the maintenance of identity and social roles is important for older adults facing adversity to maintain wellbeing. It may be suggested that if an older adult can maintain their sense of self and identity during a disaster, they may be able to cope more effectively with the ensuing events. Overall, it appears that many aspects of a disaster can impact on the health and wellbeing of older adults.

Determinants of Older Adult Health

WHO (2002) identifies the following as determinants of health in older age: culture, gender, lifestyle behaviours, biology/genetics, psychological factors, physical environment, social support, income, education, abuse/violence, and work. Of particular relevance to this study are culture, lifestyle behaviours, physical environment, and social support, although all determinants are likely to be impacted by the current pandemic and any future disasters.

Culture is the lens through which we experience everything, and through which we behave and act. Thus, it has an impact on all other determinants. It is likely to affect the response and coping abilities of older adults during the pandemic, as culture provides expectations, norms, and identity, all of which may be challenged during this time.

Lifestyle behaviours include the use of drugs and alcohol, healthy eating, and physical activity. As a result of isolation and other government restrictions, lifestyle behaviours were greatly impacted. It was more challenging to engage in physical activity, and in some instances healthy eating was impacted in the form of food shortages, inadequate access to food, and social and psychological factors.

Physical environment has implications for independence in the older adult population, and includes living rurally or urbanely, access to transport, hazards, and safe housing (Sylvie et

al., 2013; WHO, 2002). In the pandemic situation, physical environment was not impacted. However, access to the physical environment beyond the home was greatly limited, which impacted the independence of many older adults.

Social support includes family (especially the living status of the spouse), friends, and the wider community. WHO (2002) recognises the importance of social support in older adult wellbeing. Social support was drastically reduced during the COVID-19 lockdowns which therefore likely had numerous ramifications for older adult health.

Exercise and nutrition are key determinants in the health of older adults (McNaughton et al., 2012) and both of these factors have been affected by the COVID-19 pandemic; exercise has become more difficult due to strict stay-at-home measures, and as discussed previous, obtaining food has become more difficult for many.

Of note, the risk factors of depression in this population include reduced mobility, decreased social support, and adverse life events (Boyle, 2005). These three factors are likely to have affected many older adults during the COVID-19 pandemic, further highlighting the importance of understanding the experiences of older adults to provide effective support and reduce the likelihood of developing depression or ill-health.

The Impact of Social Isolation

While the risk of contracting COVID-19 and experiencing more severe symptoms than the general population is a threat to the older adult population, the threat of social isolation during this time is also present. As a result of the New Zealand government and the Ministry of Health instructing the over 70s population to stay home, many of New Zealand's older adults faced increased social isolation. New Zealand Prime Minister Jacinda Ardern explains, *"We as a country want to do everything we can to protect you; but we can only do that if you stay at*

home" (Walls, 2020). Through New Zealand's alert levels two to four, social contact was greatly reduced (Ministry of Health, 2020b). These tough restrictions were similar to the guidelines of many other Western countries (Loopstra, 2020) and may continue for a considerable period of time while there is still risk (Brooke & Jackson, 2020). Furthermore, the following effects of social isolation and loneliness may persist long after the pandemic has been eradicated (Morrow-Howell et al., 2020). This highlights the importance of understanding such effects on the older adult population, to discern the ways in which to best support them during this time.

Older adults are already at an increased risk of social isolation compared to younger generations, as they generally have fewer social contacts and fewer opportunities to socialise (Brooke & Jackson, 2020; Sims et al., 2017). The few opportunities they may have, such as grocery shopping, community groups, and religious groups, had to be temporarily suspended due to government restrictions (Berg-Weger & Morley, 2020; Brooke & Jackson, 2020; Morrow-Howell et al., 2020). Furthermore, up to 70% of the home support that older adults living in the community receive is from relatives (Locher et al., 2005a), and lockdown restrictions affected the ability of relatives to provide this support, leaving community-dwelling older adults highly isolated.

The New Zealand Ministry of Health (2020a) acknowledges that the limited interaction with others, as well as the uncertainty of what is happening, can lead to mental distress, especially in the older adult population. Limited access or skills for technology use among older adults may put some older adults at an even higher risk of experiencing social isolation and loneliness (Ayalon et al., 2020). In addition, this social isolation and loneliness in the older adult population impacts on their ability to cope with stress and can also increase reactivity to stress (Santini et al., 2020).

During the 2003 SARS epidemic, suicide rates reached a new high in Hong Kong, with the highest levels being in the over 65 age group (Cheung et al., 2008). Suicide rates among the older adult population increased 31.7% from 2002 to 2003. This was equivalent to a rate of 40.35 suicides per 100,000 people which dropped back to 33.95 suicides per 100,000 people in 2004. The authors suggest that both loneliness and being disconnected were the likely main causes of this spike in suicides. SARS had a higher fatality rate than COVID-19, at 15% in Hong Kong. However, like COVID-19, the fatality rates were higher in the older adult population compared to other populations. Authors suggest some of the suicides may also be linked to fear and anxiety in this population as they were aware that they were particularly vulnerable. Fear and anxiety were not managed during this time and led to disastrous consequences for the older adult population. Cheung et al. (2008) explain that the older adults were not prepared for this major disruption in their lives, which led to a sense of worthlessness which likely also contributed to the high suicide rates in this population. This further emphasises the need to understand how older adults respond to such events as an epidemic or pandemic, and how best to support them. It is evident that in a similar situation, the SARS epidemic, the older adult population struggled to cope with stress and loneliness, and the results were tragic.

Armitage and Nellums (2020) highlight the importance of governments recognising this increased risk of social isolation for older adults, and to act accordingly to lessen the impact on this disproportionately affected population. WHO outlined that older adults may experience more mental health issues such as anxiety, anger, and agitation during quarantine measures compared to younger populations, and advised about the importance of instrumental and emotional support during this time (WHO, 2020). Similarly, on March 21, 2020, New Zealand Prime Minister Jacinda Ardern stated in a daily briefing conference that we must remember to support the over

70 population by keeping in regular contact with them, as well as supporting them with delivering food and anything else they may need (Cheng, 2020). Similarly, Stephanie Clare, chief executive of Age Concern New Zealand, explained the importance of maintaining social contact with this population while they are physically cut off from everyone (Russell, 2020). She also explains that often, older adults will not want to ask for help as they do not want to be a burden. However, this can be detrimental to them receiving the support they need (Russell, 2020).

Social Isolation and Diet

Food is often a highly social activity, with food consumption and other eating practices often having social aspects. Consequently, social contact is highly related to diet, especially the quality and adequacy of the diet. In older adults specifically, eating can be a highly social event, where older adults meet with friends and family for coffee or a meal or go out to purchase meals. Social meals provide eating cues and socially facilitate appetite within this population (Locher et al., 2008). Eating with others supports social relationships and a sense of belonging, as well as facilitating culture and norms. Social context is thus important when looking at the nutritional status of older adults.

Social isolation has consistently been shown to be a risk factor for poor nutritional status and malnutrition in older adults, as eating alone decreases the likelihood of the older adult obtaining adequate nutrition and calories; older adults do not eat as well when they are on their own compared to when eating with others (Boyer et al., 2016; Locher et al., 2005b; Vesnaver & Keller, 2011; White, 1991; Wright et al., 2015). This malnutrition is linked to mortality and morbidity, as well as increased risk of illness and injury (Wright et al., 2015), and functional decline (Locher et al., 2005b). Furthermore, older adults who are confined to their homes are at a

greater risk of malnourishment, and Locher et al. (2008) found that 75% of their home-bound sample had inadequate caloric intake. This highlights the importance of understanding how social isolation impacts nutritional status in older adults. Moreover, older adults confined to their homes are generally dependent on others for food acquisition, preparation, and sometimes consumption, and thus social supports are highly important in the situation where an older adult cannot leave their home. Furthermore, if the support person sits with the older adult, the older adult is more likely to consume an adequate amount of food. This may be due to the extended mealtime that social companionship facilitates, the older adult wishing to please the support person, or the support person physically or emotionally supporting with the eating process (Locher et al., 2008; Tani et al., 2015a). However, during the COVID-19 pandemic, such social supports have been drastically reduced and thus older adults may have further increased difficulty with acquisition and preparation of food. While family and friends are in some cases able to bring food to the older adult, they are unable to sit with them or help them to prepare a meal. This may therefore impact how much the older adult is eating and may be a cause for concern regarding caloric intake and nutritional status.

In older men living alone specifically, this poor dietary intake is especially prevalent (Hughes et al., 2004). Older men living alone consume inadequate fruits and vegetables, with Hughes et al. (2004) finding that only 13% of their sample met the recommended requirements of five servings a day. Often this population relies on clubs and family meals, or other ready-made meals for their food and thus it is especially important during times of social isolation to ensure that this population is sufficiently supported. These results may also highlight how food practices are often gendered, especially among the older adult population which grew up with

highly gendered roles within the family. This may suggest that men engage in food preparation practices less than women, and therefore are less likely to eat adequately when on their own.

Eating alone has also been shown to be a risk factor for developing a mental illness in older adults. This occurs via through two mechanisms: social isolation and poor nutrition (Tani et al., 2015b). Social eating creates a sense of belonging, social support, and food enjoyment, which are not present when eating alone. Therefore, there may be unmet social needs when eating alone, leading to feelings of social isolation, which can result in both physical and mental health issues (Bruggencate et al., 2018; Santini et al., 2020). As discussed previously, such social isolation can lead to poor nutrition status meaning that the risk factors for developing mental health concerns is two-fold. Furthermore, both the reduction in social support and/or decrease in mental health are risk factors for undernutrition, highlighting how this correlation may be cyclical (Locher et al., 2008). Therefore, older adults may currently be at an especially high risk of undernutrition with drastically higher rates of isolation, being confined to their homes with reduced social support. Older adults may subsequently be experiencing mental distress, highlighting how social isolation, mental distress, and poor nutrition are highly relevant in our current global situation. This is important to recognise due to the cyclical nature of these factors.

Loneliness has also been identified as a factor that can affect food availability and thus negatively impact on the nutritional health of older adults (Donini et al., 2013). This decrease in nutritional status can subsequently lead to muscle loss, decreased immunity, and a reduced quality of life. Food becomes meaningful within the context of social relationships. The act of eating alone emphasises the experiences of loneliness and highlights a lack of social relations, removing the social meaning of food, and as such, the act of eating can become de-humanised (Bofill, 2004). This illustrates how eating and socialisation are highly interwoven and how eating

on one's own can highlight the existence of loneliness. Therefore, eating with others is highly beneficial in terms of nutritional health.

Social eating has been shown to increase appetite and motivation among older adults, thus increasing caloric intake and protecting against nutritional risks (Holmes & Roberts, 2011; Locher et al., 2005b; Tani et al., 2015b). Eating with others increases the intake of food in older adults by 60%, which Holmes and Roberts (2011) suggest may be a result of older adults consuming convenience foods rather than proper meals when eating alone. Calories consumed increases as the number of people present at a meal increases, and specifically, living with a spouse has a positive impact on nutrient intake of older adults (Locher et al., 2005b). Although companionship increases caloric and nutrient intake, this effect is increased when the other person sits down and eats with the older adult.

At a time when social contact has been greatly reduced, it is evident that supporting older adults is imperative for the maintenance of both their physical and mental health. A reduction in social eating and feelings of loneliness have numerous potential consequences for this population and these risks must be addressed.

Routines and Habits

Routines and habits are vital for older adult populations in maintaining wellbeing and have implications for nutrition and health (Jastran et al., 2009; Steinman, et al., 2020). Daily routines may be more influential on older adult health than medical interventions, and furthermore older adults may "have less reserve to compensate when their homeostasis is threatened" compared to younger populations (Steinman et al., 2020, p. E1). Older adult routines serve to assist with maintaining health and physical activity levels, maintaining a sense of control in one's life, and achieving a sense of balance (Ludwig, 1997). These routines also facilitate

adaptation to changes in life and to meet daily demands, and provide a sense of stability and predictability, which become more important as we age (Ludwig, 1997). King et al. (2017) found that routines are especially important for most older adults regarding eating behaviours because of this stability and predictability. Older adults use daily and weekly rhythms to guide their cooking and eating routines which are shaped with the help of social interactions, thus highlighting the importance of social eating in this population. WHO recognised this importance of routine continuity during COVID-19 and thus outlines in their document, *Mental health and psychosocial considerations during the COVID-19 outbreak*, the importance of trying to maintain as regular a routine as possible, with activities such as regular exercise, cleaning, and other activities (WHO, 2020).

Food habits and routines are often shaped by cultural context; that is, the values, beliefs, norms, and knowledge of food that have been learned in one's environment, such as what is acceptable and desirable (Burns, 2009; Jastran et al., 2009). People come to attribute meaning to the foods they eat; experiences shape the values and meanings one attributes to food and it is these meanings that determine one's habits and routines (Bisogni et al., 2002; Burns, 2009; Jastran et al., 2009). These are often developed early on in life and are internalised, thus they persist throughout the lifetime and are resistant to alteration (Burns, 2009; Edfors & Westergren, 2012; Ludwig, 1997). Moreover, even the words and phrases used to describe one's food habits, routines, and norms are determined by the narratives that one grew up with (Bisogni et al., 2002). That is to say that the context in which we live and have lived determines what food means to us. For example, Sydner et al. (2007) explain that older adults in Western societies today have lived through pre- and post-war periods, as well as various economic depressions where they may have experienced vast changes in food availability in the form of food shortages and rationing.

Furthermore, they were likely brought up in a patriarchal home environment with determined gender roles, especially about food preparation, and emphasis on the family meal. This would thus influence the norms, values, and beliefs about food and eating, and subsequent habits and routines.

Food can also have various symbolic meanings, such as certain emotions, friendship, happiness, and concepts of aging (Fjellström, 2009). When food routines and habits are disrupted, it can negatively affect these symbolic meanings (Burns, 2009; Fjellström, 2009; Sydner et al. 2007). This can have long term implications for older adults who are already at an increased risk of having their food habits and routines disrupted, due to changing financial situations, big life events and changes such as death of family and friends, and increased social isolation typical of the aging person (Burns, 2009; Fjellström, 2009). This highlights the vulnerability of this population in terms of both the likelihood of their routines being disrupted, and the impact such disruptions can have.

The meaning one attributes to food determines how food is chosen, cooked, and eaten, and discourses are constructed surrounding these habits (Fjellström, 2009). Food has both social and cultural significance, and food related processes contribute to the construction of this meaning, which is situated within a personal, social, and historic context (Bofill, 2004). This significance and meaning are closely related to one's identity and social role, as people construct their identities from their eating habits and routines, and the narratives about these habits and routines (Burns, 2009; Fjellström, 2009; Lundkvist et al., 2010; Sydner et al. 2007). Doing the things that they have always done is important for the wellbeing in older adults, and as such, wellbeing can be affected by disruptions in continuity in life. Continuity in life, that is, maintaining the behaviours and routines from their younger years, is especially important for the

wellbeing of older adults as it facilitates a sense of self and meaning, which is especially important when facing a disaster (Ludwig, 1997; Roberto et al., 2010). The food related actions of shopping and preparing food for oneself are also related to continuity in life, and this is something that older adults try to maintain (Fjellström, 2009; Sydner et al. 2007). It is evident that these food related practices and routines will have been impacted by the pandemic, and therefore this is relevant to the present study in that older adults in New Zealand likely faced, and may continue to face, a loss of continuity and changes in long-established eating habits and routines. This is likely to be impactful on the wellbeing of older adults.

We engage in particular food related practices to maintain a sense of identity, and therefore a change in food related roles can affect one's identity (Bisogni et al., 2002; Gustafsson et al., 2003). Thus, one's identity and values shape the food they eat, but reciprocally one seeks to engage with the foods and practices that will reinforce their identity and values (Bisogni et al., 2002). Identifying as independent and competent, and the identity and familial role of providing for a spouse, children, or grandchildren, is important for older adults in food acquisition and preparation. Eating alone or no longer providing for the family has implications for the older adult's identity and sense of self (Bofill, 2004; Sydner et al. 2007). Being unable to fill these roles and subsequently losing a sense of their identity can lead to decreased wellbeing as well as feelings of shame and decreased motivation to prepare and consume food (Fjellström, 2009; Gustafsson et al., 2003; Sydner et al. 2007). This is important to consider, as the dangers of older adults consuming inadequate food were illustrated above. Moreover, the consistency of routines contributes to the strengthening of identity, and therefore a lack of, or change in, consistency may be detrimental to identity (Jastran et al., 2009). This is an important consideration, as it is likely that older adults have lost their identity or role of providing for the family during the

COVID-19 pandemic and the subsequent restrictions on social contact. It is evident that this loss of identity and role can impact on wellbeing and can lead to a sense of shame for the older adult.

The role of food and eating habits in identity is also impacted by social relationships. Food related narratives influence how one relates with others and is a "social glue" through which we construct meaning in our relations with others (Burns, 2009, p. 200). Furthermore, food becomes the path for the communication of things such as love and approval, and similarly holds memories (Burns, 2009). Social eating also brings a sense of community and strengthens the ties of a group or family, as well as bringing an identity of belonging and thus bringing added value to the sense of self (Fjellström, 2009). Moreover, food related practice can shape and develop these identities and relationships (Bofill, 2004). Therefore, while impacting physical and mental wellbeing, disrupted routines and habits can also impact identity and a sense of belonging. Furthermore, this ability to select, prepare, and consume food is linked to older adults' sense of personhood; food routines provide comfort as well as an ability to exert control over one's life, thus suggesting that routines play an important role in autonomy (Fjellström, 2009; Jastran et al., 2009). Therefore, it is especially detrimental when the habits and routines have been changed in a way that reduce autonomy or independence, such as an inability to shop for oneself (Fjellström, 2009). When an event such as COVID-19 disrupts all aspects of life, including routines and food habits, it is important to consider the implications for physical and mental health. It is not just a matter of delivering food to people, but rather understanding that food is linked to mental and physical wellbeing. Furthermore, it is not just consumption of food but food preparation, accessing food and getting the right nutrition that need to be considered. Food and its practices are a holistic endeavour with numerous ties to identity, a sense of self, and to others in our lives.

This is relevant in the current research, as older adults may experience changes in what they eat due to food availability issues and restrictions on eating out at restaurants and cafes or with friends and family. Eating routines and habits will have undoubtedly been impacted by COVID-19. Moreover, further changes are likely to have been experienced regarding physical activity, social events, and other daily activity routines. Therefore, maintaining a sense of control, finding balance in one's life, and maintaining health and activity levels may have been impacted by these disruptions in routine. It is likely that some sense of stability and predictability has been lost, especially early in the pandemic when there was a lot of uncertainty and many things changing quickly. As sense of self is tightly linked to routine, it is likely that this was impacted. This is an important consideration, as a sense of self is related to the wellbeing of older adults: "The consequences of routine for wellbeing directly relate back to a sense of self," (Ludwig, 1997, p. 225). It is therefore vital that older adults can maintain as much of a sense of self as possible during disasters such as the COVID-19 pandemic, to maintain their wellbeing. To effectively support older adults during disasters, we must understand the pivotal role that food plays in their life.

Food Choice

There are multiple factors which affect the food choices of the older adult population: individual, social, cultural, and environmental factors (King et al., 2017; Payette & Shatenstein, 2005; Sylvie et al., 2013). Individual factors include the consideration of taste, convenience, perceived nutrition, and cost, as well as the values, beliefs, and customs one holds (Brownie & Coutts, 2013). Environmental factors include distance from stores, transportation, income, and social support. Social factors include access to food and food related practices, and cultural beliefs. However, identity also plays an important role in food choice. As discussed above, food related practices help to construct identity and self-image, and these identities shape the food choices one makes; identity and food choice mutually shape each other (Bisogni et al., 2002). Hughes et al. (2004) explain that food choice is influenced by individual factors which are mediated by wider social and environmental factors. The values and meanings that one attributes to food influence which foods are eaten, and these are developed early on in life, and thus tend to persist throughout one's lifetime. Therefore, the food choices of older adults are shaped by the cultural, social, and economic context in which they grew up (Lundkvist et al., 2010). Furthermore, relational status, social isolation, and living arrangement can impact on food-related behaviours, therefore impacting health status (Brownie & Coutts, 2013). This illustrates the complexity of food choice, and how food choice is deeply rooted in our sense of self and in our history. Food choice is tied to context, and the COVID-19 pandemic has impacted this context for many people.

Sylvie et al. (2013) found that enablers of food choice for older adults were factors such as cost and convenience of food. In regard to the selection, acquisition, and preparation of food by older adults, food choices are largely influenced by the aspiration to be independent and have

control in their lives (Host et al., 2016). Host and colleagues interviewed older adults and found that nutrition is seen as important for maintaining this independence. The authors found three main themes in their interviews with participants: adaptation, psychosocial parameters, and food landscape. Adaptation involved modifying food choice because of life circumstances/events, as these events often impacted on eating habits. Psychosocial parameters about food choice were influenced by the desire to maintain independence, especially being able to drive to the grocery store independently. This also included the sense of community where the participants enjoyed social gatherings involving food. Of note, the authors also found that older adult participants in their study were open to the idea of a meal delivery service to ensure adequate nutrition. This may be relevant within the current pandemic situation; determining the reception of a meal delivery service for those struggling to obtain and specially to prepare food is a worthwhile endeavour. Food landscape included factors such as food quality, price, country of origin, as well as the accessibility of the food store.

Similarly, regarding environmental factors, Sylvie et al. (2013) found that the location of food stores was the most important contributor to food accessibility and affordability. It was found that older adults living further from grocery stores had an irregular consumption of fruits and vegetables. Further, inadequate transportation increases nutritional risk in older adults as this affects the ability to access grocery stores (Locher et al., 2005a). In addition, Locher et al. (2005a) illustrate that geographic location is a huge influencer of nutritional status in older adults, thereby highlighting how important grocery store accessibility is to the nutritional status of older adults. Factors such as income and good health were also identified as impacting the variety of food consumed by older adults by Dean et al. (2009). While distance from grocery stores did not change during the COVID-19 pandemic, older adults in New Zealand similarly did

not have easy access to them, and therefore it may be suggested that the impact may be similar. It appears that being able to access the food store independently is a large predictor of food choice and subsequent healthful eating in the older adult population. Furthermore, Sylvie et al. (2013) found that social support was the second most important factor to the promotion of healthy eating in older adults. Social resources had a positive impact on food variety: family and friends were able to facilitate access to a larger variety of food (Dean et al., 2009). Again, this is a factor that COVID-19 has disrupted. Social support was greatly reduced, and it can be suggested that this may have impacted the food choice of older adults.

Contrarily, various barriers to healthful eating exist for older adults. There are various age-related changes that occur, such as a decreased appetite and lower energy requirements due to a decrease in muscle mass, physical activity, and metabolic rate (Payette & Shatenstein, 2005). Furthermore, there are decreased social opportunities for eating, as well as increased experiences of bereavement which can impact appetite (Hughes et al., 2004). These factors can influence the dietary behaviour and choices of older adults. This further highlights the pre-existing vulnerability of this population in terms of adequacy of nutrition.

During COVID many factors affecting food choice have been impacted. Access to food was greatly reduced due to government restrictions regarding going to the supermarket, as well as food availability issues. Furthermore, social supports were greatly diminished due to isolation requirements, and therefore this facilitator was likely removed for most older adults. These events are likely to have impacted the food choices made by older adults. While food choices of older adults are impacted by the desire to be independent, independence was impacted by the government restrictions imposed on this population.

The Impact of a Loss of Independence and Autonomy

Independence and autonomy are integral to the wellbeing of older adults, and government restrictions and isolation due to COVID-19 have impacted these. Autonomy entails having self-determination and being self-governing, and particularly relevant to the present study is executional autonomy, wherein a person is able to make and carry out decisions on their own, i.e., whether or not people feel as though they have the choice to make significant decisions regarding their lives and bodies so as to live a life that is of their choosing (Boyle, 2005; Sherwin & Winsby, 2010). During the lockdown, older adults, and New Zealanders in general, were unable to live a life of their choosing due to the temporary but strict restrictions imposed by the New Zealand government to keep the population safe; a sense of control and decision making, and therefore autonomy, were temporarily suspended.

A loss or constraint of autonomy in older adults can lead to reduced self-esteem and a sense of powerlessness, a loss of social roles, and social isolation, all of which can lead to the development of depression (Boyle, 2005). Depression is much more common in older adults who are physically disabled, and thus have reduced autonomy in regard to what they can physically do. However, environments that lead to constrained autonomy will negatively impact mental health, regardless of physical impairment (Boyle, 2005). This illustrates the importance of autonomy to the health of older adults, and how constraining environments can negatively impact mental health. While the environment did not constrain older adults, restrictions constrained this population and changed their access to their environment.

Similar to the concept of autonomy, independence is about being able to manage oneself on one's own, and especially relevant to the present study is the ability to procure and prepare one's own food as well as to provide for others if relevant to the role with which they identify

(Gustafsson et al., 2003). Independence and identity are deeply enmeshed and therefore failure to be able to procure and prepare one's own meals threatens not only independence but social identity as well. Maintaining independence and social identity is important for older adults, especially regarding their quality of life (Gustafsson et al., 2003; Turrini et al., 2010). Gustafsson et al. (2003) found that this identity was maintained through food shopping and preparation; being able to shop for, and prepare, one's own meals meant that they were independent. This ability was highly valued, especially among the women of the older adult population. Becoming dependent on someone else for food acquisition or preparation can be uncomfortable and lead to feelings of shame and humiliation, as well as the feeling of being socially marginalised (Edfors & Westergren, 2012; Gustafsson et al., 2003; Turrini et al., 2010). It may also affect one's feelings of self, and it is suggested that older adults can feel less complete as an individual when having to rely on others for support (Gustafsson et al., 2003). Becoming dependent means that the deeply engrained values and habits of the older adult are threatened.

In order for support with food acquisition and preparation to be more acceptable to an older adult, it must be ensured that they retain as much choice as possible in what is purchased and the meals made, and this support must coincide with the older adult's preestablished routines and habits, the importance of which has already been demonstrated (Edfors & Westergren, 2012; Gustafsson et al., 2003). Maintaining some sense of self-determination will ensure the older adult retains their sense of self and independent identity. This is a promising consideration when looking to effectively support older adults during times when their independence is threatened.

Loss of autonomy and independence are relevant to the present study, as older adults in New Zealand had many of their choices temporarily taken away, as well as experiencing a subsequent loss of independence. While still physically capable of going to the supermarket,

older adults were instructed by the New Zealand government to stay at home and therefore were unable to procure food on their own. This meant that they were suddenly dependent on others for essential items. Furthermore, staying at home limited many of the decisions that older adults were able to make; they could no longer go out as they pleased and spend their days in a way of their choosing. Their decisions were largely influenced by the instructions provided by the government.

Food Insecurity

Food insecurity is a threat to the health of older adults. Food insecurity occurs when people have uncertain or inadequate access to, or availability of, food of sufficient quantity and quality to meet dietary needs and support a healthy lifestyle (Lee & Frongillo, 2001; Myers, 2020; Souza & Marin-Leon, 2013). This can be due to income, environmental barriers, or inadequate food stocks (Myers, 2020), as well as social factors (Wang & Bishop, 2019), although it is most commonly recognised to be related to income, and this is where most of the research focuses (Carter et al., 2011). A common theme in the literature is that food insecurity is an immense health risk for older adults, and this population may be one of the most impacted by food insecurity during the pandemic. Older adults were instructed to stay home throughout the pandemic, both before and after New Zealand entered a lockdown, impacting on their ability to procure food items.

The COVID-19 pandemic has impacted all aspects of food insecurity (Niles et al., 2020). Short-term food availability has decreased due to people purchasing large quantities of products and leaving shelves empty (Niles et al., 2020). Further, there were tight restrictions on food purchasing and travelling to the grocery store. However, longer-term food availability may also be affected by infrastructure changes, distribution, and food cost (Niles et al., 2020).

Furthermore, retirement funds have been impacted by the hit on the economy, and thus older adults may be facing reduced funds for food purchasing which can increase food insecurity (Morrow-Howell et al., 2020). Meal delivery services and other nutrition programmes have been suspended in many cases, and thus older adults may have to rely on more packaged foods rather than cooked meals, consequently affecting their ability to obtain adequate nutritional status (Morrow-Howell et al., 2020).

Older adults are more likely than their younger counterparts to experience food insecurity (Gyasi et al., 2020). It is well established in the literature that older adults already consume too few calories and nutrients, which is especially risky as nutrient needs increase with age (McNaughton et al., 2012). This is a risk factor for myriad health issues as well as quality of life and the ability to live independently (Sylvie et al., 2013). The nutritional status of older adults can be affected by access to food that is both healthy and affordable (Sylvie et al., 2013). Moreover, as people are staying home from work during the pandemic, reducing their hours, and in some instances losing their jobs, it is likely that the prevalence of food insecurity in the whole population will increase, as well as exacerbating the already existing food insecurity (Deaton & Deaton, 2020; Power et al., 2020).

During the COVID-19 lockdown in New Zealand, obtaining food was difficult for older adults in some instances. As the over 70 population was told to stay at home and avoid supermarkets, they often had to rely on online ordering and delivery of groceries. However, due to the increased demand the wait time could be up to one month to place an order (Feek, 2020). Furthermore, the in-store stock was also limited during the lockdown, with supermarkets unable to keep up with the demand of people purchasing large quantities of items (Deaton & Deaton, 2020; Feek, 2020; Power et al., 2020). This sometimes resulted in only the most expensive items

being left on the shelves, if any item was left at all (Power et al., 2020). Similarly, empty shelves lead to worry about food availability (Deaton & Deaton, 2020). For those that were able to secure an online order, they were often missing important items such as milk and meat. This uncertain and inadequate access to food can lead to food insecurity, due to the inadequate access to familiar and recognisable foods (Fjellström, 2009). These factors highlight the risk for the development of food insecurity in an already at-risk population, and how the pandemic impacted many aspects of food security.

As discussed above, the foods we eat have cultural implications and are attributed value and meaning. As such, going without the foods that one values can have an impact on wellbeing, and it is important to understand and recognise the disruption in values that can occur with food insecurity, as this can impact on both the wellbeing and dignity of an older adult (Burns, 2009). Furthermore, the dangers of food insecurity may remain long term, even after the pandemic has been eradicated (Robson, 2020). It is recognised that the inadequate access of older adults to supermarkets and suitable food existed before the pandemic, and thus will persist afterwards. Many older adults in New Zealand live in isolation and do not have adequate access to the resources they need (Robson, 2020).

Loopstra (2020) found that the prevalence of food insecurity in the United Kingdom increased four-fold during the COVID-19 lockdown. Forty percent of this was explained by lack of food on supermarket shelves. Similarly, an American study found a 33% increase in food insecurity since the start of the COVID-19 pandemic (Niles et al., 2020). Income loss while in lockdown when people were unable to work or complete job loss also contributed to this food insecurity, and this unemployed population was especially vulnerable to food insecurity (Loopstra, 2020; Niles et al., 2020). For people who had to self-isolate and were thus unable to

leave their homes, acquiring food was particularly difficult and these people were at an increased risk of going without food. Loopstra (2020) also found that 21.6% of adults in the general population of the United Kingdom felt worried about inadequate access to food, highlighting the prominence of food insecurity during this time.

Food insecurity has repeatedly been linked to poor health outcomes in the literature (Chung et al, 2011; Lee & Frongillo, 2001; Souza & Marin-Leon, 2013; Wright et al., 2013). With older adults specifically, food insecurity can lead to a lower caloric intake and consumption of less nutritious food. Wright et al. (2015) explain that food insecure older adults have a 60% increased risk of depression, and are 53% more likely to have a heart attack, emphasising the huge risk of food insecurity to older adults. Souza and Marin-Leon (2013) found that among older adults, those who self-reported poor health were more likely to be food insecure than secure. Similarly, self-reported hospitalisation and diabetes were more likely to be correlated with food insecurity than food security. Further, nutrition risk and depression rates were higher in the food insecure group of this study. The authors also found that meat and produce consumption was lower in the food insecure population than the secure.

Similarly, a common theme in the literature is that food insecurity in older adults is linked to poor mental health, as well as lower cognitive function, both contributing to a lower quality of life (Chung et al., 2012; Gyasi et al., 2020; Portela-Parra & Leung, 2019). Portela-Parra and Leung (2019) found that food insecurity and cognitive function have an inverse relationship in older adults, even after controlling for sociodemographic factors. It is important to recognise the risk of decreased cognitive function in the older adult population as a result of food insecurity, as this population is already at a higher risk than the general population to experience such declines (Koyanagi et al., 2019; Portela-Parra & Leung, 2019). Furthermore, food

insecurity can worsen cognitive impairment (Portela-Parra & Leung, 2019). This is dangerous, as cognitive disorders such as mild cognitive impairment (MCI) can quickly progress to dementia (Koyanagi et al., 2019). Proposed mechanisms for this relationship between food insecurity and cognitive decline include the high levels of stress experienced with uncertain access to food which leads to chronic elevated cortisol levels and chronic activation of the hypothalamic–pituitary–adrenal (HPA) axis which can alter brain structure, as well as increase pro-inflammatory cytokines in the body. Other proposed mechanisms include the mental distress experienced such as depression, or the inadequate nutrition intake resulting from food insecurity (Koyanagi et al., 2019). Koyanagi et al. (2019) found a higher prevalence of cognitive decline in older adult populations experiencing food insecurity than in the general population, with almost 3 times higher odds, even after adjusting for socioeconomic factors, physical health, and depression.

In New Zealand, Carter et al. (2011) found a strong association between food insecurity and psychological distress. They found that males and females were 60% and 110% respectively more likely to experience psychological distress when food insecure than the general population. This is consistent with the literature from other countries, where strong associations between mental distress and food insecurity were found (Gyasi et al., 2020). Jones (2017) similarly found a dose-response relationship between food insecurity and poor mental health across an analysis of 149 countries. There are various possible mechanisms for this association. Similar to the mechanism for cognitive decline, Gyasi et al. (2020) suggest that the uncertainty about access to food can result in a stress response by the body, and can also promote feelings of helplessness and shame, all of which can lead to psychological distress (Gyasi et al., 2020; Jones, 2017). It is also suggested that the older adult population may be more at risk to develop mental distress

because of the age-related decrease in hippocampal size (Gyasi et al., 2020). Furthermore, there is a strong and robust association between food insecurity and suicidal ideation, thus further highlighting the importance of addressing this issue (Davison et al., 2015). Davison et al. (2015) found that the prevalence of suicidal ideation was much higher in food insecure populations than the general population and suggest a bi-directional relationship between depression and food insecurity.

A lack of social support has been linked to food insecurity in older adults; those older adults with lower emotional support are at a greater risk of food insecurity (Lee & Frongillo, 2001; Wang & Bishop, 2019). As such, social support can act to buffer the impact of insufficient monetary resources on the risk of food insecurity (Wang & Bishop, 2019). Social support thus becomes increasingly important as people age (Turrini et al., 2010). House and Khan (1985) wrote about social support and social structure, and grouped social support into emotional, instrumental, and informational. Instrumental and informational support are of relevance to reducing food insecurity (Davis et al., 2016; Wang & Bishop, 2019). Regarding instrumental support, Turrini et al. (2010) found that both formal supports, in the form of organised assistance, and informal support, in the form of support from neighbours, friends, and family, can act to assist with food procurement. They explain that 80% of older adults in the UK were receiving some sort of informal support in relation to food procurement, and that this support can increase feelings of security. This is important to note, as a great deal of support has been reduced during the pandemic due to family and friends being unable to leave their neighbourhoods to provide food for the older adults in need, suggesting that instrumental support may have been impacted.

Vesnaver and Keller (2011) and Wang and Bishop (2019) explain how instrumental support is related to food security: social interactions can provide opportunities for material goods (i.e., food) to be given, thus reducing the risk of food insecurity. Food security in older adults includes consideration of acquisition, preparation, consumption, and as such, instrumental support in the form of assistance with acquiring, and preparing food, can greatly impact an older adult's food intake. This further emphasises the importance of instrumental support in minimising food insecurity in the older adult's population and highlights a promising target area for maintaining the health of older adults during a disaster. However, Vesnaver and Keller (2011) and Turrini et al. (2010) highlight that relying on others can cause anxiety about imposition, as well as frustration about the food purchased and this may result in older adults not utilising these supports as much. This highlights the importance of understanding the experience of older adults to effectively support them in an empowering manner. Conversely, Wang and Bishop (2019) explain that social support may make it less likely that older adults will feel shame or guilt about asking for help, as a feeling of social support mitigates this feeling. Therefore, it may not be the support with food procurement that causes feelings of shame, but rather who is supporting the older adult and the social relationship between them.

It is evident from the literature that food security is likely to have been impacted by the pandemic and the subsequent government restrictions. Social contact was greatly reduced, older adults were unable to go to the supermarket, online ordering was mostly impractical, and many food items were unavailable due to food shortages. People were also losing jobs, and in some instance's retirement funds were impacted. This is therefore a highly important consideration when looking at the experiences of older adults, as it is likely that food security was impacted in some way for a great many in this population. As illustrated above, food insecurity can be

problematic, especially for older adults, for their physical, mental, and cognitive health. This is potentially an area which will require increased support in future disasters.

Technology Use

Technology has myriad potential benefits for the older adult population, especially during this unprecedented time, and was highlighted as a method of reducing food insecurity by increasing access to grocery delivery and increasing social contact, as well as supporting the wellbeing of older adults in general. However, barriers exist to the access and utilisation of technology, and consideration of the digital divide is important.

Technology, and specifically online shopping, may be a useful way to help older adults retain autonomy and independence, and it is suggested in the literature that internet use may be beneficial for older adults as it requires no physical movement (Gorkovenko et al., 2017; van Deursen & Helsper, 2015). Similarly, the internet and technology may be a promising way for older adults to increase their levels of socialisation during times of isolation (Marston et al., 2019; Steinman et al., 2020) and can decrease levels of loneliness, and thus may be a viable alternative to in-person contact when this is not possible (Sims et al., 2017). Internet use for social goals has been shown to increase life satisfaction, especially in those over 80 years of age. Older adults can both seek and maintain social relationships by using the internet and can find social support (Szabo et al., 2018). Therefore, internet use for social reasons can facilitate a sense of belonging. Internet access among older adults in New Zealand increased from 21% in 2001 to 75% in 2013 (Szabo et al., 2018) which suggests that most older adults have access to the internet, making it a viable option during this time of social isolation.

Internet use among older adults has been shown to increase cognitive, emotional, and physical wellbeing; using the internet increases life satisfaction while decreasing loneliness, as

well as improving cognitive and executive functioning such as processing speed and memory, and using the internet to find health information increases physical wellbeing (Sims et al., 2017). Internet use also decreases the prevalence of depression by 20% compared to non-users and can increase feelings of self-efficacy in the older adult population (Szabo et al., 2018). In New Zealand, Szabo et al. (2018) found that older adults utilized the internet for primarily three reasons: social – connecting with friends and family, instrumental – online banking, and informational – accessing health information. Social use had an impact on wellbeing in that it decreased loneliness within this population. These results highlight the potential for internet use to mitigate the negative effects of social isolation and disrupted lives during times such as the COVID-19 pandemic.

However, there are various potential barriers for older adult internet use. Age Concern New Zealand highlights the issue of older adults being unable to utilise technology during the COVID-19 pandemic to obtain the resources they need (Robson, 2020). In the older adult population, there are many who are not literate in the use of technology and also do not have access to technological devices and/or an internet connection, and thus cannot utilise the supports and resources put in place or obtain value from the digital socialisation they provide (Gorkovenko et al., 2017). This is known as the digital divide. The digital divide is the societal gap between those who have internet access and those who do not (Chang et al., 2014; van Deursen & Helsper, 2015). Technology use may perpetuate existing inequalities, especially during this time (Brooke & Jackson, 2020; Marston et al., 2019). Technology use in the older adult population generally favours those of higher social status and those with higher levels of education (Marston et al., 2019). Hargittai et al. (2019) found that socioeconomic status was a

big influence of skills and use; the more advantaged were more likely to use the internet and have better skills, thus highlighting how existing inequalities can be perpetuated.

Furthermore, internet use has consistently been shown to be negatively related to age (Chang et al., 2014; van Deursen & Helsper, 2015). Physical and cognitive decline, such as hearing loss or cognitive impairment, may affect an older adult's ability to utilise these technologies (Steinman et al., 2020). Furthermore, older adults who are not competent or comfortable with using technology, or do not have internet access may be unable to utilise the online services or obtain value from the digital socialisation they provide (Gorkovenko et al., 2017). Marston et al. (2019) found that confidence in using technology was an important barrier in their Technology in Later Life (TILL) study. The authors also found there was some confusion with how the grocery shopping website worked.

Gorkovenko et al. (2017) and Marston et al. (2019) identified trust as a main barrier to online shopping. Both studies found that older adults were not comfortable with giving away their bank details online, and prefer to use cash or cheques, and similarly were worried about being scammed. Furthermore, older adults enjoy physically going into the community to do tasks such as shopping, for the exercise and social opportunity, as well as for the ability to assess the quality of products. Part of an independent identity involves physically going to the store to see the products being purchased and therefore online shopping may impact on this sense of independence (Gustafsson et al., 2003). Similarly, Fjellström (2009) explains that some older adults use the regular grocery shop as a source of social interaction and exercise. Using online shopping reduces socialisation, and the participants expressed concerns about not being able to check the quality before buying.

Chang et al. (2014) found that a main reason for not using the internet was there was no perceived benefit, or the older adults were just not interested. Other barriers found were frustration with the learning process, computer anxiety or fear, a lack of trust with the internet, not knowing how to use it, or no internet access. van Deursen and Helsper (2015) found that those participants who were over 75 felt as though they were too old to use the internet. Furthermore, older adults may feel anxious about asking for support with technology (Marston et al., 2019). These results illustrate the myriad barriers that exist for the older adult population in terms of internet use and highlight the potential issues this population may face when trying to utilise technology during this challenging time. It appears there exist many factors older adults may need support within order to effectively utilise technology and the internet.

However, there are also facilitators to technology use by older adults. In their study, van Deursen and Helsper (2015) stated that 97% of people aged 16-75 in the Netherlands had access to the internet at home, however of those above 65, 19% did not have internet access. A common theme in the literature is that older adults living with others are more likely to use the internet and have internet access at home, as well as having more positive attitudes toward internet use (Chang et al., 2014; Gorkovenko et al., 2017; Kuoppamaki et al., 2017; Lian & Yen, 2014; Marston et al., 2019). This is because older adults often gain internet skills from social connections. Living with an internet user allows older adults to learn how to use the internet and access continued support in this endeavour. Chang et al. (2014) found that one third of their participants that use the internet were taught by a family member. This highlights an important method for decreasing the digital divide and improving internet and technology use among older adults.

These considerations of barriers and facilitators to technology use are important. It is evident that internet and technology use is valuable for older adults during this time, due to the socialisation they provide as well as the ability to complete essential tasks, such as shopping and banking, online. However, there are many barriers to the use of technology, and it would be valuable to address these and to support older adults without access, to help them to be able to utilise the benefits.

Neoliberalism and Health

Neoliberalism began in the 1970s and explains a significant shift from the public ownership of markets to private ownership (Breheny & Stephens, 2019; Rubinstein & de Medeiros, 2015). There was a corresponding shift of de-centering of the government to more autonomous citizens: Foucault's idea of 'self-governance' and 'governance at a distance' (Springer, 2012). Foucault saw this governmentality as a method of social control, which was not forceful but rather focused on the autonomous self as governing itself rather than the responsibility lying with the government (Ayo, 2012). The intention is to benefit the individual, but also the entirety of society, as the load is shifted from the government and onto individuals (Ayo, 2012). Thus, neoliberalist values place heavy responsibility on the individual to achieve good health and wellbeing (Pond et al., 2010). Neoliberalism posits that individuals can achieve good health by actively pursuing it; engaging in regular exercise, eating well, and being socially active are purported ways to ensure one remains healthy (Pond et al., 2010). This suggests that responsible citizens will actively engage in health promoting habits and lifestyles and will apply self-discipline (Pond et al., 2010). Consequently, when individuals do experience illness or disability, they are often seen as blameworthy for this outcome and experience resulting feelings of shame, as well as anxiety about maintaining health (Pond et al., 2010; Stephens, 2017).

Neoliberalism is the dominant lens through which society views health and the involvement of citizens in their own health, which has an important impact on the experiences of the COVID-19 pandemic for older adults.

Healthism

Healthism is a termed first used by Crawford (1980) and describes an excessive awareness and attention to health and health related behaviours, which results in individually focused pursuits to actively prevent ill health and maintain good health (Hodgetts et al., 2005). In alignment with neoliberalism, the values of healthism place the individual as responsible for their health, and health is seen as a product of self-discipline and healthy habits and lifestyles (Ayo, 2012; Hodgetts et al., 2005). Viewed in this light, good health is attainable by all if they take responsibility and act as responsible citizens (Henderson et al., 2009). This subsequently places blame on those who experience ill health, as these individuals are seen as irresponsible and accountable for this outcome (Breheny & Stephens, 2019; Henderson et al., 2009; Stephens, 2017).

In this light, health is no longer seen as the absence of illness and disability, but rather as individuals striving for perfection and the need to be responsible and disciplined citizens (Cheek, 2008). Health thus becomes a moralistic issue, with those who are unhealthy being seen as irresponsible and not living in alignment with the prescribed lifestyle, with this failure to achieve or maintain good health being not just a personal failure, but a moral one as well (Ayo, 2012; De Jong et al., 2019). As food and food related habits are enmeshed with one's identity and sense of self, this can have a detrimental effect on how one views themselves (Lundkvist et al., 2010). The foods people choose to eat and the routines and habits surrounding these foods thus have moral valuation. Healthism leads to people attributing moral value to who they are as a person by

their level of health and whether they feel as though they are acting responsibly (Lundkvist et al., 2010). Furthermore, as discussed above, identity is closely related to food choice and practice, however the body is increasingly becoming an indicator for identity. A healthy and fit body aligns with the healthism ideals of self-control and willpower, and these are ultimately determined by the foods one eats and the lifestyle one undertakes, according to healthism messages (Bisogni et al., 2002). Bisogni et al. (2002) found that when they asked participants about their food related practices, the participants automatically discussed the neoliberalist and healthism values of being healthy and having control over oneself. This illustrates how food is tightly linked to self-discipline and taking responsibility for one's own health.

Older adults are aware of these health messages and the subsequent responsibility they face to ensure good health (Lundkvist et al., 2010). Lundkvist et al. (2010) and Sydner et al. (2007) both found that the older adult participants in their studies were aware of this personal responsibility to maintain health and prevent ill-health. The studies found narratives about making sense of the confusing health messages in society as being their own responsibility and saw health as an investment one makes to ensure on-going good health. Participants see relationships between the foods they eat and the prevention of illness and come to understand and explain their health through the lens of healthism (Hodgetts et al., 2005). Consequently, this health consciousness and the pursuit of health have an impact on food choice behaviours and subsequently have a moralising effect on these behaviours (Henderson et al., 2009). Henderson et al. (2009) found that participants are driven by wanting to eat healthfully when making choices about food, to take responsibility and achieve good health. The participants view food choice as a moral responsibility, and a duty of being a good citizen.

Healthism is a shift from citizens being seen as passive and dependent on a society that provides for its citizens, to being autonomous and independent citizens that are enabled by society, and thus government campaigns and information are aimed at an individual level (Cheek, 2008; Henderson et al., 2009). Again, this corresponds with the Foucauldian idea of governmentality, and indeed neoliberalism and healthism mutually reinforce each other (Ayo, 2012). This inevitably reinforces social inequalities, as ill-health is seen as a choice rather than being affected by the numerous social determinants of health (Ayo, 2012). The discourses which reinforce healthism also serve to reinforce these inequalities (De Jong et al., 2019). As such, money is invested into individualised health promotion and individual action rather than wider-based healthcare assistance and support, or to address the social systems which may be leading to the ill-health in the first place (Ayo, 2012; Hodgetts et al., 2005). In this light, the government is thus not accountable for the illness experienced by its citizens, but rather the individuals themselves are to blame. These health promotion efforts by the government reinforce this individual responsibility over health while neglecting to consider the wider societal context (De Jong et al., 2019). This is of particular relevance in the pandemic situation, where older adults are positioned to take responsibility for their own health during this time; older adults must stay home and isolate in order to stay safe, without much consideration of the responsibility of society to keep them safe and well.

The healthism discourse is pervasive and deeply engrained in our society, with individuals associating good health with a healthy lifestyle and a willing acceptance of this responsibility as a moral one (Henderson et al., 2009; Hodgetts et al., 2005). Each day, citizens talk about their health, and the government talks about health and the responsibilities of the citizens to achieve good health (Cheek, 2008). Public policies have huge health promotion

components (Ayo, 2012). Consequently, health becomes a focal point in all aspects of life, and indeed, a preoccupation (Cheek, 2008; Henderson et al., 2009). However, this ideal state of health is something that cannot be attained as there is always more to be done, and a healthier life to live (Cheek, 2008). This results in a huge focus on health, while at the same time constantly living in a state of anxiety about never reaching this unattainable level of health.

Healthism is relevant in the current COVID-19 context. Government messages consistently highlight the responsibility of the individual to keep themselves and others safe by following government restrictions. Where there already exists anxiety about maintaining good health, these messages have the potential to perpetuate the fear felt by the public. The large quantity of these messages in the media during the pandemic is likely to reinforce these values. It is important to consider the values of healthism and neoliberalism when understanding the experiences of older adults.

Successful Aging

Consistent with the idea of healthism and the values of neoliberalism is the concept of successful aging (SA), introduced by Rowe and Khan (1998). SA places the emphasis and responsibility on the individual to age successfully and to maintain good health throughout the aging process (Rubinstein & de Medeiros, 2015; Stephens, 2017). This includes preventing illness and disability as well as maintaining high levels of social engagement, physical and economic participation, cognitive performance, and high physical functioning (Dean et al., 2008; Stephens, 2017). Consistent with the values of healthism, SA implies that one can achieve this ideal by taking responsibility and engaging in practices such as regular exercise, a healthy diet, and remaining socially active (Stephens, 2017; WHO, 2002). According to this model, it is the action of the individual in their lifetime that will determine whether or not they are successful as

an older adult, and as such this is posited as an attainable reality for everyone (Rubinstein & de Medeiros, 2015). This is aimed at changing the discourse from older adults being dependent and declining, to being independent and experiencing good health. This is also aimed at reducing the burden of the ever-increasing population of older adults on society (Stephens, 2017).

This idea of SA very closely aligns with WHO's 'active ageing' concept, as outlined in their *Active Ageing: A Policy Framework* document (WHO, 2002). This concept was developed in the 1990s, and the policy explains that active ageing will reduce costs to individuals and society and allow older adults to remain active participants in society for longer with fewer diseases and illnesses. It is purported that this will enhance autonomy and quality of life. In order to achieve this quality of life, WHO explains that one should be self-responsible and "make personal efforts to adopt positive health practices at all stages of life" (WHO, 2002, p. 15), highlighting the neoliberalist values that underpin this policy.

However, this purported ideal is not equally attainable and fails to consider social or physical context and conditions or life history. These factors often have a significant effect on how successful one is in older age, and as such SA is oppressive and not equally attainable for all, as the discourse suggests (Breheny & Stephens, 2019; Rubinstein & de Medeiros, 2015; Stephens, 2017). In New Zealand, the Ministry of Social Development has released a Positive Ageing Strategy, which aligns with the SA discourse and WHO's Active Ageing Policy. While acknowledging that positive ageing relies on myriad factors, the document states: "The ability to age positively is assisted by good investment in education throughout life, to provide individuals with a repertoire of skills and an ability to set and achieve goals" (Ministry of Social Development, 2001, p. 1). This statement suggests that positive ageing is attainable by all if they invest in education throughout their lifetime, reinforcing the discourses of healthism and SA.

As with healthism, this discourse places blame on older individuals who do experience physical, mental, or social decline, and resulting feelings of shame for failing to achieve this ideal (Stephens, 2017). Furthermore, SA produces anxiety and fear for older adults regarding requiring assistance and being dependent in some aspects of life, and makes them reluctant to ask for help, as it is seen as a failure to require support (Pond et al., 2010). This undoubtedly has adverse consequences for older adults, for whom losing physical and cognitive capabilities and thus requiring support is inevitable (Breheny & Stephens, 2019). It is suggested that older adults may rather have unmet needs and still be independent, than to ask for support (Breheny & Stephens, 2019). Of relevance to the COVID-19 pandemic, Davis et al. (2016) explain that asking for help when facing food insecurity can be a stressor, perhaps due to the image it portrays of not being able to take care of oneself. In the current pandemic situation, older adults are experiencing forced loss of autonomy and independence and are requiring support from either friends or family or from the government because of necessary social isolation. This is likely to impact how older adults are viewing and talking about themselves, as well as how others are talking about them. In the SA discourse, successful older adults are independent and do not need to rely on others; however, this is not always possible, and in the current situation may be even more impossible. Furthermore, ageing is no longer synonymous with receiving support; rather, older adults are competing with younger adults for resources (Breheny & Stephens, 2019). This is revealed in the competition for medical resources to treat COVID-19, as discussed in the following section.

SA impacts on how older adults navigate, talk about, and shape their identity, which change in alignment with the current social context (Breheny & Stephens, 2019). Consistent with the social constructionist epistemology, identities are fluid and are continuously being shaped

and reshaped by the way we talk about ourselves. This discourse is increasingly becoming more about the individual and individual action and responsibility, and so what it means to be an older adult today is different than it used to be (Breheny & Stephens, 2019). Older adults often talk about what they should be doing to age well, and speak about being responsible for the condition that they are in. In this way, dependence or independence become an identity rather than a physical state, which is constructed based on the knowledge of older age and what this entails (Breheny & Stephens, 2019). This influence on identity is an important context to understand when looking at the experiences of older adults; we know that older adults shape their identity based on their belief of their own alignment with SA ideals, and therefore experience cannot be understood outside of this context.

SA discourses are important to be aware of when considering the experiences of older adults during the pandemic. These discourses produce feelings of shame when an older adult requires assistance, and the moral valuation tied to the ability to be independent has the potential to lead to the older adult feeling like a failure. We must be mindful of these discourses and the effect they have on the experience of being an older adult, especially during difficult times.

Ageism

The COVID-19 pandemic has highlighted the pre-existing issue of ageism and has changed the ways in which older adults are viewed and subsequently treated (Ayalon et al., 2020; Berg-Weger & Morley, 2020; Brooke & Jackson, 2020). Ayalon et al. (2020) refer to this as a "parallel outbreak of ageism" (Ayalon et al., 2020, p. 1). Ageism is defined as "the stereotypes, prejudice, and discrimination toward people because of their age" (Ayalon, 2020, p. 1) and incorporates many incorrect beliefs (Sims et al., 2017). Many aspects of the pandemic have perpetuated this issue.

These discourses fail to recognise the heterogeneity of this population. Older adults have had myriad experiences, differing genetics, and varying privileges and statuses (Ayalon et al., 2020) and thus are the most heterogeneous of all the age groups (WHO, 2002). Subsequently, the experience of ageing is different for everyone. The ageism discourse views older adults as having all the same risks and vulnerabilities, as well as being frail and dependent, across the entire older adult population (Ayalon et al., 2020). However, a considerable number of older adults do not fit into this image and are independent, healthy, and active. Indeed, there are stories of people over 100 years of age who survive COVID-19 and reports of those much younger who do not (Ayalon, 2020). It is also of note that when a younger person dies from COVID-19, it usually produces a large story and media response, whereas when an older adult dies, they are represented as merely a statistic (Fraser et al., 2020). This further emphasises the working of ageism. Older adult deaths from the virus are usually related to levels of frailty and co-morbidities rather than age, and thus the age cut off is arbitrary and should not be the sole criterion for decisions regarding resource allocation (Ayalon, 2020; Fraser et al., 2020). WHO (2002) recognises this threat to older adults about resource allocation and the disregard for human rights that comes when older adults are discriminated against based on age. Furthermore, we consider someone to be an older adult specifically regarding their age, without consideration of functional capacity or level of impairment. However, Johnson et al. (2014) suggest that care should be based on these parameters, rather than age, during a disaster. In future resource planning, the authors explain, “Going forward, more emphasis should be placed on functional needs as opposed to chronology” (Johnson et al., 2014, p. 76). This is especially relevant during the COVID-19 pandemic where the arbitrary age cut off 70 was consistently used, from identifying those who are vulnerable to creating specific restrictions.

Ageism disregards the value of older adult lives. While also being patronising (Sims et al., 2017), this ageism discourse implies that older adult lives are not as worthwhile to save; they are nearer the end of their life, having had their time, and are viewed as a burden to society (Ayalon, 2020; Brooke & Jackson, 2020). This highlights a pre-existing discourse in society of the older adult life being of lesser value than younger lives (Fraser et al., 2020; Morrow-Howell et al., 2020; Sims et al., 2017). Similarly, in some instances the fate of the economy has been deemed more valuable than the lives of older adults, with decisions being made ensuring the economy will survive but neglecting or risking the health and safety of older adults (Morrow-Howell et al., 2020).

Furthermore, COVID-19 has been consistently viewed as an illness of the older adult population. There was a sense of relief for the younger population when they learned that the older adult population is at the highest risk of mortality from contracting the virus (Berg-Weger & Morley, 2020). This led to many countries not taking the virus seriously (Fraser et al., 2020; Morrow-Howell et al., 2020). Viewing this virus as an issue of the older adult population has the potential for myriad consequences. In Israel, the former CEO of the Ministry of Health stated that older adults should be sacrificed, and in other countries such as Italy and Spain, older adults were often sacrificed to give resources to younger people, with age being the deciding factor as to whether or not someone received treatment (Ayalon, 2020). Regulations around resource allocation during the pandemic have often used age as a tie-breaking consideration when two or more people are competing for the same resources (Fraser et al., 2020). This again highlights the use of this arbitrary age cut off and the neglection to consider other factors beyond age.

Discourses of ageism perpetuate the gap between young and old, and lead to a decrease in intergenerational solidarity. The New Zealand Ministry of Social Development Positive Ageing

document outlines one of its missions as addressing the issue of the attitudes and actions of the younger generations towards older adults in order to achieve the goal of positive ageing for all older adults in New Zealand (Ministry of Social Development, 2001). Furthermore, the WHO Active Ageing Policy highlights the importance of intergenerational solidarity and recognising the important contributions to society that older adults provide (WHO, 2002). However, discourses of intergenerational solidarity have increased over the course of the pandemic. These discourses are perpetuated by the messages in the media instructing over 70s to stay home, and the messages about over 70s having the highest mortality risk (Ayalon et al., 2020; Brooke & Jackson, 2020; Fraser et al., 2020; Sims et al., 2017). Moreover, this arbitrary age of 70 contributes to the ageism discourse as it makes very broad generalisations and does not allow for any differentiation among this population, as discussed above (Ayalon et al., 2020). This reinforces the issue as a problem for older adults, and furthermore, younger people see themselves as invincible and as though the problem is not theirs (Ayalon, 2020; Fraser et al., 2020; Sims et al., 2017). This has a consequence of younger people subsequently being resentful towards this older adult population, thus increasing intergenerational tension within the context wherein a division between young and old already existed (Ayalon, 2020).

Furthermore, there has been significant discourse around “us” and “them” during the COVID-19 pandemic (Ayalon, 2020). In some countries, people in positions of power have had considerable impact on the ageist discourse: in Israel, the Ministry of Defence stated that the most important action in the fight against the virus is to separate the young from the old, implying that older adults are the problem rather than the virus. Similarly, leaders of many countries emphasised the importance of isolating older adults rather than the whole population. While it is important to protect the health of older adults, these discourses can be patronising and

it is important to acknowledge and respect older adult autonomy, and thus a balance must be struck between these two considerations (Ayalon, 2020; Fraser et al., 2020).

These discourses of ageism are dangerous because people internalise the stereotypes and biases assigned to them (Ayalon et al., 2020). This leads to a shift in how a person views themselves, and this internalisation can have consequences for physical and mental health (Ayalon et al., 2020; Brooke & Jackson, 2020). Furthermore, this ageist discourse complicates the experience of ageing during a pandemic (Brooke & Jackson, 2020). Older adults may feel devalued and worthless, as well as feeling they are a burden to society (Brooke & Jackson, 2020). Losada-Baltar et al. (2020) found that negative self-perceptions among older adults can actually increase the occurrence of loneliness and distress, as well as increasing emotional reactivity. Thus, age may not be as impactful on wellbeing during this time, but rather the ways in which older adults view themselves. On the contrary, older adults with positive views about themselves and ageing appear to be more resilient. Consequently, due to the high levels of stress that result from the pandemic, it may be even more imperative than usual that older adults feel self-efficacious to maintain health and wellbeing (Losada-Baltar et al., 2020).

It is therefore highly evident that older adults need to be supported during this time, and to do so, we must understand the context in which they are experiencing both the pandemic as well as the complicated experience of ageing. Ageism leads to older adults feeling worthless and devalued, and these feelings are perpetuated by the intergenerational solidarity as well as the perpetual messages in the media highlighting the arbitrary age cut off for being vulnerable. Older adults are highly heterogeneous, but society fails to recognise this. Ageism is a pressing issue that must be addressed when looking to support adults through this pandemic.

Study Aims

The aim of the present research was to explore the lived experiences of older adults during the COVID-19 pandemic in the first half of 2020. The focus of the research was on the intersections of food, health, and coping with the changes and restrictions the pandemic brought. In addition, a media analysis was conducted to further understand the context in which these experiences occurred, regarding government messaging, news media, and local newsletters. Researching lived experiences is crucial when looking to understand how older adults have coped with, or not coped with, all the challenges that the COVID-19 pandemic brought. As an identified vulnerable population, it is important that we understand these experiences to effectively provide support and improve the outcomes for older adults in such challenging situations as a pandemic.

Chapter 2

Methods

This chapter outlines the methods used and the justification for these methods to answer my research question. Firstly, I outline why qualitative methods are important for this study. Secondly, I discuss the assumptions behind my study including the epistemology of social constructionism and my theoretical perspective, interpretivism. Thirdly, I discuss reflexive Thematic Analysis (TA) as the methodology most suited to answer my research question. The importance of reflexivity and my position is also covered. Then I move on to the procedure for this study. Finally, I discuss the analytical process.

This study consisted of interviews with six participants, as well as a media analysis from news sources, seniors' newsletters, World Health Organisation documents, and Ministry of Health documents. Two interviews were conducted in person, and the remaining four were conducted over the phone. The interviews were centred around the participants' experiences of the pandemic, with a focus on food habits and acquisition. The interviews varied in length from 20 minutes to 45 minutes. These were audio recorded and then transcribed by me. These transcripts were analysed using reflexive thematic analysis, with codes being generated and then wider themes being developed from these codes. Media sources from the time of lockdown were used to further illustrate the context of the participants' experiences.

Qualitative Methods

Qualitative methods sit within a relativist ontology which postulates the existence of multiple realities. Furthermore, these methods sit within a constructivist epistemology which emphasises that knowledge is created through the relationship between the knower and the phenomenon to be known, and therefore knowledge cannot be independent from the knower

(Yilmaz, 2013). Qualitative methods aim to understand human behaviour in context by collecting the stories of people who have experienced particular phenomena in order to better grasp the human condition and the phenomena that impact us (Carter & Little, 2007; Jacob & Furgerson, 2012). Further, qualitative methods seek to understand peoples' experiences and the subsequent meanings that people attribute to these experiences (Tuffour, 2017). As such, qualitative methods are inductive in nature, as well as emic and idiographic (Tuffour, 2017).

Qualitative methods are appropriate for the present study which aims to understand the first-hand experiences of older adults living through the COVID-19 pandemic. There is currently a lack of research in planning for and supporting older adults during disasters, and very little research in the firsthand experiences of older adults during disasters. It is therefore important that older adults can tell their own stories within their own context. Qualitative research ensures that experience remains in context, thus providing a rich and detailed account.

Tuohy et al. (2014) identified a need for further qualitative research on independent, community-dwelling older adults about disaster planning and preparedness, and thus the current research aims to contribute to this. It is widely recognised in the literature that older adults are vulnerable to poor outcomes during disasters. This phenomenon may be best understood in the context in which the disaster is experienced. Therefore, if we can understand the context and the experience of older adults during this time, we may be able to better implement support and resources for future disasters. This highlights the need for and importance of qualitative methods in research, and the relevance of the inclusion of a media analysis.

Social Constructionism

Kenneth Gergen is largely recognised as the father of social constructionism (Burr, 2015; Losantos et al., 2016). This theory posits that knowledge is constructed by humans in their

interactions, language, and historical, cultural, and social context (Burr, 2015). This is in contrast to the dominant positivist epistemology that exists in the natural sciences and views knowledge as something that is out there, waiting to be discovered, and in research as something that belongs to the participant or object of study (Losantos et al., 2016).

This thesis uses Vivienne Burr's (2015) views on social construction. Burr (2015) outlines the key assumptions for a social constructionist approach. Firstly, social constructionism challenges the view that human behaviour, and knowledge in general, can be discovered through objective observations and instead postulates that there is no final, objective, and universal truth, as there exist multiple realties and perspectives. To do this, the research must take a "critical stance" (Burr, p. 2) towards the taken-for-granted ways of understanding the world. Knowledge is constructed rather than discovered, through our interactions with others and the environment around us (Burr, 2015; Crotty, 1998; Gray, 2014). Secondly, Burr highlights the importance of history and culture in our current understandings. People understand the world in different ways and all these perspectives exist in parallel, and therefore none can be said to be more truthful than another. Thirdly, that knowledge comes about through interactions between people and differing realities are derived from social interactions (Burr, 2015). Thus, humans are immersed in language and social relationships and experiences which can only be disclosed through language (Burr, 2015; Tuffour, 2017). This therefore challenges the positivist research approach of objective observations, where people are studied and attempted to be understood out of their context (Burr, 2015). Lastly, Burr advocates that social action and knowledge are intertwined showing the importance of power creating supposed more legitimate forms of knowledge or treatment towards others.

In addition, social constructionism advocates for a curiosity in research, and participants are viewed as experts providing an answer, rather than the researcher being the expert and constructing an answer (Losantos et al., 2016). It is the collaboration of researcher and participant to construct knowledge through interaction; both researcher and participant work together to construct knowledge (Losantos et al., 2016). As a result, the position of the researcher needs to be transparent, as they are an actor in the production of knowledge. Reflexivity is discussed later in this chapter. Thus, the current research falls within the social constructionist epistemology as the research is investigating how participants have come to understand the world around them via their interactions with it. The participant and researcher are constructing knowledge within the participant-researcher relationship, and the participant is the expert of their own experience. The current context of the pandemic and the importance of government and health agency messages in creating a dominant narrative to protect "our team of five million" (Baker et al., 2020, p. e56(3)) emphasised the importance of using a media analysis alongside the participant interviews. This form of analysis works well within a social constructionism position and enables a comprehensive understanding of context.

Theoretical Perspective

The theoretical perspective of the present study is interpretivism. Consistent with social constructionism, interpretivism understands the existence of multiple realities that are themselves created by the knower, and knowledge is viewed not as what is real, but rather as the best understanding thus far (Laverty, 2003). This framework also recognises that there exists an intricate relationship between the knower and the known and looks to understand the experience of knowledge (Laverty, 2003). Social constructionism fits well for the present study which explores older adults' experiences of health, food access, and food consumption during the

COVID-19 pandemic. While I gained insights through interviews, I also explored the messaging that was aimed at New Zealanders just prior to and during lockdown levels 3 and 4 with a specific focus on government messaging and messaging around food provision for older adults. It was important for this research to explore the context of the experiences, and to investigate whether the participants followed or resisted the advice.

Researcher Position

This project is using reflexive thematic analysis (TA). The researcher is the instrument for analysis in qualitative research, as they carry out the coding, decontextualization of data, recontextualization, as well as categorising the data into themes and groups (Starks & Brown Trinidad, 2007). In reflexive TA specifically, the researcher is generating the codes and interpreting meaning-making, which is impacted by the social and historical context of the researcher themselves, as well as their own experiences (Tuffour, 2017). As such, a high level of reflexivity is required in qualitative research. The researcher must be aware of how they are situated in regard to the research topic as well as to the participants, and acknowledge the role of the self in the construction of knowledge, as knowledge always comes with presumptions (Berger, 2015; Tuffour, 2017). Further, researchers must adopt an epistemological stance from which to carry out all aspects of their research, as this is their theory of knowledge: the lens through which to go about the research endeavour (Carter & Little, 2007).

Reflexivity is a way of ensuring that qualitative research is of high quality and maintains accuracy and credibility by identifying and making known the ways in which the researcher situation may be affecting the research and research data (Berger, 2015). In qualitative research, the researcher becomes a part of the world they are studying, and thus will have an impact on the phenomena and the construction of knowledge. With thematic analysis the researcher must

engage in ongoing reflexivity throughout the research process. This is because there are many decisions that must be made compared with other stricter methods of analysis which makes it imperative that the researchers continually reflect and consider their position in regard to the research (Braun & Clarke, 2006).

This researcher position can affect every aspect of the research, from the development of research questions to the final analysis, and this highlights the imperative need for reflexivity to continue throughout every aspect of the research process, starting from when the research questions are being formulated, up until the final submission of the research (Berger, 2015; Starks & Brown Trinidad, 2007). It is important to always be aware of how one is *currently* situated regarding the research, and as such to maintain a critical self-awareness. Over the course of a research project, researcher feelings, presumptions, and context can change. Furthermore, the researcher may not always be aware of their preconceptions, further highlighting why researchers should continually engage in self-reflection (Alase, 2017). Reflexivity involves an awareness of perspective, as well as of pre-existing beliefs and ideas about the topic. It includes a consideration of gender, race, age, sexual orientation, personal experience, and political, theoretical, and professional beliefs, with age being of most relevance with the current research (Berger, 2015). All of these can influence biases and stereotypes, which must be constantly monitored throughout. Similarly, this position will impact the types of questions that are asked by how the researcher conceptualises the topic of interest and the lens through which they see the world (Berger, 2015). This can affect participant recruitment, as participants may be more likely to partake in the research if they feel as though they will be understood by the researcher, by having a shared experience (Berger, 2015). Again, this emphasises the intricate role of the researcher in qualitative research and the importance of always engaging in reflection.

It is important to note that the subjectivity that comes with the researcher involvement in qualitative research is not a negative, but rather it is this very context and experience of the researcher that allows them to interpret meaning making and experience and to find themes. Indeed, the researcher uses their own experience, values, and beliefs of the phenomenon of interest to interpret the meaning ascribed by the participants and that understanding comes with presumptions (Tuffour, 2017).

As a young person interviewing older adults, I was aware that my life experiences thus far were likely quite different from those of my participants. I have lived for a far shorter time and have experienced far fewer life events than my participants. My current context, especially regarding the pandemic, will also likely be vastly different than those of the participants of the present study. I was therefore vigilant throughout the research process about how this may affect everything from the research questions I develop to the conclusions I draw. For a two-week period after returning to New Zealand from Europe on March 18, 2020, I was in a two-week self-isolation where I was unable to leave the house. I therefore had a brief experience of being unable to do my own shopping, like the participants of the present study. However, after this two-week period I returned to work as normal as an essential worker and was also doing my own supermarket shopping. This contrasts to the participants who were unable to do their own shopping for approximately 7 weeks during the first lockdown in New Zealand.

I was also cognisant of the fact that I am a healthy young person, and thus far less likely to experience adverse consequences if I were to contract the virus. The participants of the present study were considered at-risk due to their age, and therefore the danger to them was far greater than it was for me. While they all identified as healthy, this likely would have still produced a vastly different experience during the pandemic and subsequent lockdowns. Being young and

therefore not in the at-risk group, I was able to go into the community without too much anxiety about getting sick, and therefore from a personal health perspective, the pressure on me to avoid contact with others was much less than it was for the participants.

As a young person, it is also likely that I had a greater degree of technology literacy than my participants, making keeping in contact with friends and family easier during this time of increased social isolation. Again, this would have likely been a different experience than that of the participants who, although four of five participants had access to the internet and a device, potentially had more limited technology literacy.

However, older adults often have had greater experience with difficult life and economic circumstances than younger generations, due to their age. This may influence their ability to be resilient through already having the inner resources to cope with such adversity. Being young means that I have had less life experience, and therefore have likely developed fewer coping strategies for dealing with adverse events. It was therefore important for me to not assume anything but rather go into the interviews with an open mind about the participants' coping abilities. This is something that was discussed with my supervisor throughout the research process. I drafted my interview schedule, and we were able to discuss the questions I would ask and what I was looking for. This ensured that I was not going into the interviews with unrecognised preconceived ideas about what I was going to find. This enabled me to keep my questions open and unassuming.

It is helpful to maintain a research journal in TA, where the researcher records thoughts, feelings, reactions, and emotions to each part of the research process (Starks & Brown Trinidad, 2007). This can help identify emerging themes, as well as recognise where the researcher position may be influencing the data. Furthermore, it is recommended that the researcher come

back a few weeks after the initial reading of the data, to have a fresh perspective and for a chance to notice any biased interpretations of the data (Berger, 2015). A researcher should keep a detailed and transparent record of thought processes, research steps, and rationale for any decisions or interpretations (Berger, 2015). I found this to be a particularly useful process to ensure I maintained reflexivity and awareness throughout data collection, by reflecting on any thoughts I had during the process. Consulting with colleagues and supervisors is important for reflexivity, to ensure the researcher has not misinterpreted or failed to recognise pieces of data (Starks & Brown Trinidad, 2007). Colleagues and supervisors will be better able to identify parts of the data that have been over emphasised and parts that have been ignored (Berger, 2015). Throughout the research process, I consulted with my supervisor about my thoughts and reactions to the participants and the data. She was able to provide an outsider's perspective and assist with the analysis of the data sets to ensure that I had not missed anything, and that I was not looking at the data through a lens of bias. These strategies ensured researcher reflexivity and minimised any biases.

Reflexive Thematic Analysis

Reflexive thematic analysis (TA) was the analytical approach used to answer my research question. Reflexive TA is a flexible and simple method of qualitative data analysis which allows the researcher to identify and analyse patterns in a data set and provides flexibility in answering research questions (Braun & Clarke, 2006). This flexibility comes from TA being conceptualised as an analytical method rather than a methodology; this type of analysis does not follow a pre-existing theoretical framework, as other qualitative methods do. Therefore, there is flexibility in data collection methods, with common methods including interviews, focus groups,

surveys, and blogs. However, researchers must still locate their research within a theoretical and interpretive framework, as has been done in the present study (Braun et al., 2017).

Reflexive TA was most suited to the current study as opposed to coding reliability approaches or codebook approaches, as I used both interview and media data (Braun & Clarke, 2020). The reflexive approach is about theme development from codes, or "shared meaning underpinned by central organising concept" (Braun & Clarke, 2020, p. 3). In this regard, themes unite otherwise disparate pieces of data and can explain large portions of the data and help to answer the research question (Braun & Clarke, 2006). It is in this stage of the research that the researcher is largely the instrument for analysis, as the researcher is constructing the themes (Braun & Clarke, 2006). I generated themes through thorough engagement with the data, whilst being reflexive and acknowledging that the themes cannot exist separately from the researcher.

Two methods of coding can be used in TA: inductive and deductive. An inductive method starts analysis at the level of the data, using a bottom-up approach where the identified codes are linked to the data itself. The researcher is not trying to fit the data into a pre-existing framework. A deductive method comes to the data with pre-identified ideas, concepts, and possibly even codes, and uses a top-down approach (Braun et al., 2017). The present study utilised an inductive approach, coming to the analysis with no preconceived codes or theories and instead taking the data at face value.

Furthermore, the level of meaning can either be semantic, where codes are developed from the explicit content of the data, as with the present study, or latent, which considers the underlying meanings and assumptions of the data (Braun & Clarke, 2006). The present study is situated within a social constructionism epistemology, and thus the research is not focusing on

the meanings made by the individuals, but rather how meaning is constructed within the socio-cultural context that the participants have experienced the pandemic.

Participants

The inclusion criteria for this study was adults over 70 years of age living in New Zealand from February 28th, 2020, which was the date of the first known COVID-19 case in New Zealand. Participants had to be living independently; that is, on their own or with a spouse in their own dwelling, and not in any sort of supported care situation or with extended family. They needed to have experienced a change in food acquisition and/or consumption, e.g. having to rely on others or online shopping for groceries or having eating habits that had shifted markedly. The participants must have been confident in English. The exclusion criteria included chronic health conditions that require a specific diet, and conditions causing cognitive issues. The recruitment poster can be found in Appendix A, and the information sheet can be found in Appendix B. Six participants were recruited in total, all from word of mouth and snowball sampling. The participants contacted me by phone and provided their email address or street address so that I could send the information sheet, consent form, and transcript release form to them before the interview. The consent form can be found in Appendix C and the transcript release form can be found in Appendix D.

Recruitment

Snowball sampling was used to recruit participants for the present study. Snowball sampling is a common recruitment method in qualitative research, especially that which is exploratory and requires a small sample size (Baltar & Brunet, 2012; Noy, 2008). This type of sampling involves known contacts of the researcher being contacted, and further contact details of other potential participants passed on to the researcher by the known contacts (Alase, 2017;

Noy, 2008). I contacted people known to me who may have contact with eligible participants and gave them copies of the research information sheet. They then passed on the information sheet to potential participants, which informed them about the aims of the study, what was required of them, and their rights as participants.

This recruitment method is especially effective for research with small, homogenous samples, like the present study. The social circles of the participants were all similar: older adults living independently, who were able to pass on the information to other potential participants living nearby. This provided a largely homogenous sample. A participant from Auckland was contacted by my supervisor who then passed on the information to an eligible friend. The participants from Morrinsville were contacted by my family members, who had known eligible contacts in Morrisville, who then were able to pass on the information sheet to others in the area. Having participants from both a small town and the largest city in the country was advantageous, as it meant that the experience of both was captured in the research.

Data Collection

Interviews

Interviews are an accomplished method of data collection in qualitative research (Eatough & Smith, 2008). Semi-structured interviews are the most common method of data collection with thematic analysis, as this allows for the rich and detailed understanding that this method aims to achieve (Larkin et al., 2006; Pietkiewicz & Smith, 2014; Smith & Shinebourne, 2012). I followed best practice guidelines set out by Alase (2017) where I used open-ended and exploratory questions based on an interview prompt sheet, which can be found in Appendix E. This method allows for a particular set of questions to be answered while allowing flexibility to cater each interview to the individual participant, and the direction and topics they highlight

(Smith & Shinebourne, 2012). It was important that the participants had an active role in leading the interview but that I was able to obtain the information I required.

I planned for the interviews to take 60-90 minutes and I offered follow-up interviews to all the participants. The interviews of the present study were shorter than this, taking on average 30-60 minutes. The phone interviews were shorter than the in-person interviews, being 20-30 minutes in length. The in-person interviews were approximately 40 minutes each. This was likely due to the majority of them being conducted on the phone, which leads to a more concise conversation than an in-person interview (Locatis et al., 2010). It was very important due to the differences in our ages that I build rapport so that the participants felt comfortable talking with me. I took the view that the participants are the experts and thus they should guide where the interview leads with prompting (Biggerstaff & Thompson, 2008; Eatough & Smith, 2008). The interviews of the present study were conducted in the first week of August 2020, two months after New Zealand entered alert level 1. Four of the six interviews were conducted over the phone, due to travel distance as well as precautions due to COVID-19. Two interviews were conducted in person, at the participants' houses. After all the questions had been covered, the participants were asked if they had anything else, they would like to discuss or any points they wanted to add. The next steps were then explained to them, and the transcripts were emailed or mailed within a week for review.

Participant Profiles (Aliases)

Participant 1

Malcolm - Caucasian male, living in the Morrinsville area on a farm with his wife.

Participant 2

Florence - Caucasian female, living in Morrinsville, carer for husband, no family nearby.

Participant 3

Gertrude - Caucasian female, living in Auckland on her own.

Participant 4

Dancer - Caucasian female, living in Auckland on her own.

Participant 5

Dawn - Caucasian female, living in Morrinsville on her own.

Participant 6

Lillian - Caucasian female, living in Morrinsville with her husband.

Media Analysis

A media analysis was utilised in the present study to illustrate the context of the participants' experiences during the COVID-19 pandemic. The media sources provide information of the dominant messages in society at the time, from news sources as well as from the government. This allows the reader to understand the context in which the participants were making decisions and the messages they were receiving that would have influenced their experience.

The dates for the media analysis were two weeks before the start of lockdown – March 11, 2020, until New Zealand entered alert level 2 on May 13, 2020. Key words were searched in news websites: COVID, older adult, food. Articles were then downloaded and key pieces of information relevant to the present study were extracted. The following tables outline the sources that were used. Table 1 shows the news articles used including dates, Table 2 shows the documents from the Ministry of Health, and Table 3 shows what SuperSeniors newsletters were also used in the analysis.

Table 1:News Articles Used in Media Analysis

Date	Source	Article Title
March 13	New Zealand Herald	Coronavirus: How do we keep older Kiwis safe during Covid-19 pandemic?
March 17	TVNZ One News	'Be strong, be kind, we will be OK' – PM's message in face of coronavirus impact
March 17	Stuff	Coronavirus chaos at the supermarket: Countdown says there's 'no need to panic'
March 18	World Health Organisation	Mental health and psychosocial considerations during the COVID-19 outbreak
March 18	Stuff	Coronavirus: How to battle loneliness and stay connected when you're in lockdown
March 18	Stuff	Coronavirus: Panic-buying making supermarket trips risky for elderly, Grey Power says
March 20	Radio New Zealand	Coronavirus: Prime Minister Jacinda Ardern gives address to nation on the COVID-19 response
March 21	Stuff	Coronavirus: People over 70 or with compromised immune systems should stay home
March 22	Stuff	Coronavirus: Call to introduce seniors' hour at Nelson supermarkets
March 27	Otago Daily Times	Supermarkets give priority to over 70s and 'vulnerable customers'
March 29	Stuff	PM plea to elderly after first Covid-19 death - 'listen to me, stay at home'
March 30	Radio New Zealand	Coronavirus: PM backs families battling to keep seniors in their bubble
April 1	Newshub	Nationwide flour shortage as home baking makes a comeback
April 2	Stuff	Coronavirus: 1000 Aucklanders call Covid- 19 emergency food service in first day
April 3	Stuff	This isn't about Millennials saving Boomers, it's about the country banding together to save itself, experts say
April 9	Stuff	Coronavirus: Panic-buying has given way to 'eerie' supermarkets - what's next?
April 26	Stuff	Coronavirus: Seniors urged to weigh up the risks of living normally in Level 3
May 8	Stuff	Coronavirus: Senior citizens are even more digitally excluded than ever

Table 2:Ministry of Health Documents

COVID-19: Advice for older people and their family and whānau
If you cannot get essential supplies
Accessing goods and services
Shopping safely

Table 3: SuperSeniors Newsletters

COVID-19 Special Edition March 2020
COVID-19 Special Edition April 9
COVID-19 Special Edition April 24
COVID-19 Special Edition May 1

Ethical Considerations

Conducting research with older adults living in their homes can pose some unique ethical challenges (Locher et al., 2006). This population is vulnerable to therapeutic misconception as well as researcher role conflict, and thus the researcher has a special obligation to ensure ethical practice. It is very important to have clear researcher roles and to communicate these to participants at the outset of research, as well as communicating that no treatment will be given for any concerns brought forward. It must also be ensured that informed consent has been understood, by asking the participant to summarise back to the researcher what the purpose of the research is and what is required of them. It was important to me that the participants felt comfortable in sharing their stories about their experiences during COVID-19 lockdowns and not feel judged. It was also important that they did not think the interview had a therapeutic purpose. Therefore, it was highly important to discuss consent and expectations at the outset.

Furthermore, the motives for participating in the study may have ethical implications. Participants, especially older adults who are socially isolated, may enroll for some extra social contact or companionship. This is especially relevant with the present study. Furthermore, a $30

grocery voucher was offered in acknowledgement for their participation, during a time when many people were struggling both with finances and with groceries. This may have influenced the participants' motives for involvement in the study and therefore must be considered.

Cultural aspects were also considered in line with Massey University's Human Code of Ethics. I consulted with a bicultural staff member to ensure that I felt confident in being culturally safe for any participants who identified as Māori or Pasifika. The interview format and questions were discussed with this member of staff to ensure they were culturally safe. It was agreed that we could have further discussions if the need arose; however, none of the participants identified as Maori or Pasifika.

Ethics approval for this study was granted on July 7, 2020 by the Massey University Human Ethics Committee: Northern, Application NOR 20/23 with a full ethics application. The ethics notification letter can be found in Appendix F.

Data Analysis

The interviews of the present study were recorded via both a voice recorder and a voice recording app on a laptop. They were then transcribed verbatim and the transcripts were emailed or mailed to the participants to be checked for accuracy and the chance to amend or add anything. Once confirmed that the participant was happy with the transcript, I proceeded to data analysis. I used the analytical approach of reflexive thematic analysis, following the six steps outlined by Braun and Clarke (2006) for each transcript and each media script. This involved the following phases: phase one: familiarization, phase two: generating codes, phase three: searching for themes, phase four: reviewing themes, phase five: defining and naming themes, and phase six: producing the report.

Phase one involved familiarisation. This involved repeated readings of both the interview transcripts and the media sources and involved initial searches for meaning. Pieces of data that stood out as meaningful were highlighted, and notes were written on the transcript about my initial thoughts and possible meanings. During stages one to three I kept the interview transcripts separate from the media analysis, initially looking at them as two distinct data sets. I did my initial reading of the data as soon as the interviews were completed. I then left the transcripts for a few weeks, before coming back to read them again. I read through them multiple times, and each time I was able to pick up something I had previously missed.

Phase two consisted of initial generation of codes: starting to bring together very basic pieces to generate codes by identifying seemingly important features of the data. I created a table as a simple way to organise the pieces of data extracted from the transcripts, under headings that served as possible codes. For example, I coded "I did not want to be a burden on my family" initially as burden. As with the readings of phase one, I did my initial coding, took a break, and then came back, taking notes each time about my thoughts of the data and possible meanings. Again, each time I further developed my codes.

Phase three involved searching for themes across all the data. I sorted the basic codes into broader categories and started to link codes to begin articulating themes. I looked for more complete extracts from the data to support these codes and began to compile these. It was here that I started to integrate the interview data with the media analysis to see if the interviews reflected the same codes as the media analysis and where they were different. Reviewing themes involves combining and refining the codes and early themes, to see where there is overlap or where there may be gaps.

Phase four involved refining the themes. During this stage, I spent time reading over my possible themes and the codes I had generated and looked for where the themes may overlap and could therefore be combined, or where themes may need to be separated into their own themes. I analysed the themes I had generated against the data sets to see whether the themes were an accurate representation of the participants' experiences.

Phase five consisted of giving the themes names, defining them, and further refining them where needed. Here, I generated my wider themes and then generated the sub themes that fell under this broader category. This phase involved articulating the story the themes were telling about the data and linking them back to the research questions.

Phase six was the final stage, where the report was written to tell the story of the data. Here, the themes from the transcript were combined with the media analysis extracts to create a comprehensive and contextual picture of the experiences of the participants. The meanings behind the themes were expanded upon and discussed and connections were made between the media messages and the participants' experiences. This provided an accurate account of the participants' experiences, and the explanations and interpretations were supported with extracts from the data.

Chapter 3

Findings and Discussion

This chapter will outline the main findings of the study and discuss them in relation to previous research. Six main themes will be discussed: unable to shop, change from previous socialising, loss of freedom, uncertainty, maintenance of health and routine, and resilience. A summary can be found in Table 4.

The analysis for each theme will start with media messages related to the theme to provide context to the participants' experiences, followed by the experiences of the participants. The chapter will conclude with a discussion of the implications of this research.

Table 4: Theme and Subtheme Summary

Theme name	**Description**	**Subthemes**
Unable to shop	Media and government messaging emphasised staying home to stay safe. Consequently, food acquisition practices changed, and resourcefulness was used to reduce the burden on those supplying food.	Minimising burden through resourcefulness Online shopping issues
Change from previous socialising	The restrictions imposed by the government to reduce the spread of the virus led to drastically reduced socialising, as people were staying home and unable to see others.	Maintaining social contact
Loss of freedom	Due to the strict restrictions, many people felt that they had reduced freedom to do the things they wanted to do.	
Uncertainty	Participants felt as though they lost confidence when going out into the community, even after restrictions eased. There were also high levels of panic buying and subsequently impacted food availability.	Loss of confidence Food insecurity, panic buying, food unavailability
Maintenance of health and routine	Participants were proactive in maintaining their health by continuing with their normal routine as much as possible and engaging in healthy habits.	

Resilience	The participants all showed high levels of resiliency throughout the pandemic situation.	Understanding and acceptance

Unable to shop

On March 21, 2020, four days before the rest of the country went into level 4 lockdown, the Prime Minister of New Zealand, Jacinda Ardern, advised older adults to stay at home. This meant that the older adult population was unable to do their own supermarket shopping, pick up their medications, or use other services before the rest of the country was unable to. This was a change from their normal routines of doing their own shopping and thus served as a disruption to their lives.

The New Zealand Prime Minister's view about older adults staying home during the pandemic was very evident in the media through her consistent urging of older adults to remain at home as much as possible. This is highlighted by a Stuff news article on March 21, 2020, which explained,

> *"She (Ardern) urged anyone over the age of 70, those with compromised immune systems and underlying respiratory conditions to stay at home as much as possible"* (Guildford & Heagney, 2020).

Further, a news headline on March 29, 2020, was "PM plea to elderly after first Covid-19 death - 'listen to me, stay at home'"

Ardern pleaded with the elderly population:

> *"You must stay at home, it's devastating to lose anyone, it's devastating to lose a parent ... You must stay at home…. I really want to restate that you must stay at home. We as a country want to do all we can to protect you but can only do that if you stay at home…. Even with the measures we now have in place, we will continue to see more people get sick .... Our older*

New Zealanders and those with underlying health issues are by far at the most risk" (Devlin, 2020b).

One day later, on March 30, 2020, a Stuff news article read "Coronavirus: PM backs families battling to keep seniors in their bubble" (Moir, 2020), following the first death in New Zealand from COVID-19 of a woman in her 70s, and reports of older adults still going out into the community. This statement illustrated how the first death in New Zealand reinforced the original message, that our older adults are more likely than other age groups to die from this virus and therefore must take extra precautions to stay safe. What is not immediately obvious in this initial messaging was that Ardern was also ensuring that the New Zealand health services were able to cope with a potential influx of ill people that may have needed ventilation and high levels of medical care, should they contract the virus and experience adverse effects. It was therefore important to get those most at risk of needing this care protected as much as possible, and the most effective way to achieve this was through the more vulnerable populations remaining at home. While there were public health concerns, these sat alongside economic and resource needs.

As is highlighted in the statements above, government messaging throughout the pandemic, especially from the Prime Minister, was very strongly worded and was aimed at the vulnerable populations of older adults and people with other health issues. The risk to these populations was magnified and they were subsequently told to stay home to protect themselves. The other element to these messages was getting family members to monitor the older adults in their family to ensure they had access to resources and were obeying the restrictions set by the government. Ardern repeatedly requested that family members support older adults, as she was well aware of the risks to the older adult population if they were to contract the virus from seeing

the consequences in other countries. Older adults were consistently among the hardest hit, and Ardern did not want to see that same effect in New Zealand. She was very emotive in voicing her concern about the safety of our older adult population and the great risks they would be exposing themselves to if they were to go out into the community, and the importance of providing support to these populations.

For disaster messaging to be successful, it must be clear and simple, and inspire trust (Mehta et al., 2017). One way to do this is to ensure consistent and constant messaging from many sources. This was achieved by organisations that support and provide information to older adults outside mainstream media, such as SuperSeniors and Aged Concern reinforcing the messages from the government. An example of this is the SuperSeniors COVID-19 Special March 2020 newsletter which emphasised that everyone, especially older adults, must stay at home unless involved in essential work. The newsletter states,

> *"Older people are particularly at risk of suffering from this virus, please be careful. We know many people over the age 70 are fit and healthy, but everyone needs to do their part in stopping the spread of COVID-19 by staying at home.... All New Zealanders not working in essential services must stay at home and stop all physical interactions with others outside of their household. Staying home is the safest and most sensible thing to do to protect yourself, your loved ones and to make sure our health system can cope and look after people who become sick" (Martin, 2020c).*

This message aligns with messages coming from the government. The implications of these messages were felt around food provision in particular; older adults were told not to go to the supermarket, and this was a change from their normal routines of doing their own shopping. Media messaging then started emerging advising older adults to get others to support them with

their food shopping during this time, to ensure that the older adults were able to stay at home while still accessing essential supplies.

Ardern said in a public statement,

> *"That means we need friends, family and neighbours to support our older New Zealanders and people who may be in this group by doing simple things like keeping in contact and dropping off food or other supplies"* (Guildford & Heagney, 2020).

Ardern was adamant that families and neighbours support older adults to ensure that they would not have to leave their homes, as obtaining groceries and other necessary supplies was of the most concern for this population during this uncertain time. Furthermore, the government, and the Prime Minister in particular, encouraged New Zealanders to be kind and to look out for one another. A week before New Zealand went into lockdown, Ardern cast this message to the nation:

> *"Be strong, but be kind…. We will be OK…. That is when New Zealanders are at their best. That is when we rally, when we look after one another, when we care for the most vulnerable"* (Whyte, 2020).

Ardern was unremitting with her messages of being kind and supporting one another through this trying time.

The SuperSeniors Special COVID edition April 2020 supported these government messages of getting family and friends to do the grocery shopping, stating, *"Reach out to friends, family or neighbours for help running errands, like going to the supermarket for you"* (Martin, 2020a).

The messages from all media platforms and from different stakeholders was strong, clear, and consistent for older adults: stay home. What is interesting is the messaging is also seemingly

pulling on neoliberalism notions of healthism, explaining how staying home is the safest and most sensible thing one can do to protect oneself, to protect loved ones, and to make sure our health system can cope and look after people who become sick. These messages were also underpinned by ingroup social facilitation, which highlighted that many people over the age 70 are fit and healthy, but that everyone needs to do their part in stopping the spread of COVID-19 by staying at home. Positioning the nation as one ingroup fighting COVID-19 and protecting us all is an effective tool in creating a shared sense of responsibility, while trying not to engage in ageism discourses (Moskowitz & Piff, 2021). This is of particular importance during this type of disaster where people are not typically displaced from their homes but rather are restricted in activities.

Five of the six participants in the current study heeded the advice of the government, avoiding supermarkets and other public places as soon as they were advised to do so. One participant, Florence, continued going to the supermarket once a week to buy groceries for herself and her husband as she usually did. She has acted as her husband's carer since he was in a bad road accident, and her family lives over an hour away. Therefore, it was most practical that she does their shopping.

Florence explained this process: *"I like to go and pick my own groceries…. Once a week on Saturday morning. Yep. Like I normally do."* But she also expressed her discomfort with going out into public during the pandemic, explaining, *"I used to dread having to go and do the shopping on Saturday morning but hey, it wasn't that bad I suppose. I went and did it. Put my mask and my gloves on and away I went."* Despite saying that she dreaded going, she then went on to rationalise to herself that it was not that bad of an experience, going protected with masks and gloves. She tried to maintain some sense of normality by continuing to shop once a week,

but there was an underlying sense of dread and perhaps anxiety around having to regularly go out into the community.

The remaining participants utilised nearby family members, mainly their children, for food acquisition. This was consistent with Ardern's continual request of supporting older adults who were to stay home and avoid places such as the supermarket. The participants explained how they had their family members do their shopping and dropping it off at the door to avoid any contact. Dancer explained, *"I suppose I was reasonably lucky. I've got my daughter and grandsons nearby…. And they did the shopping for me."*

Lillian explained, *"Our daughter who lives out in the country, she came into town once a week and got our groceries, as well as her own groceries, as well as in-laws' groceries, as well as one of her son's groceries (laughs). A ute just packed with groceries."*

Dawn explained, *"I have a daughter who lives here in Morrinsville so she's an essential worker and she was able to do my supermarket shopping."*

The participants of the present study, with the exclusion of Florence, obeyed the restrictions set by the government and followed advice to get family members to help with obtaining food items. This is illustrative of the common area of life upheaval in this population, with the lives of the participants being disrupted in their being unable to shop on their own and having to now rely on someone else. Other than Florence who continued going to the supermarket herself, all the participants experienced a change in their usual shopping habits. All populations were having to change how they shopped, worked, and lived their lives, and this is reflected in the present study where participants were suddenly unable to leave their homes and run their own errands. This common experience of disruption to lives and routines was addressed by the Prime Minister in a statement on March 21, 2020. She explained, *"I understand that all of*

this rapid change creates anxiety, and uncertainty. Especially when it means changing how we live" (Coronavirus: Prime Minister Jacinda Ardern Gives Address to Nation on the Covid-19 Response, 2020). Ardern recognised that many people were experiencing a high degree of change in their lives, in a very rapid manner. This messaging may have been comforting and helpful in decreasing anxiety, as people felt less alone and that their struggles were being recognised. However, the messages in the media and from the government emphasise the discourses of the COVID-19 pandemic being an older adult issue. Messages from the government consistently identified older adults as at-risk, and illustrated that we must support them, which served to continually emphasise this discourse. Furthermore, the news, from both New Zealand and overseas, often highlighted stories of older adults contracting the virus and experiencing adverse consequences. In New Zealand, the COVID-19 deaths were all people over 50 years of age, with many of them being over 70, further supporting these discourses in the media. Stephens (2017) explains how, within the discourses of successful aging and ageism, older adults are often singled out as an "other" and this was even more evident during the pandemic. This population was singled out early on in New Zealand, identified as an "at risk" population and instructed to stay home while the younger populations were still able to go out into the community and to work. Ayalon (2020) highlights how there has consistently been an "us" and "them" mentality throughout the pandemic, with intergenerational solidarity becoming more prominent than usual. Certainly, all the participants were aware of the main messages being delivered by health officials and the government and recognised their role and responsibility in the pandemic. These discourses undoubtedly increased intergenerational solidarity during this time.

Minimising Burden Through Resourcefulness

While the participants experienced challenges in obtaining their food items, as illustrated in the previous section, they displayed resourcefulness during this time, using ingredients they had in their deep freeze, minimising frequency of delivery, and using all the food their family brought for them. They also explained that they were cooking and baking more than usual. Part of this cooking and baking was giving the participants something to do, but also had an objective of reducing the burden on their families, as making their own food meant they required less food to be brought to them. They were aware that having to rely on their family members for grocery items meant that their families needed to spend more time in the supermarket, not only using up their free time but potentially also putting them at greater risk of contracting the virus. This was an aspect the participants appeared to be very cognisant of, with this theme of minimising burden underpinning a great deal of what the participants spoke about during the interviews. It was evident that reducing burden was a considerable concern for these participants and influenced their behaviours during lockdown.

This resourcefulness was consistent with the well-known image of many people during lockdown, baking their own bread and trying new things in the kitchen, with numerous news agencies providing recipes for lockdown loaves and subsequent spikes in Google searches for bread recipes. People were cooking and baking much more frequently than they usually would. While giving people valuable activities to engage in when they were unable to leave the house, it also potentially served to limit the number of required trips to the supermarket. Google searches for "baking" reached all-time highs in March 2020 and in April, searches for "sourdough" were nine times higher than usual (Brooks, 2020). Similarly, bread maker purchases were at an all-time high during the lockdown (Kirkness, 2020). Flour became a commodity that was difficult to

find, with a Newshub headline on April 1 stating, “Nationwide flour shortage as home baking makes a comeback” (Brownlie, 2020).

Price-spy manager Liisa Matinvesi-Bassett explained how the baking behaviours of New Zealanders changed.

> *“Shopping habits, however, appear to be changing with everyone staying at home on a national level 4 lockdown. The lockdown certainly seems to be getting more people baking at home. Whether this trend will continue in the future remains unknown but it's pretty clear from our data and on social media that many are getting creative in the kitchen, baking bread, hot cross buns and other delicious treats”* (Kirkness, 2020).

This is like the message from Chris Wilkinson, of First Retail Group.

> *“We know that consumers have embraced cooking from scratch, baking, 'rediscovering' the enjoyment of preparing meals and looking after those around them. Given the length of time in lockdown that will drive a lot of transformational behaviour, with these practices remaining for some time. That will see supermarkets further focus on satisfying shoppers' culinary and creative appetites through inspiring recipe ideas and products”* (Edmunds, 2020).

Messages from the government and in the media also recognised that older adults may worry about being a burden, requiring groceries as well as other necessities such as medications to be picked up and delivered, and there was concern that older adults may go without rather than ask for support. Ardern explained: *“I do worry that our older New Zealanders who may have a tendency to not wish to be perceived to be putting anyone out may not be asking for the help that we need to give them”* (Devlin, 2020b).

Horowhenua Grey Power president Terry Hemmingsen expressed a similar concern about older adults staying at home.

"I just hope that through all of this our elderly use some good common sense and don't hunker down to the extent they end up so isolated they're not getting what they need, the necessary supplies they're going to need week to week…. Some people will take that whole concept literally and isolate themselves. They will end up starving or not getting the necessary cleaning products. That's not good" (Guildford & Heagney, 2020).

Age Concern NZ also voiced their concern about older adults not wanting to be a burden to others.

"There will be an end to this pandemic, but we urge people that this is not a time to sit in silence. If you are worried about anything you should call us. Too often we hear of people not wanting to be a burden or make a fuss, please make a fuss! We have amazing staff and volunteers who can help direct you to the support or information you need" (Russell, 2020).

These media messages highlight that there is an awareness of the reluctance of older adults accepting support from others for fear of being a burden. Within the context of the media messages and dominant discourses of vulnerability among the older adult population, it is clear that older adults knew their responsibility and subsequently would do all they could to both remain independent while at the same time adhere to the guidelines by staying home. With neoliberalist values leading to feelings of shame in requiring support, it is likely that older adults wanted to prevent this as much as possible. However, this becomes risky if they are not asking for what they need.

The experiences of the participants illustrate that these concerns were valid, as the concerns of the participants are consistent with these media messages. Dancer explained that she

prepared her own food and biscuits to reduce the burden on her family, by reducing the number of items brought to her.

"I do tend to try and make my own food and make my own biscuits as well. And yeah probably most of, the fact that I didn't want them going and buying biscuits and things for me. And so, I was more than happy…. I tried to keep it as little as possible because I didn't want to inconvenience them too much."

She then went on to explain how she demonstrated resourcefulness by getting the recipe books out to make more of her own food.

"I've had the recipe books out and so I've cooked soup and made meals and froze them and things like that. I'm not one that sits around doing nothing you know. I can always find something to do."

Gertrude explained how she tried to use everything she had on hand at home.

"Fortunately, my deep freeze was pretty well stocked. So I did have, it was just mainly fresh fruit and vegetables and I tried to get my daughter to buy, you know, fruit that was going to last longer than, yeah, so she didn't have to be ferreting around and getting special stuff so I tried my best to use the last crust of bread and... (laughs)."

Gertrude then explained how she baked once a week to ensure there was one less thing for her daughter to buy at the supermarket for her.

"And I used to, about once a week, bake a batch of muffins and deep freeze them so I had one of those for morning tea as opposed to my daughter looking for biscuits at the supermarket."

Dawn also highlighted a similar concern, describing the shopping as not being too hard on her daughter.

"I normally only shop, once a fortnight anyway. So, yes, that wasn't um, (daughter) was able to sort of do that when she did her shop as well. So that yeah, it wasn't like I was relying on her every week to get the shopping. Perhaps some milk or those sorts of small items but not a main shop."

It was difficult for the participants, who stated that they enjoyed being able to go to the shops normally and do their own shopping, to now stay at home and rely on others. Gertrude said she felt a loss of independence as a result of having to rely on someone else to do her shopping, explaining, *"(felt a loss of independence) because somebody was having to do the shopping for me, whereas I would jump in the car and go down to the shop by myself."*

It was also common for the participants to explain during the interview that they were not too much of a burden, describing how it was not much of an extra effort on the part of their families and that they did not need deliveries very frequently. This appears to have been at the forefront of the participants' minds when discussing their experiences with having someone else do their shopping and was therefore perhaps a source of some concern. Suddenly having to rely on someone else would have required a significant adjustment on their part. Furthermore, participants repeatedly explained that it was not too much trouble for their families, perhaps to remind themselves that they were not a burden, when requiring support was inevitably required in the context of the pandemic.

In an address from the Prime Minister to the public on March 21, 2020, she explained, *"We may not have experienced anything like this in our lifetimes, but we know how to rally and we know how to look after one another, and right now what could be more important than that?"* (Coronavirus: Prime Minister Jacinda Ardern Gives Address to Nation on the Covid-19 Response, 2020). The participants showed they were able to look after one another, by looking after their

families. Being resourceful was aimed at reducing the burden on the participants' families, meaning that the families did not need to bring as much food. This also would have served to reduce the amount of time the family members needed to spend at the supermarket, thus potentially reducing their risk of contracting the virus, and thus further minimising burden. This demonstrates the participants' adherence to the Prime Minister's request for people to look out for one another; the participants were able to look out for their families by reducing the time needed to be spent in the supermarket. Furthermore, Pond et al. (2010) note that having a sense of control helps to offset anxiety, and therefore it could be suggested that the participants of the present study found some control in providing for themselves through baking and being resourceful, which would have helped reduce their feelings of anxiety.

Identifying as independent, it appeared to be difficult for some of the participants to rely on someone else to do the supermarket shopping, something they were capable of doing themselves. In the healthism and successful aging discourses, becoming dependent and reliant on someone else is seen as a moral failure for an older adult, and the change from being independent to having some level of dependence can be very uncomfortable and can lead to feelings of anxiety (Edfors & Westergren, 2012; Pond et al., 2010). This may have motivated the participants to be as independent as they possibly could be, given the circumstances; to retain some sense of control as well as to maintain a sense of independence. Breheny and Stephens (2019) explain that becoming dependent comes with a fear of being a burden, which can be seen in the experiences of the present participants. Having suddenly become dependent on their family to supply groceries, the participants were very aware of the burden they were placing on them. This is potentially why a sense of burden was so prominent in the discussions with the participants, as there is a sense of shame interconnected with having to rely on someone, and

subsequent feelings of being burdensome. Independence is the key indicator of successful aging in the SA discourse and therefore this is the quality to strive for (Breheny & Stephens, 2019). The participants made every effort to remain as independent as possible so as not to 'fail'.

This is consistent with what Roberto et al. (2010) found; the older adults who were previously independent prior to a disaster feared being a burden to their families, who were also experiencing the disaster, and felt discomfort when relying on others. The participants of the present study were dealing with the pandemic, but so too were their families. This may have increased their motivation to minimise the burden on their family, consistent with Ardern's messages of looking out for one another.

Davis et al. (2016) explain that asking for support as an older adult can be distressing due a perceived loss of control or autonomy, and sometimes the older adult would rather go without than ask for help. This is consistent with what Breheny and Stephens (2019) found; their participants would rather have unmet needs than be dependent. This is highlighted in the media extracts above, where people understand older adults do not want to ask for help and are worried that they will go without. This effect is likely influenced by neoliberalist and SA discourses which emphasise that requiring support is a failure and is shameful. Within these dominant discourses, it is clear that one would try to prevent this "failure" for as long as possible, even if it meant going without some essential items.

Similar to the results of Tuohy and Stephens (2012), the present study found emphasis on the importance of maintaining independence and self-efficacy as an older adult and remaining a valuable part of the community. There is a sense of pride in being able to take responsibility for one's own health and wellbeing in the face of events such as disasters and pandemics, and this is reflected in how the participants spoke of maintaining their health, discussed later in this chapter.

There is a motivation to adopt an identity of being a person who can cope with adverse events and take responsibility for one's own health, and the participants strove to maintain this identity throughout the pandemic. The participants were able to take responsibility for their health and wellbeing, as well as to maintain independence and self-efficacy by engaging in cooking and baking and general resourcefulness, providing a sense of control and this identity as someone who can proactively cope in the face of disaster.

It is noteworthy that the participants of the present study and of other studies, as well as the government and media report writers, have positioned asking for assistance as synonymous with being a burden. This suggests that these are likely a reflection of our society's ideals. This links back to the ideals of healthism and successful aging that have been discussed throughout; successful aging positions the older adult as responsible for their own healthy aging, such as maintaining high levels of social engagement and high physical functioning, both of which are relevant and challenging to accomplish during the COVID-19 pandemic (Dean et al., 2008; Stephens, 2017). Successful aging shifts the discourse from older adults being dependent and declining to being independent and healthy. While not inherently bad, this discourse puts pressure on older adults to remain independent and healthy, so as not to fail in their successful aging. Breheny and Stephens (2019) explain that within the healthism discourse, individuals are positioned as responsible for minimising their risk of becoming sick. Therefore, in the current situation, older adults are seen as needing to take full responsibility for minimising their risk of contracting the virus, without consideration of the wider context. This helps to explain the resourcefulness and fear of being a burden the participants displayed.

Despite these dominant discourse in the media messages positioning older adults as both responsible for their own health and as a burden to others and the healthcare system, this

population was still pushed to ask for support from friends, family, and neighbours. These messages are highly conflicting and likely confusing. Furthermore, an important context neglected to be considered by such discourses is the role of culture. Western societies prioritise independence over interdependence in older adult populations, which may make the experience of being an older adult during a pandemic much more challenging than it is in more collectivist cultures, where supporting the older members of the family is common and is not seen as a failure. This is relevant to the present study as the participants all identified as Caucasian and therefore not from a collectivist culture. This influence of culture on experience is worthwhile to note, as it potentially has a considerable impact on how the pandemic and resulting loss of independence is experienced and viewed, by older adults as well as others.

Within the discourse of successful aging, older adults are competing with those younger than themselves for resources, as aging is no longer synonymous with receiving support. However, Prime Minister Ardern did well to emphasise that the New Zealand population must support our older adults and to create a discourse of support being the norm. Interestingly, the messages during the pandemic consistently placed the older adult population as at-risk, vulnerable, and in need of protecting, which is counter to how the successful aging discourses see older adults. This may have been due to the awareness that there would be limited medical resources if older adults were to become sick, and therefore there was benefit in this shift. As we could see in other countries, such as Italy, medical workers were having to make decisions about who received care and who did not, with the care often being given to the younger of the people needing it. Therefore, it was important that older adults be viewed in this way, rather than being expected to fend for themselves, as this could have been detrimental to the healthcare system had the older adults not received adequate support and consequentially become sick.

However, these discourses of vulnerability still served to highlight how this population is seen as a burden on the healthcare system, and the majority of participants strictly obeyed the restrictions imposed on them by the government, suggesting that they were aware of this potential burden and wanted to minimise it. The successful aging discourse is aimed at reducing the burden of the ever-increasing population of older adults, which in some instances has become more of a burden during the COVID-19 pandemic.

The experience of the participants during this time is thus captured in the shift from their previous normal routines with a subsequent change in their behaviour to adapt to this unprecedented situation. The participants, in their endeavour to reduce the burden on their families, demonstrated their resourcefulness both in making the best possible use of what they had on hand, as well as doing their own cooking and baking. This meant their families did not need to buy as much food at the supermarket, and thus the food delivered consisted mainly of perishable items such as fruits and vegetables, therefore reducing the burden on the family members. However, trying to prevent becoming a burden could lead to negative consequences for older adults if they are not asking for the support and supplies, they need during a time when they have limited options for acquiring essential items. This is something we must be cognisant of when considering how best to support older adults during crises such as pandemics.

Online Shopping Issues

While online shopping was available as a priority service for those over 70, after the huge demand as the country moved into lockdown the participants illustrated that it was not a viable option for them. Participants were unable to find available time slots and there was also concern about the extra cost for delivery. The participants therefore had no choice but to rely on family members or to go to the supermarket themselves.

Countdown Supermarket's general manager of health and safety, Kiri Hannifin, explained the issues with the grocery delivery in an interview with The Otago Daily Times.

> *"Our online shopping services have seen unprecedented demand and to help ensure we can provide the essential service we need to; we are prioritising those customers whom the Government has identified as most vulnerable at this time."*

The article then went on to explain, *"Countdown was expecting high demand for its Priority Assistance delivery times, and availability could not be guaranteed…. Countdown's teams would do everything they could to scale up online and home deliveries to the elderly, people with disabilities or those in mandatory self-isolation"* (Hansen, 2020).

Despite having a priority service, grocery delivery could still not be guaranteed due to the high demand for this service. This means, as in Florence's situation, that some older adults would have to continue going to the supermarket themselves if they had no support nearby. In a Stuff article 10 days later, on April 9, 2020, this problem was further highlighted:

> *"Hannifin said Countdown had 100,000 new applications for online shopping last week and 60 per cent were for its priority service, for people over 70 and those with health conditions that made them vulnerable…. On Thursday, 91 per cent of the online orders being processed were going to priority customers"* (Edmunds, 2020).

Similarly, an email to Nelson MP Nick Smith, from a Stuff article on March 22, read,

> *"Online shopping is all very well but there is a four-day delay and is not suitable for people like this older lady [who was in tears "about having to return to the supermarket for essential supplies, as she had been trying to minimise her contact with others"] who are not able to access the internet"* (Gee, 2020).

While the media and the supermarkets were encouraging older adults to use priority online grocery services, there were issues across New Zealand with demand and being able to fulfil needs. Countdown still highlighted that delivery could not be guaranteed even for priority customers. This was evidently a potentially serious issue with the online shopping and delivery service, making it unviable for many people. The media messages consistently advised older adults to stay home, however it was evident that there were not enough supports in place to help the more vulnerable population obtain necessities.

The participants explained that they tried to use the online delivery service but were unable to find available slots, consistent with the messages from Countdown as well as other messages in the media of people struggling to use the online shopping service. This highlights how prominent this issue was. Lillian said she was unable to find time slots for her daughter to pick up her orders, explaining, *"I started off by buying online with New World, but after, I think I got two lots that she (daughter) would pick up for me and then I just couldn't get on because the seven days was just so full."* Lillian's daughter, having to subsequently spend more time in the supermarket because of being unable to order online, positioned Lillian as more of a burden to her family. The implications of this, as discussed above, demonstrate that this can have consequences for the older adult, who is already concerned about being a burden to both their families and to society, and being unable to utilise online ordering and delivery exacerbates these concerns.

Dancer explained that she was unable to find an available delivery date, and so she had to rely on her grandsons to obtain her groceries.

"I did try to go online, and it was a problem. Um, and when you got to the delivery date and it was always at the end of the flaming form as well and there was no delivery date within the

next couple of weeks. And so I gave up and just relied on the boys to bring me what I needed."

Again, this further exacerbates a situation where the participants are already concerned with being a burden. Dancer had to rely on her grandsons to do her shopping, with their thus spending extra time in the supermarkets and potentially putting themselves at risk.

Florence explained that while she could use the service, there was a delivery fee which deterred her: *"I could have had them delivered by New World but hey, that's an extra few dollars and we're pensioners…we have to watch our bucks."*

This service, while seemingly trying to address the needs of NZ's most vulnerable, also highlighted inequalities, as the service required access to the internet, extra money for the delivery, and a device that is connected to the internet, pushing it out of an essential service to a service for the privileged. Research has shown that while it is becoming more common for older adults to use the internet, not all older adults have access to the internet or to suitable devices to use the internet, and even if they do have access, not all older adults are comfortable or technologically literate enough to use the online shopping services (Gorkovenko et al., 2017). Older adults of higher socioeconomic status are more likely to have internet access and skills compared to those of lower socioeconomic status (Hargittai et al., 2019). This is known as digital inequality and is an important consideration when looking to support older adults via technology and the internet. This inequality can be a source of disempowerment for older adults, which is something to be avoided at a time when autonomy and independence is already impacted. While older adults recognise the potential of using online services to enhance their independence and autonomy, there are many barriers to internet use, such as a lack of trust in paying for items online and being unable to physically see what they are purchasing (Chang et al., 2014;

Gorkovenko et al., 2017; Kuoppamäki et al., 2017). These experiences must be considered when looking at older adults during crises. While online ordering appears to be a good opportunity to help older adults obtain food items, further investigation shows that this is not a viable option for a lot of older adults, irrespective of availability of slots. Many older adults require support that does not rely on technology or internet use.

Furthermore, in rural areas there are also problems with reliable internet and a widening digital divide between rural and urban areas (Townsend et al., 2013). This poses a problem in food acquisition for those without family nearby, as their options are very limited, especially if they do not have access to the internet or a device. This is concerning, and again relates back to the messages in the media of worry over older adults being unable to obtain necessities. This is a potentially seriously detrimental situation for some older adults.

Change From Previous Socialising

The lockdown restrictions and having to stay in one's "bubble" meant a dramatic decrease in face-to-face social interactions, especially among the older adult population, which was told to limit social contact as much as possible across all alert levels. All the participants had strong family ties and often spoke about the challenge of being unable to see their children and grandchildren. The participants were also highly social and missed their regular social events and catch ups with friends. Because of reduced social contact, the participants found themselves eating alone more often than usual, and experienced reduced motivation to eat proper meals. Despite these challenges, all the participants were proactive in maintaining social contact with friends, family, and neighbours.

Participants were unable to see their children and grandchildren, and most were largely family oriented, having regular monthly or weekly visits that had to come to a stop during

lockdown. This was therefore a large adjustment and change in routine for the participants. In fact, this was often cited as the biggest adjustment for the participants during the lockdown, having more of an impact than other changes such as being unable to shop or to continue with social hobbies. Participants frequently spoke about being unable to see their families over multiple points in the interviews, highlighting that it was, for them, particularly challenging and a large adjustment from normal.

Malcolm explained, *"We've got a son and daughter and a whole lot of grandchildren, and we couldn't catch up with them and we used to catch up with them regularly."* Similarly, Florence explained, *"We couldn't go and see friends, we couldn't go out for dinner or anything like that… I couldn't go and see my grandchildren."*

Many of the participants are also actively engaged in the community, being involved in some sort of social activity, hobby, or volunteer position. All these activities had to come to a stop during the lockdown, and the participants explained the impact this had on them. Gertrude explained, *"I'm quite a social person and of course my social activities all came to a grinding halt."* Dancer explained a similar experience, *"And, um, we do Scottish country dancing. And of course, all that came to a stop. And I play bridge as well. So, the socialising came to a stop, really. Apart from if I saw somebody when I was out for a walk."* Lillian found it difficult being unable to help with the volunteer organisations she usually went to, explaining, *"The volunteer organisations that I've been involved with, of course, I couldn't help with them. So that was a bit of a wrench. But that's back to normal again, but no, I did, I did miss being able to get out there and help other people."*

Volunteer work is important for older adult happiness, identity, and sense of wellbeing (Dulin et al., 2012; Stephens, Breheny, & Mansvelt, 2015). It provides older adults with a chance

to contribute to society which increases wellbeing. Dulin et al. (2012) found that the number of hours per week spent volunteering predicted levels of happiness in older adults. Therefore, being unable to contribute to volunteer organisations can have negative consequences for the older adult, which is important to consider when looking at the experiences of older adults during this time.

This pause in social activities meant that the participants had drastically reduced social contact compared to what they would normally have, illustrating an area of life upheaval for these participants. This was compounded on top of the reduced socialising with family and friends, which also appeared to have a large impact on participants. While half of the participants lived with a spouse, the other half lived on their own and therefore may have experienced even more social isolation. Social isolation is a great risk, especially in the older adult population, and this must be acknowledged in situations such as the current COVID-19 pandemic where this population is experiencing much greater socialisation than is normal for them.

Due to this limited social contact, participants found themselves eating on their own more often than usual. They were unable to have their regular meals with family and friends, and this was particularly challenging for those living alone. Florence explained that she and her husband are social and often meet with friends for meals, saying, *"It was hard because, I mean, we're quite a social couple. We like to go out and have the odd meal and this sort of thing with people."*

Gertrude explained that she often meets with her children for meals, as well as meeting with friends for coffee.

"Like quite often I'd have you know, be invited to one or other of the families on the Saturday, Sunday night for dinner. Like last Saturday night it was at (daughter) and tomorrow night I'm

going to my other daughter's for dinner. So that all had to stop, and um I would meet friends down at the mall for a coffee, you know, once a week, or."

Being unable to meet up with friends or to attend social gatherings with shared meals was a change from the usual routine of these older adults. Again, the participants were highly active in their communities and the lockdown restrictions had a large impact on them. Furthermore, motivation to eat properly became a challenge for some of the participants. Gertrude lives on her own and found it difficult to make meals for herself during lockdown, when she was not regularly meeting with family and friends. She explained, *"It is much harder preparing meals for yourself… It's not good (laughs) because you're very much inclined to think, "Oh I'll just have a poached egg on toast, and I'll skip meat and vegetables.""* Dawn was also aware of the difficulty of preparing a meal for oneself and made an effort to ensure she always had regular meals. She explained, *"I make sure I cook myself, I'm quite conscious of being on your own. It is quite a disciplined thing to cook for yourself."*

These results are consistent with other research, showing that social isolation, and eating alone specifically, are risk factors for poor nutrition in older adults. Locher et al. (2005b) found that older adults consume fewer calories when there is no one else present. Living with a spouse facilitated eating sufficient calories. Therefore, there is a heightened risk for those living without a spouse during this time of social isolation, and three of the six participants of the present study were living without a spouse. Eating alone is also a risk factor for a multitude of other consequences, from depression to malnourishment. The participants were aware of the risks, but sometimes struggled to keep eating adequately as they were used to eating with others much more frequently. Locher et al. (2008) found that 75% of the homebound older adults in their study consumed inadequate calories. Thus, not only is eating alone a risk factor for

malnourishment, but so too is being homebound. These are two factors that the participants of the present study faced, putting them at an increased risk of malnourishment during this time.

The participants' experiences illustrate the change from normal that they experienced. However, despite eating alone, the participants also displayed resiliency and were proactive in trying to keep to their normal eating routines and usual meals as much as possible. Malcolm explained, *"We ate exactly the same food."* Florence was consistent with this, explaining, *"I actually bought the same groceries and food and that sort of thing."*

Eating behaviour is highly tied into routine and the usual cues of our environment. The participants appeared to be cognisant of this and tried to continue their normal routines despite a loss in some external cues, a main one being reduced social eating. Social cues are especially powerful for older adult eating behaviours (Hughes et al., 2004; Locher et al., 2008; Tani et al., 2015a); however, all aspects of our environment and usual routine impact our eating behaviour (Orbell & Verplanken, 2010).

The participants experienced a large disruption in their regular socialisation with friends and family, and engagement with social hobbies. While the participants experienced subsequent challenges regarding eating alone, they were aware of the importance of continuing to eat as normal and kept up with their usual food routines. Again, the theme of resiliency is highlighted by these examples.

Maintaining Social Contact

The participants were proactive in maintaining contact with family, friends, and neighbours over the course of the lockdown. They spoke of utilising the phone, email, internet, and chatting with neighbours over the fence and while out for a walk. Again, the theme of resiliency can be seen here. The participants all made a great effort to maintain contact with

family and friends and ensured they and others were not feeling isolated or lonely. Again, this highlights the sense of pride in the identity as someone who can cope with the adverse events and take responsibility for one's own health; the participants took responsibility for maintaining social contact which would have provided some control as well as served to maintain wellbeing and increase coping abilities.

The actions of the participants reflected the messages in the media about the importance of maintaining social contact during this time. These messages were clear about staying connected, especially for older adults. The SuperSeniors newsletter outlined the importance of routine continuity in their March 2020 publication,

> *"It is really important you keep talking to people. Reach out by phone or internet to your usual support, like family, whaānau and friends to keep in touch and talk about how you feel…. You can also go outside for a walk or tend to your garden as long as you adhere to the guidelines - stay at least two metres away from other people"* (Martin, 2020c).

Similarly, Stephanie Clare, chief executive Age Concern New Zealand, told the New Zealand Herald, *"We are encouraging friends, family and communities to find new ways to keep connected, from Skype calls, delivering a meal and phoning each other to leaving notes of kindness in mailboxes"* (Russell, 2020).

Florence explains how she utilised the phone a lot during the lockdown to keep in touch with friends. She said, *"It was great to be able to, you know, pick up the phone and give your friend a ring… and yack to them on the phone. The phone bill got a bit big but ha, why worry."*

Many participants felt an increased sense of community during the lockdown, as everyone was out and about, chatting with other people out doing the same thing. The daily walk appeared to be a remarkably social event, which the participants spoke of highly. Participants

were located in either the small town of Morrinsville or in the large city of Auckland; however, community experiences appeared to be very similar across both locations. Participants from both Auckland and Morrinsville described feeling a sense of increased community and chatting with neighbours while out for their daily walks.

Gertrude, who lives in Auckland, explained, *"Made lots of distant friends and I met neighbours that I didn't know I had. Just being out in the garden and people were walking past, and people waving when you're out walking."*

Dancer, also living in Auckland, explained a similar experience, *"You'd meet people who were doing the same thing (walking)… And I'd often meet somebody from the bridge club or dancing. And so you know, you say good morning and how are you, and that's just enough to make you feel you've met somebody and haven't spent all day on your own."*

Lillian, in the small town of Morrinsville, explained a similar experience to the participants living in Auckland, *"I walked for an hour every day and that was a very social thing because, living in a small town we would meet people that we knew and we would keep our distance from them and have a chat, and then off we'd go… Everybody was out and about, which was lovely."*

All the participants made a conscious effort to maintain social contact during the lockdown, with friends, family, and their communities. The daily walk served as a very social event, which was enough to keep the participants feeling as though they had at least spoken to another person each day. Again, the theme of resiliency is highlighted well by these examples. The participants were aware of the importance of staying in contact with people during this isolated time and took action to do so; they accepted their responsibility to maintain their health.

As illustrated previously, the participants of the present study were financially well off, being able to afford internet access, devices, and phones. Therefore, this privileged position may have served to increase the participants' coping abilities regarding social contact. Technology has consistently been recognised as an effective way for older adults to maintain their mental wellbeing through increased autonomy and independence, as well as for maintaining social contact, especially during times of increased isolation (Gorkovenko et al., 2017; Marston et al., 2019; Steinman et al., 2020; van Deursen & Helsper, 2015). Five of the six participants of the present study had access to the internet and a device, and all the participants had access to a phone. This enabled them to maintain contact with friends and family throughout the lockdown, when face to face contact was drastically decreased. This may not be the situation for all older adults in New Zealand, in which case maintaining social contact would prove to be much more challenging, and therefore this may be an area in need of increased support for our older adult population, especially during challenging times such as the COVID-19 pandemic.

This sense of connectedness to others is highly important during times of physical isolation. Santini et al. (2020) highlight the importance of older adults being connected, explaining that feeling lonely or disconnected can increase reactivity to stress, which is problematic during a time where stress levels are already potentially higher than normal. This increased reactivity can also lead to decreased coping abilities. This is important to consider, as the authors found that these consequences lead to an increased prevalence of depression and anxiety.

Cheung et al. (2008) investigated the experiences of older adults during the 2003 SARS epidemic in Hong Kong. The authors found that the suicide rates in Hong Kong were at an all-time high, and that most of these were among the older adult population. The authors attribute

this situation to the high levels of disconnection and loneliness faced by this population during this time, and therefore highlight the importance of finding ways to maintain the mental wellbeing during challenging times. They suggest that this task is of the same importance as getting the virus under control. This is highly relevant to the current situation, where older adults are experiencing highly increased social isolation due to isolating to protect themselves from a virus. This highlights the imperative need to ensure our older adults feel connected and do not feel alone during this highly stressful time. We need to learn from previous similar situations if we want to effectively support our older adult population moving forward.

The theme of change from previous socialising is highlighted by the drastically reduced socialisation and engagement with social hobbies experienced by the participants. However, the participants were highly proactive in maintaining social contact with friends, family, and neighbours where possible to maintain their health and wellbeing.

Loss of Freedom

Participants often discussed a loss of freedom as being the most challenging aspect of the pandemic. Not being able to pop down to the shops to obtain their own groceries, or get in the car and drive somewhere, were cited as a change from normal and something that was challenging to deal with in this population of independent and capable older adults.

A big part of the freedom of this population is being able to do their own shopping, but also to be able to socialise with friends and family as they please. As discussed in the previous section, many of the participants described themselves as highly sociable and enjoyed meeting with friends and family regularly, often for a cup of coffee or a meal, as illustrated in the previous section. However, this freedom was drastically reduced during lockdown due to the government restrictions.

This loss of freedom, or lack of control, may have implications for mental health. A Stuff article on March 18 read, *"Research shows a period of uncertainty and a lack of control in our daily lives can lead to increased anxiety"* (Lim & Badcock, 2020).

The messages in the media recognised this loss of freedom, especially within the older adult population. A Stuff article on March 30 stated, *"People over 70 and those with underlying health conditions were the first to feel the brunt of the lockdown, being told to stay home four days before the rest of the country"* (Moir, 2020).

Even as New Zealand came out of lockdown and the rest of the population was starting to regain their freedom as we entered alert level 3 from level 4, the older adult population still had greatly diminished freedom. A Stuff article on April 26 explains,

> *"Seniors look set to be given more freedom when lockdown ends but are being advised to be "especially careful" if they leave their bubble…. The Government's official Covid-19 website had advised those in this demographic to stay home, where possible, and take additional precautions when leaving home, such as avoiding supermarkets or touching surfaces"* (Devlin, 2020a).

While the article starts with explaining that older adults are "set to be given more freedom" the reality was that their freedom was still minimal, even in alert level 3. This population was still advised not to go out, and to especially avoid supermarkets; therefore, being given back very little of their freedom while the rest of the country started to return to normal.

Further illustrating this loss of freedom, Sommer Kapitan, a senior marketing lecturer at AUT explained in a Stuff article on April 9, *"Popping up to the shops has always been part of daily life"* (Edmunds, 2020).

The pandemic meant that everyone, not just older adults, was unable to do the things they normally did, which was quite a large disruption to daily life. In New Zealand, "popping up to the shops" is synonymous with being a New Zealander. This is something that stopped completely for some and was greatly reduced for everyone else during the pandemic. Being able to go out on one's own, to do the things they want to do and see the people they want to see, is a large part of being an independent person. During the lockdown, this freedom was taken away and consistently reinforced with the regular media messages of staying home and avoiding going into the community.

A loss of freedom was a common experience with many of the participants, illustrating how the pandemic disrupted the lives of these older adults. The participants described the challenge of not being able to go out and do what they pleased. Dawn explained, *"It was just that feeling of not being able to go out and visit friends or do whatever…. Not being able to go out when you pleased. Perhaps go and visit a friend or meet somebody for coffee… that was probably the worst part of it."*

Lillian explained, *"(Most challenging part was) probably not being able to just hop in the car and go and visit somebody."*

These results are consistent with the results of Barari et al. (2020) who found that older adults in Italy during the COVID-19 pandemic were most likely to state a loss of freedom as one of the most challenging aspects of being in quarantine. This suggests that a loss of freedom may be something that needs to be addressed within the older adult population during situations where restrictions are being imposed on what older adults are able to do, as it appears to be a widespread issue which has implications for health.

The theme of loss of freedom is highlighted by the participants of the present study in their experience of a loss of freedom during the pandemic due to the restrictions imposed by the government. They were unable to do their own shopping, to go for meals with family and friends, or get in the car and drive where they wanted. This has potential implications for older adult health; a constraint in autonomy, defined as having choice over their everyday lives, can lead to depression in the older adult population (Boyle, 2005). This may be due to feelings of powerlessness and subsequently hopelessness, which can lead to the development of depression. Older adults also lose a sense of self-esteem and meaningful roles when autonomy is reduced, further impacting on wellbeing (Boyle, 2005). Longer term, this can lead to a loss of social identity (Gustafsson et al., 2003). While the participants of the present study only temporarily lost their freedom, older adults in other countries continue to face strict restrictions on what they are able to do and where they are able to go, which can have serious implications for their mental health. Therefore, this is an important consideration when looking at the experience of older adults during this pandemic.

Uncertainty

Loss of Confidence

Many of the participants spoke about losing their confidence to go back into the shops and other crowded places when they emerged from lockdown. Participants explained how they minimised their time in crowded places as well as taking extra precautions, such as shopping early in the morning before there were many people in the shop, wearing masks, and hand sanitising. This is consistent with the messages from the government and the Ministry of Health, advising older adults to take extra precautions and to continue to avoid busy places such as

supermarkets as much as possible, even as New Zealand came out of lockdown. A Stuff news article from April 26, 2020 explained,

> *"As the country prepares to move out of level 4 lockdown and into a slightly more relaxed level 3 at 11.59pm on Monday, the elderly community looked to be staying put.… The Government's official Covid-19 website had advised those in this demographic to stay home, where possible, and take additional precautions when leaving home, such as avoiding supermarkets or touching surfaces"* (Devlin, 2020a).

This message was also evident in the SuperSeniors Special Edition of May 2020, which stated, *"You are able to go to the supermarket, but it is safest to stay home. We know this might be difficult, lots of people look forward to their supermarket outings and it can sometimes be hard to plan ahead"* (Martin, 2020d).

Participants explained how they adhered to these messages and simultaneously faced decreased levels of confidence compared to before the pandemic. Dancer explained having to rebuild confidence to go out into the community after being in lockdown.

> *"It's been a gradual thing building up the confidence to go back and, um, and, at the beginning I used to go first thing in the morning, and just avoiding the crowds. For ages. And I still do, still shop early in the morning."*

Dawn explained a similar feeling.

> *"I used to like going to the movies but I'm not quite so keen to go to those sort of, you know, where there's sort of a group, a big group of people, or… And I think a lot of people, a lot of older people have felt the same. That, you haven't felt the same about going into big groups or things."*

The pandemic is changing how people shop. People are minimising time spent in the supermarkets by planning ahead and buying enough food to last a couple of weeks. They are also taking extra precautions and limiting social interactions as much as possible. The behaviour of the participants is consistent with the change in shopping behaviours witnessed in the wider population. Chris Wilkinson of First Retail Group explained to Stuff on April 9, 2020,

> *"Consumers will be more purposeful and prepared ahead of their shop and there will be less of the social interaction that has increasingly characterised grocery shopping environments in recent years"* (Edmonds, 2020).

The decreased confidence of the participants of the present study may reflect the urgent messages in the media for older adults to stay home, as there was a great risk to them if they were to leave their homes. The continual stream of information in the media and from the Prime Minister of the devastating consequences of older adults going out into the community may therefore have affected how the participants felt about leaving their houses. Moreover, throughout the pandemic, older adults were consistently labelled as vulnerable. This could certainly have impacted how they felt about going out into the community, either knowing they were vulnerable or knowing they would be labelled as vulnerable. These discourses of ageism and successful aging can be dangerous, as people internalise the stereotypes and biases assigned to them (Ayalon, 2020). Although the participants of the present study were healthy and active, they have lost confidence. This may be a result of these persistent messages in the media of them being vulnerable and at-risk, and now as being dependent on others. Having internalised these identities, they have lost confidence in going out into the community. Furthermore, these behaviours may further be attributed to the development of new habits which may have been created due to the restrictions lasting for more than 6 weeks. Staying at home would have

become the new normal for a lot of people, and so leaving the house would feel out of the ordinary.

We can see from the results of this study that older adults lose confidence after having been labeled as vulnerable. These experiences are important to consider when looking to support older adults during crises. The internalisation of stigma and stereotypes can be detrimental to both physical and mental health (Brooke & Jackson, 2020), which is dangerous at a time when health may already be compromised. The confidence of older adults must be addressed during the reintegration back into the community after a situation such as a lockdown, or a similar situation wherein a person is temporarily restricted regarding community involvement. A loss of confidence appears to be a common response to the pandemic, as highlighted by the participants of the present study.

Food Insecurity, Panic Buying, Food Unavailability

New Zealand and other countries around the world faced food shortages during the pandemic, both because of panic buyers purchasing large quantities of products as well as disruptions in the food chain. The purchasing habits of others impacted on the participants of the present study, and these food shortages were felt at times. However, the older adults again showed resilience and were able to make do without some food items.

Messages in the media were consistent about shopping normally. In an address from the Prime Minister early on, on March 21, 2020, she explained, *"It's important to note, that at every alert level supermarkets and essential services, like access to pharmaceuticals will continue. Shop normally. If we do that, our supermarkets will have time to restock their shelves."* (Coronavirus: Prime Minister Jacinda Ardern Gives Address to Nation on the Covid-19 Response, 2020).

Despite these messages, many supermarkets faced empty shelves and the need to enforce limits on the numbers of items people could purchase. This led to varying levels of food insecurity for some people, as they were unable to get certain items. While challenging at times, the participants were not uneasy about the lack of certain types of foods. They were able to show resourcefulness and adaptability and manage without some foods for a short period of time. For Florence, flour unavailability affected her ability to bake and to therefore be resourceful and reduce the burden on her family. She explained, *"Flour was the big thing I couldn't get. And I like to do our own baking and that sort of thing. And I just couldn't get the flour."*

Dancer explained that she was unable to get some items, but that she made do without.

> *"There's one or two things that we couldn't get at the time. You just do without. It didn't matter too much and they [family] got everything I needed. You know, you just do without if you can't get it. It's not a big deal. And I'm the type of person that's pretty well stocked up. Just in case there's an emergency. Um, so, um, I didn't get too stuck for anything. I managed."*

Again, this highlights the underlying theme of resiliency shown by the participants. While there were changes in the normal foods they bought, the participants were able to see the bigger picture and carry on as normally as possible.

Lillian further highlights this, explaining how she was not concerned about being unable to access certain items.

> *"Oh, there was the odd thing. Silly things. Golden syrup, she couldn't buy that. Of course I suppose that's because of the sugar they weren't processing, or manufacturing as much perhaps. But generally everything else was readily available. And if not, she just substituted it for something else."*

While food insecurity was impacted by the COVID-19 pandemic, the participants of the present study were not greatly impacted or concerned by food unavailability. Short term food availability was impacted with 'panic buying' – people buying large quantities of food. This affected the ability to procure certain items such as flour and golden syrup. However, the strong theme of resiliency that underpins the experience of the participants is again highlighted here.

Deaton and Deaton (2020) describe how empty shelves during the pandemic led to worry for some people about food availability; however, this contrasts with the current research where none of the participants were worried about being unable to access adequate food. While facing food shortages and food insecurity, the participants were accepting and resilient and did not become stressed about it. They were able to manage substitutions or doing without, illustrating the resiliency they demonstrated throughout the pandemic situation. Again, this may reflect the privileged position of these participants. Having adequate money meant the participants were able to purchase other items which may have been more expensive. They were also able to access food and essential items from nearby family and were in a financial position wherein they could afford enough food for themselves and their spouse. At no point did the participants worry about not having enough food to eat, or about being unable to access the supplies they needed. Had the participants been in a different socio-economic position and/or had they not had family nearby, the results may have been different.

The lack of food insecurity in my results may also reflect the short duration of food unavailability experienced by the participants. While some foods were unavailable, this only lasted for approximately a month, and the participants were able to see the bigger picture. What food insecurity meant for these participants was that they changed and made do, demonstrating

resilience and being ‘successful’ and good citizens. They still were able to access adequate and nutritious food.

While not present in my research, food insecurity during this time is not to be dismissed. Food insecurity has consistently been linked to poor health outcomes in older adults (Chung et al., 2011; Lee & Frongillo, 2001; Souza & Marin-Leon, 2013; Wright et al., 2013). Therefore, it is imperative that food insecurity is considered when addressing the experiences of older adults during the pandemic. It is likely that older adults in differing demographics from the participants of the present study had a vastly different experience and may have faced significant food insecurity.

Maintenance of Health and Routine

Despite not being able to leave the neighbourhood, the participants spoke of maintaining and often improving their healthy habits and sticking to a routine as much as possible. All the participants described an increase in daily physical activity, mainly walking and gardening, and described trying to keep themselves busy as much as they could while in lockdown. The participants were proactive about staying busy and sticking with their routines, and each participant ensured they kept physically active every single day. It appears that the participants were aware of the importance of maintaining their health and normal routines during this challenging time and were aware of their personal responsibility within the healthism and successful aging discourses. They spent more time on their usual hobbies such as gardening and quilting, played games, and engaged in a lot of reading. Some participants gave themselves projects for the lockdown to have something to focus on.

The messages in the media were consistent about staying active and keeping to a routine as much as possible. The March 2020 SuperSeniors newsletter explained,

> *"It's important to take care of your health and wellbeing while you're at home. It is recommended to stick to a routine such as having regular mealtimes, bedtimes and exercising…. Do the usual things you enjoy at home like reading, writing, watching TV, art or cooking. You can also go outside for a walk or tend to your garden as long as you adhere to the guidelines - stay at least two metres away from other people"* (Martin, 2020c).

Consistent with this, a news article on March 18 stated, *"Keep regular routines and schedules as much as possible or help create new ones in a new environment, including regular exercising, cleaning, daily chores, singing, painting or other activities"* (Lim & Badcock, 2020).

This news article mirrors a document released by WHO on March 18, 2020 titled, "Mental health and psychosocial considerations during the COVID-19 outbreak" (WHO, 2020).

> *"Maintain familiar routines in daily life as much as possible or create new routines…. Keep regular routines and schedules as much as possible or help create new ones in a new environment, including regular exercising, cleaning, daily chores, singing, painting or other activities"* (WHO, 2020).

The participants frequently spoke about the measures they took to ensure they stayed active and healthy during this time. Lillian explained that she and her husband walked a lot more during the pandemic than they previously had. She stated, *"My husband and I walked for an hour every day… Yes, well we walk anyway but not that regularly (laughs)."*

Malcolm explained that because he could not go fishing, he took up cycling instead, and has since maintained this habit.

> *"What I did, I actually started cycling. And then I, I bought a, I had a bit of a farm bike. And I was biking probably four times a week. And since COVID I've actually bought a brand-new*

bike, and I'm trying to bike five days a week… So I'm really getting into my cycling to keep fit. So that's one thing because I couldn't go fishing, I've taken up cycling."

Other participants often spoke about doing more gardening and housework than they usually would have, on top of their walking. Gertrude explained, *"I did lots of gardening and you know I went for a 30 minute walk every morning."*

Dancer explained how she made plans for house repairs she wanted to do when lockdown ended. She stated, *"The garden's looking tidier than it's looked for a long time…. And soon as lockdown finished, I got the fence repaired and I got new lights for the living room. So, there was plans made while I was in lockdown."*

Dawn explained how she undertook a quilt project during lockdown, as well as engaging in numerous other activities.

"I also had a quilt project that I had started. And I made that my project for the lockdown, and I was able to actually finish the quilt so that was you know something good to pass the time as well…. I do a lot of reading. Um, I did my quilt stitching. And that gave me a real project to sort of do throughout the lockdown and the weather was, the weather was so lovely I think that made a huge difference for everybody and it was just lovely to see families out walking and, you know, people would be saying hello and greeting one another. That side of it I thought was really lovely."

It is highly evident that the participants were proactive in maintaining and creating routines and habits to maintain their health and wellbeing throughout the lockdown. They ensured they were getting up at their usual time, sticking to usual eating routines, and going for walks in the morning. This was consistent with the messages in the media encouraging people to

maintain their usual routines as much as possible. Further illustrating this, Florence explained how she carried on as normal during the lockdown.

"We just love our garden and that sort of thing and we just kept up with our gardening and I do a lot of sewing and I kept up with that. And, and that sort of thing and we just basically just kept going sort of thing."

Dawn shared a similar story of maintaining her usual routine.

"I made sure I just ate the same as normal and yeah, carried on the same…. It helped a lot just having a normal routine…. I usually get up about 8 o'clock in the morning, and breakfast - have a read of something while I'm having my breakfast. Yeah, the day goes by."

Gertrude explained how she kept herself busy during the lockdown.

"I tried as much as possible to keep to a routine. Get up at the same time, shower, get dressed. Went for a walk every day. And did lots of gardening, lots of cleaning…. I did 8 jigsaws, I'm onto my 80th beanie (laughs) for the Middlemore hospital. So, um yeah and I did lots of gardening and you know I went for a 30 minute walk every morning."

Lillian explained a similar situation of keeping herself occupied.

"I have a garden. I did a lot of gardening. We played a lot of Scrabble (laughs) and read a lot of books. And one of our neighbours used to own a book exchange. So, she had a lot of books at her house. And she would just pack them in the bag for us and pop them across the road. And we would pick up the bag and read what we wanted to and then return them. So yes, again, that was not, not a big deal. You know, we just carried on."

Malcolm kept working during the lockdown, as he is a self-employed farmer who can therefore work from home. He explained, *"So we just carried on work as normal and I probably*

did a hell of a lot more work on the farm than what I needed to do or had to do. But I quite enjoyed that."

The participants of the present study were proactive in maintaining usual routines and developing new ones during the lockdown. Again, this highlights the theme of resilience. Despite having many of their usual routines disrupted, the participants were able to stick to the routines they still had, and to create new ones. They recognised the importance of this continuity for both their physical and mental health and wellbeing, and their actions were consistent with messages from the government.

Ludwig (1997) explains that the routines of older adults serve to assist with maintaining health and physical activity levels, maintaining a sense of control in one's life, and achieving balance. These routines also facilitate the adaptation to changes in daily life by providing stability and predictability. The participants of the present study all maintained a structured routine throughout the course of the pandemic to maintain their healthy habits such as eating and exercising. These routines were also likely to have provided a sense of control and stability where these were otherwise reduced.

That the participants were able to afford new exercise equipment, have gardens and therefore a yard, and materials for hobbies such as sewing and quilting, may speak to their advantaged position. The ideals of healthism and successful aging suggest that health is something that is available for everyone, but these discourses fail to consider context. While the participants of the present study were able to access food via nearby family, and could afford this food, as well as exercise equipment and other supplies, this was likely not the case for many older New Zealanders. Therefore, remaining healthy may have been less attainable for some older adults.

Stephens (2017) explains that SA positions older adults as responsible for healthy aging through maintaining a healthy diet, engaging in regular exercise, and remaining socially active. The participants of the present study displayed all these behaviours, often emphasising how they remained active and made efforts to eat well, as well as remaining in regular contact with friends and family. This highlights that the participants were aware of and accepted this responsibility. Indeed, Hodgetts et al. (2005) explain that speaking about how one adheres to this personal responsibility and acting accordingly illustrates their acceptance of this responsibility. This is shown in the present study where, when asked about their experiences with the pandemic, the participants spoke of their maintenance of healthy habits. This is similar to what Bisogni et al. (2002) found; when they asked their participants about their food-related practices, the participants immediately spoke of the neoliberalist and healthism values of being healthy and having control over oneself. These results reflect the deeply ingrained healthism discourse in our society.

These results are also consistent with what Lundkvist et al. (2010) found: older adults are aware of this responsibility and their moral duty to engage in healthy behaviours to reduce their burden on society and the healthcare system. Henderson et al. (2009) found that older adults willingly accept this responsibility, and Pond et al. (2010) explain how people see health as something that can be accomplished on their own with no help from others, highlighting the acquired personal responsibility for health. This becomes a problem when older adults are suddenly unable to procure their own food and essential items due to a change in context, but still accept the responsibility of having to provide for themselves.

The values of healthism and successful aging are highly visible in this theme. Participants are aware of their personal responsibility to maintain their health during this time and to avoid

contracting the virus. Government campaigns were aimed at the individual level for all age groups, to "stay home, stay safe." The participants were aware of this responsibility and acted accordingly, obeying the government's instructions. Hodgetts et al. (2005) explain how government health campaigns focus solely on individual action while neglecting to consider the wider context. While the New Zealand government was telling older adults to "stay home and stay safe" they neglected to consider the wider context for this population, wherein some older adults may have struggled to comply with these government messages due to financial constraints, physical capabilities, or a lack of the resources necessary to maintain physical activity levels and to eat healthfully.

Stephens (2017) illustrates how these behaviours are directed at reducing the burden on the healthcare system, especially with the rapidly growing older adult population. The participants of the present study were exemplary healthism citizens, having taken control of their health by being proactive with their eating, exercising, and socialising, which would have potentially reduced the burden on our healthcare system.

Within the healthism discourse, becoming unwell also impacts how one views oneself. Furthermore, whether people feel as though they are acting responsibly affects how they view themselves. Failing to see oneself as a responsible person leads to feeling as though they themselves are a failure; our health behaviours take on moral valuation (Breheny & Stephens, 2019; Lundkvist et al., 2010). This may have provided extra motivation for the participants to engage in health-related behaviours, to prevent being a failure, either by themselves or by others.

The participants displayed healthy behaviours throughout the lockdown, engaging in regular exercise, eating consistent meals, and keeping themselves busy with activities such as cooking and gardening, and contacting friends and family. They ensured they followed the rules

set by the government, staying home, and avoiding physical social contact. According to the ideals of healthism, the individual is responsible and accountable for their own health, being blamed if they experience ill-health. The participants heeding to the advice of the government meant that they stayed well and avoided needing healthcare, thus minimising, or avoiding any burden on the healthcare system. The values of healthism and successful aging are clearly visible in these responses from participants. The participants were well aware of their responsibility to remain healthy during this time, and the physical as well as moral consequences of failing to do so. When considering the experiences of older adults, we cannot neglect to identify the wider social context of healthism and neoliberalist ideals. While the participants of the present study were of an advantaged position, not all older adults experiencing the pandemic will be. We must consider this wider context and support older adults who do not have the means to engage in healthy habits and routines.

Resilience

The theme of resilience can be seen throughout the study, underlying many of the other themes. The participants were aware that the lockdown was a temporary situation that would pay off in the long run and understood why it was happening. They explained that they did not get stressed out about the pandemic, but rather accepted it for what it was. They were happy to make the sacrifice to keep themselves and those around them safe.

Lillian explained how she did not get stressed about the situation. She stated, *"I did not really get worried about it at all. Just took it all in my stride. And it was, yes, it was no big deal, I didn't think."*

Dancer illustrated a similar mindset, explaining, *"Yeah, I just lived with it. I knew it was going to end at some stage. So, no, I didn't stress out about it. It was what it was…. It's never really been an issue for me."*

Lillian also showed her acceptance of the situation. She explained, *"There was a light at the end of the tunnel, wasn't there? For all of us. We knew that eventually, the levels would be lowered."*

Florence explained that the sacrifice of having to isolate was worth it, if it meant saving lives.

> *"We've got some special friends and that sort of thing and we always try and get together with them on occasions and that, but that was the one thing we couldn't go and do. But hey, if that's gonna save lives, well, that's nothing."*

While many of the participants experienced disruptions and upheavals of their daily lives, they took it in their stride and were very accepting of the situation. None of the participants resisted what was happening, but rather understood the reasons behind it, saw "a light at the end of the tunnel," and carried on as normal.

This is consistent with previous research which shows how older adults tend to be more resilient during disasters than younger populations (Cherry et al., 2015; Ferraro, 2003; Huerta & Horton, 1978; Parker et al., 2016; Tuohy & Stephens, 2012). Cherry et al. (2015) further suggests that older adults with high levels of perceived social support are more resilient during disasters. This is consistent with the present study, where most of the participants had family nearby as well as utilised the phone and email to keep in contact with family and friends. Therefore, it may be inferred that the participants of the present study likely had high levels of perceived support, which may have contributed to the resilience they displayed.

Furthermore, Ferraro (2003) suggests that older adults with prior experience of disasters are more resilient. That is, prior experience protects against psychological distress from disasters. While a pandemic is undoubtedly a new experience for the participants of the present study, they may have lived through prior disasters such as war, earthquakes, and economic recessions. Tuohy and Stephens (2012) support this theory: "Chronological age and the experience it brings may inoculate against psychological effects…. A lifetime of experience provides resources for psychological resilience and strength rather than vulnerability in the face of disaster" (Tuohy & Stephens, 2012, p. 27, 33).

Parker et al. (2016) offer four hypotheses which explain the reactions of older adults during disasters, with three of the hypotheses illustrating resilience and the final hypothesis highlighting a negative response. Inoculation hypothesis: Previous experiences of disasters reduces the reactivity of older adults to new disasters. Maturation hypothesis: Older adults can develop coping strategies from prior experiences, to cope more effectively in the face of present disasters. Burden hypothesis: Older adults tend to have fewer responsibilities (such as dependent children, mortgages, and jobs) and therefore are better able to cope in the face of adversity, such as a disaster. Exposure hypothesis: This hypothesis explains the negative reactions of older adults to disaster, positing that older adults are more at risk to experiencing distress due to limited warnings about impending disasters, and resistance to evacuation and changes in routines.

The participants of the present study may be displaying a combination of aspects of the inoculation, maturation, and burden hypotheses. It is likely that the participants have experienced prior disasters or at least difficult life situations, which has subsequently reduced their reactivity to disasters, supporting the inoculation hypothesis. Furthermore, from these experiences, they

conceivably developed coping strategies which supports the maturation hypothesis. And finally, it appeared that the participants of the present study generally did not have major responsibilities such as dependents and careers, aiding them in coping with the pandemic, therefore supporting the burden hypothesis.

Tuohy and Stephens (2012) highlight that older adults are an incredibly diverse population, and therefore how they respond to disaster will be highly individual and contextual. The older adults of the present study appear to be well off: they are Caucasian, enjoy middle to high socioeconomic status, and have lots of close family and friends nearby. This may speak to the high levels of resilience this population has shown throughout the pandemic, and how they were able to be highly resilient. Therefore, while the participants of the present study did not speak about becoming anxious or stressed, it is an issue that should not be overlooked. With nearby family, the participants of the present study did not struggle with acquiring food and other essential items. If the participants were of a different socioeconomic status and/or without family nearby, these results may have been very different, and we may have seen much higher levels of distress. We can see this in the case of Florence, who did need to continue going to the supermarket. She was unable to use online shopping or nearby supports, and so had to put herself at risk to procure food for both her husband and herself.

The results of the present study contrast with those of Barari et al. (2020), who found that older adults in Italy were not without anxiety during the COVID-19 pandemic. Older adults were among the most anxious of populations, along with women and people with vulnerable health conditions. However, Barari et al. (2020) used a nationally representative study, which would therefore have included many different demographics. The sample of the present study was largely homogenous, with the participants being in a privileged position. This is conceivably

why the results contrast; being financially well off could have limited the anxiety felt by the participants of the present study.

Understanding and Acceptance

Participants were conscious of the regulations imposed by the government and wanted to follow them. Most of the participants had a deep understanding of the reasons why they were unable to go to the supermarket and were accepting of this, as well as being highly supportive of the decisions made by the government. They knew what their responsibility was and what was required to keep themselves and others safe. The participants displayed great degrees of understanding and acceptance of the situation. They did not appear to resist the regulations imposed on them, but rather displayed resilience throughout the pandemic. This acceptance and understanding demonstrates well such resilience.

Dancer spoke about following what the government had advised. She explained, *"I stayed to what they said. I'd stayed away from shops and things."*

Lillian explained, *"We were all very aware of why we had to stay safe."* She further explains,

> *"Yes, so I was fully in favour of the fact that the borders were closed. And the only thing was that it was a bit of a shame they didn't stop the flights in a little earlier. But put that down to (laughs) experience. Yeah. But now I think, I think the government has done very well and oh the Ministry of Health has done a wonderful job."*

Many of the participants also mentioned supporting the decisions made by the government and were accepting of these. Florence explains a similar mindset.

"It was the right thing for the government to do, I've got to admit that. And I think they should keep the borders closed for a lot longer. Yeah, and not let, and not let any bugger in. Well look what's happened in Australia."

This is consistent with the results of Barari et al. (2020), who evaluated the public health messaging compliance in Italy during the COVID-19 pandemic. They found that older adults had a deep understanding of why they needed to stay at home and were the population most likely to comply with the regulations. None of the participants of the present study resisted the restrictions or complained about having to be in lockdown. While they identified the challenges, they were not concerned with what was happening, but rather accepted their situation.

The participants frequently displayed high levels of resilience, understanding, and acceptance throughout the lockdown period, supporting the decisions made by the government and not resisting the restrictions imposed on them. As discussed in the previous section, being sick as an older person is a burden on the healthcare system, especially at a time of a global pandemic. This may lead to older adults being more likely to follow the rules and heed the messages from the media to stay home and save lives, to reduce their burden. Whatever their motivation, the participants were highly resilient and proactive throughout the New Zealand lockdown.

Chapter 4

Conclusions, Implications, and Directions for Future Research

The main objective of this study was to investigate how older adults in New Zealand experienced the COVID-19 pandemic, with a primary focus on eating habits and food acquisition, and the impact of reduced social contact which resulted from the initial lockdown. Research on the experiences of older adults during disasters is limited. However, it is important to understand these experiences to adequately support all members of our population during such challenging times. The present study therefore aimed to highlight areas where additional support may be required for older adults. At the outset of the research, a heavy focus was placed on the relationship between social contact and eating, specifically how reduced social eating affected the wellbeing of the older adults, as it is well established in the literature that social contact is important for older adults in terms of adequacy of calories and nutrition (Locher et al., 2005b). Having this focus but being flexible to explore the more comprehensive experiences of lockdown was advantageous. This was achieved through semi-structured interviews which were flexible, and which allowed the participants to guide the conversation in the directions they wished. This resulted in a great deal of discussion around the maintenance of the healthy routines which served to keep the participants busy and active, and ensured they were eating adequately and regularly. Therefore, much of the present research discusses the role that routine played in the participants' lives during the lockdown, which inherently links to the ideals of healthism and neoliberalism: the participants were very aware of their responsibility to be proactive in maintaining their health during this time.

All participants, but one, shared very similar stories of having family do their grocery shopping, and of keeping themselves busy. Being unable to see family, and feeling a loss of their

sense of freedom, were cited as the most challenging aspects of the pandemic. The participants were unable to see their children and grandchildren due to the lockdown restrictions and were unable to exercise the freedom to go where they pleased and engage in the social activities they normally would have. Despite these challenges, all the participants demonstrated resilience and were accepting of the situation. They were proactive in staying healthy and keeping to their regular routines as much as possible, thereby lessening the stress inherent in navigating such unique circumstances. They were resourceful in making the most of the foods they had on hand, which enabled them to be resilient when faced with food shortages. However, the participants were highly cognisant of the fact that they were having to rely on others, and worried about becoming a burden to their family members who were doing their shopping and delivering their groceries. This worry underpinned a great deal of what the participants spoke about.

The media analysis was added to the study to provide context to the experiences of the participants which were lived through in the context of a heavy media and government influence, in the form of news articles, newsletters, and government messaging. There were strong messages in the lead up to and during the various phases of lockdown in New Zealand, especially regarding the over 70 population, being a group, which was identified as particularly vulnerable and at-risk. Throughout the interviews, participants acknowledged the role these messages played in their experience and utilised these messages to guide their behaviour and routines.

Reflections

The present study has some considerations which must be discussed. The sample was highly homogenous: five of the six participants were female, all the participants identified as Caucasian, were of middle to high socioeconomic status, and were in good health, living

independently. Therefore, the results of this study are not descriptive of the older adult population as a whole, but rather of this particular selection of older adults. It is important to note that many factors will influence the experience of the pandemic, and therefore this research represents six sets of experiences. Furthermore, the sample size was small, even for a thematic analysis. Two of the participants were referred from one source, and the remaining four were sourced from another single contact. Therefore, not only was the sample homogenous, but is representative of only represent two social circles. However, this enabled the investigation of experiences from both the large city of Auckland, and the small town of Morrinsville. The mode of interview was also inconsistent. The Auckland interviews were conducted in person and the Morrinsville interviews were conducted via telephone. This may have led to differences in rapport building and the subsequent information provided. However, having fewer participants enabled a deeper understanding of their experiences and the ability to know each individual at a deeper level than if the sample size was larger.

This research proved eye-opening and offered insight into another population's experience of the pandemic while I too was experiencing the same pandemic. Understanding other experiences within another context led to greater empathy for all the experiences of this pandemic, and a greater understanding of what is at risk for more vulnerable populations. This research also highlighted how our shared context of living in New Zealand, being of good health, and of a reasonable socio-economic status made resilience attainable during this challenging time.

Implications

What is also highly important is the impact of healthism and ageism on the over 70 population. Our society holds many stereotypes and expectations of this population, which are at

times conflicting, and which can make the experience of aging complicated. Furthermore, there exists an intergenerational gap which was perpetuated within the COVID-19 pandemic, as initially this virus was considered an illness of the over 70 population, leading to blame and a widening of this intergenerational gap. It may therefore be valuable for future research to address both this intergenerational gap and identify how intergenerational solidarity may be increased, as well as to identify the mechanisms of healthism and ageism and how we can mitigate these to support the over 70 population during such challenging times.

It would further be valuable to investigate the experience of older adults of other ethnicities and socio-economic statuses. I believe these would provide vastly different results than did the present study, as resources for coping would undoubtedly be very different. For example, a study of older adults from a collectivist culture may show that values of healthism were less prominent, as relying on family members is common, rather than something that is shameful. In addition, a lower socioeconomic status may affect coping abilities due to financial implications on being unable to afford certain foods. This may affect the experience of food insecurity, especially if the sample was already food insecure. Furthermore, a lower socioeconomic status may impair the ability to afford certain items, such as exercise equipment and material for hobbies to stay active and busy during a time of social isolation. The participants of the present study were also able to access the internet and being of a lower socioeconomic status may impact on the ability to stay connected with others during times of reduced social contact. Therefore, future research on narrowing the gap of experiences within a population would be valuable, in identifying how we can best support older adults within all contexts and demographics.

It was highly evident that the participants worried about being a burden to those doing their shopping and delivering their food, which highlights an important area for consideration when looking to support older adults during such situations. Older adults experience anxiety and discomfort when faced with having to rely upon others, whether that be due to losing a sense of independence or of viewing themselves as being a burden to their family members. This is a promising area to investigate further and to develop supports for, to reduce the level of anxiety experienced by those finding themselves in such a position. This may also prove to be an area of risk for this population, as older adults are motivated to avoid becoming dependent and therefore may go without food and other necessities rather than asking for help.

The issue of the unviability of online shopping was also highlighted. None of the participants were able to access this service due to there being no available time slots, the additional delivery fee, and/or a lack of internet access. This is therefore an area that needs to be addressed to support our more vulnerable or at-risk populations in preparation for future disasters.

Importantly, this study has served to highlight the ways in which the values of healthism and successful aging underpin much of what the participants spoke of during their interviews, and therefore the manner in which it impacted their experience of the pandemic. All these experiences occurred within the context of neoliberalist ideals, with the stereotypes and expectations for older adults challenging the participants to fit into a certain image and to carry out their adopted neoliberalist responsibilities as good citizens. These ideals led to feelings of worry about being a burden to family members, underpinning much of what the participants spoke of in face of suddenly having to rely on others to attain necessary items such as groceries.

The media analysis served to provide a broader context for the participants' experiences and to demonstrate the ways in which the media can influence citizens behaviour. This was of relevance to the present study wherein the media and government messaging had such a large impact on the experiences of the pandemic. This context enabled the capturing of the comprehensive experience of these participants.

Central to this research is the demonstration of the high levels of resilience shown by this population. Despite facing challenges and being unable to engage in many of their normal activities, the participants proved resilient, always understanding, and accepting of the situation. They utilised the messages from the government to guide their actions and through maintaining healthy and regular routines were able to preserve their mental and physical health, to stay engaged in the community and with family and friends, and to remain optimistic and resilient throughout.

"There was a light at the end of the tunnel, wasn't there? For all of us." - *Lillian*

References

Alase, A. (2017). The interpretative phenomenological analysis (IPA): A guide to a good qualitative research approach. *International Journal of Education and Literacy Studies*, *5*(2), 9-19. http://dx.doi.org/10.7575/aiac.ijels.v.5n.2p.9

Allen, J., Brown, L. M., Alpass, F. M., & Stephens, C. V. (2018). Longitudinal health and disaster impact in older New Zealand adults in the 2010–2011 Canterbury earthquake series. *Journal of gerontological social work*, *61*(7), 701-718. https://doi.org/10.1080/01634372.2018.1494073

Armitage, R., & Nellums, L. B. (2020). COVID-19 and the consequences of isolating the elderly. *The Lancet Public Health*. https://doi.org/10.1016/ S2468-2667(20)30061-X

Ayalon, L. (2020). There is nothing new under the sun: Ageism and intergenerational tension in the age of the COVID-19 outbreak. *International Psychogeriatrics*, 1-11. https://doi.org/10.1017/s1041610220000575

Ayalon, L., Chasteen, A., Diehl, M., Levy, B. R., Neupert, S. D., Rothermund, K., Tesch-Römer, C., & Wahl, H. W. (2020). Aging in times of the COVID-19 pandemic: avoiding ageism and fostering intergenerational solidarity. *The Journals of Gerontology: Series B*. https://doi.org/10.1093/geronb/gbaa051

Ayo, N. (2012). Understanding health promotion in a neoliberal climate and the making of health conscious citizens. *Critical public health*, *22*(1), 99-105. https://doi.org/10.1080/09581596.2010.520692

Baker, M. G., Wilson, N., & Anglemyer, A. (2020). Successful elimination of Covid-19 transmission in New Zealand. *New England Journal of Medicine*, *383*(8), e56. https://doi.org/10.1056/NEJMc2025203

Baltar, F., & Brunet, I. (2012). Social research 2.0: Virtual snowball sampling method using Facebook. *Internet research, 22*(1), 57-74. https://doi.org/10.1108/10662241211199960

Barari, S., Caria, S., Davola, A., Falco, P., Fetzer, T., Fiorin, S., Hensel, L., Ivchenko, A., Jachimowicz, J., King, G., Kraft-Todd, G., Ledda, A., MacLennan, M., Mutoi, L., Pagani, C., Reutskaja, E., Roth, C., Slepoi, F. R. (2020). Evaluating COVID-19 public health messaging in Italy: Self-reported compliance and growing mental health concerns. *medRxiv*. https://doi.org/10.1101/2020.03.27.20042820

Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative research, 15*(2), 219-234. https://doi.org/10.1177/1468794112468475

Berg-Weger, M., & Morley, J. E. (2020). Loneliness and social isolation in older adults during the Covid-19 pandemic: Implications for gerontological social work. https://doi.org/10.1080/01634372.2020.1764687

Berry, T. R., Wharf-Higgins, J., & Naylor, P. J. (2007). SARS wars: an examination of the quantity and construction of health information in the news media. *Health communication, 21*(1), 35-44. https://doi.org/10.1080/10410230701283322

Biggerstaff, D., & Thompson, A. R. (2008). Interpretative phenomenological analysis (IPA): A qualitative methodology of choice in healthcare research. *Qualitative research in psychology, 5*(3), 214-224. https://doi.org/10.1080/14780880802314304

Bhandari, R. B. (2014). Social capital in disaster risk management; a case study of social capital mobilization following the 1934 Kathmandu Valley earthquake in Nepal. *Disaster Prevention and Management, 23*(4), 314-328. https://doi.org/10.1108/dpm-06-2013-0105

Bisogni, C. A., Connors, M., Devine, C. M., & Sobal, J. (2002). Who we are and how we eat: a qualitative study of identities in food choice. *Journal of nutrition education and behavior*, *34*(3), 128-139. https://doi.org/10.1016/s1499-4046(06)60082-1

BMJ (2020). *COVID-19 (coronavirus)* [Pamphlet]. BMJ Publishing Group Limited. https://bestpractice.bmj.com/patient-leaflets/en-gb/pdf/3000166/Coronavirus.pdf

Bofill, S. (2004). Aging and loneliness in Catalonia: The social dimension of food behavior. *Ageing International*, *29*(4), 385-398. https://doi.org/10.1007/s12126-004-1006-3

Boyer, K., Orpin, P., & King, A. C. (2016). 'I come for the friendship': Why social eating matters. *Australasian journal on ageing*, *35*(3), E29-E31. https://doi.org/10.1111/ajag.12285

Boyle, G. (2005). The role of autonomy in explaining mental ill-health and depression among older people in long-term care settings. *Ageing & Society*, *25*(5), 731-748. https://doi.org/10.1017/s0144686x05003703

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2017). Thematic analysis. *The Sage handbook of qualitative research in psychology*, 17-37.

Brooke, J., & Jackson, D. (2020). Older people and COVID-19: Isolation, risk and ageism. *Journal of Clinical Nursing*, *29*(13-14). https://doi.org/10.1111/jocn.15274

Breheny, M., & Stephens, C. (2019). Social policy and social identities for older people. *The Sage Handbook of Applied Social Psychology*, 347-365. https://doi.org/10.4135/9781526417091.n17

Brooks, E. (2020, April 27). Coronavirus: Why we're embracing one of the oldest styles of bread making in lockdown. *Stuff*. https://www.stuff.co.nz/life-style/well-good/121076857/why-were-embracing-one-of-the-oldest-styles-of-breadmaking-in-coronavirus-lockdown

Brownie, S., & Coutts, R. (2013). Older Australians' perceptions and practices in relation to a healthy diet for old age: A qualitative study. *The journal of nutrition, health & aging*, *17*(2), 125-129. https://doi.org/10.1007/s12603-012-0371-y

Brownlie, K. (2020, April 1). Nationwide flour shortage as home baking makes a comeback. *Newshub*. https://www.newshub.co.nz/home/lifestyle/2020/04/nationwide-flour-shortage-as-home-baking-makes-a-comeback.html

Burns, C. (2009). Seeing food through older eyes: the cultural implications of dealing with nutritional issues in aged and ageing. *Nutrition & Dietetics*, *66*(4), 200-201. https://doi.org/10.1111/j.1747-0080.2009.01370.x

Burr, V. (2015). *Social constructionism*. Routledge.

Carter, K. N., Kruse, K., Blakely, T., & Collings, S. (2011). The association of food security with psychological distress in New Zealand and any gender differences. *Social science & medicine*, *72*(9), 1463-1471. https://doi.org/10.1016/j.socscimed.2011.03.009

Carter, S. M., & Little, M. (2007). Justifying knowledge, justifying method, taking action: Epistemologies, methodologies, and methods in qualitative research. *Qualitative health research*, *17*(10), 1316-1328. https://doi.org/10.1177/1049732307306927

Chang, J., McAllister, C., & McCaslin, R. (2015). Correlates of, and barriers to, Internet use among older adults. *Journal of Gerontological Social Work*, *58*(1), 66-85. https://doi.org/10.1080/01634372.2014.913754

Cheek, J. (2008). Healthism: A new conservatism?. *Qualitative Health Research, 18*(7), 974-982. https://doi.org/10.1177/1049732308320444

Cheng, D. (2020, April 26). Covid 19 coronavirus level 3: More freedom for over-70s despite higher risk from virus. *New Zealand Herald.* https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12327549

Cheung, Y. T., Chau, P. H., & Yip, P. S. (2008). A revisit on older adults suicides and Severe Acute Respiratory Syndrome (SARS) epidemic in Hong Kong. *International Journal of Geriatric Psychiatry: A journal of the psychiatry of late life and allied sciences, 23*(12), 1231-1238. https://doi.org/10.1002/gps.2056

Cherry, K. E., Sampson, L., Nezat, P. F., Cacamo, A., Marks, L. D., & Galea, S. (2015). Long-term psychological outcomes in older adults after disaster: relationships to religiosity and social support. *Aging & Mental Health, 19*(5), 430-443. https://doi.org/10.1080/13607863.2014.941325

Chung, W. T., Gallo, W. T., Giunta, N., Canavan, M. E., Parikh, N. S., & Fahs, M. C. (2012). Linking neighborhood characteristics to food insecurity in older adults: The role of perceived safety, social cohesion, and walkability. *Journal of Urban Health, 89*(3), 407-418. https://doi.org/10.1007/s11524-011-9633-y

Coronavirus: Prime Minister Jacinda Ardern gives address to nation on the Covid-19 response. (2020, March 21). *Radio New Zealand.* https://www.rnz.co.nz/news/covid-19/412280/coronavirus-prime-minister-jacinda-ardern-gives-address-to-nation-on-the-covid-19-response

Crawford, R. (1980). Healthism and the medicalization of everyday life. *International Journal of Health Services, 10*(3), 365–388. https://doi.org/10.2190/3h2h-3xjn-3kay-g9ny

Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Sage.

Curtis, S., Gesler, W., Smith, G., & Washburn, S. (2000). Approaches to sampling and case selection in qualitative research: examples in the geography of health. *Social science & medicine, 50*(7-8), 1001-1014. https://doi.org/10.4135/9781473915480.n29

Davis, B. L., Grutzmacher, S. K., & Munger, A. L. (2016). Utilization of social support among food insecure individuals: a qualitative examination of network strategies and appraisals. *Journal of Hunger & Environmental Nutrition*, *11*(2), 162-179. https://doi.org/10.1080/19320248.2015.1066731

Davison, K. M., Marshall-Fabien, G. L., & Tecson, A. (2015). Association of moderate and severe food insecurity with suicidal ideation in adults: national survey data from three Canadian provinces. *Social psychiatry and psychiatric epidemiology*, *50*(6), 963-972. https://doi.org/10.1007/s00127-015-1018-1

Dean, M., Grunert, K. G., Raats, M. M., Nielsen, N. A., & Lumbers, M. (2008). The impact of personal resources and their goal relevance on satisfaction with food-related life among the elderly. *Appetite*, *50*(2-3), 308-315. https://doi.org/10.1016/j.appet.2007.08.007

Dean, M., Raats, M. M., Grunert, K. G., & Lumbers, M. (2009). Factors influencing eating a varied diet in old age. *Public health nutrition, 12*(12), 2421-2427. https://doi.org/10.1017/s1368980009005448

Deaton, B. J., & Deaton, B. J. (2020). Food security and Canada's agricultural system challenged by COVID-19. *Canadian Journal of Agricultural Economics/Revue Canadienne D'Agroeconomie, 68*(2), 143-149. https://doi.org/10.1111/cjag.12227

De Jong, M., Collins, A., & Plüg, S. (2019). “To be healthy to me is to be free”: how discourses of freedom are used to construct healthiness among young South African adults. *International journal of qualitative studies on health and well-being*, *14*(1), 1603518. https://doi.org/10.1080/17482631.2019.1603518

Del Rio, C., & Malani, P. N. (2020). COVID-19—new insights on a rapidly changing epidemic. *Jama*, *323*(14), 1339. https://doi.org/10.1001/jama.2020.3072

Devlin, C. (2020a, April 26). Coronavirus: Seniors urged to weigh up the risks of living normally in Level 3. *Stuff*. https://www.stuff.co.nz/national/health/coronavirus/121274011/coronavirus-seniors-urged-to-weigh-up-the-risks-of-living-normally-in-level-3

Devlin, C. (2020b, March 29). PM plea to elderly after first Covid-19 death - 'listen to me, stay at home'. *Stuff*. https://www.stuff.co.nz/national/health/coronavirus/120658786/pm-plea-to-elderly-after-first-covid19-death--listen-to-me-stay-at-home

Different COVID-19 Vaccines. (2020, November 24a). Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines.html

Donini, L. M., Scardella, P., Piombo, L., Neri, B., Asprino, R., Proietti, A. R., Carcaterra, S., Cava, E., Cataldi, S., Cucinotta, D., Di Bella, G., Barbagallo, M., & Morrone, A. (2013). Malnutrition in elderly: Social and economic determinants. *The Journal of Nutrition, Health & Aging*, *17*(1), 9-15. https://doi.org/10.1007/s12603-012-0374-8

Dulin, P. L., Gavala, J., Stephens, C., Kostick, M., & McDonald, J. (2012). Volunteering predicts happiness among older Māori and non-Māori in the New Zealand health, work, and retirement longitudinal study. *Aging & mental health*, *16*(5), 617-624. https://doi.org/10.1080/13607863.2011.641518

Eatough, V., & Smith, J. A. (2008). Interpretative phenomenological analysis. *The Sage handbook of qualitative research in psychology*, *179*, 194.

Edfors, E., & Westergren, A. (2012). Home-living elderly people's views on food and meals. *Journal of Aging Research*, *2012*, 1-9. https://doi.org/10.1155/2012/761291

Edmunds, S. (2020, April 9). Coronavirus: Panic-buying has given way to 'eerie' supermarkets - what's next? *Stuff.* https://www.stuff.co.nz/business/120918858/coronavirus-panicbuying-has-given-way-to-eerie-supermarkets--whats-next

Everett, J. A. C., Colombatto, C., Chituc, V., & Brady, W. J. (2020, March). The effectiveness of moral messages on public health behavioral intentions during the COVID-19 pandemic. https://doi.org/10.31234/osf.io/9yqs8

Feek, B. (2020, March 26). Covid-19 coronavirus: Auckland man, 70, describes month-long wait for online groceries. *New Zealand Herald.* https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12320053

Ferraro, F. R. (2003). Psychological resilience in older adults following the 1997 flood. *Clinical Gerontologist*, *26*(3-4), 139-143. https://doi.org/10.1300/j018v26n03_11

Fjellström (2009). Preparing meals in later life. In Raats, M. (Ed.), *Food for the ageing population* (95-109). Woodhead Publishing Ltd.

Fraser, S., Lagacé, M., Bongué, B., Ndeye, N., Guyot, J., Bechard, L., Garcia, L., Taler, V., Adam, S., Beaulieu, M., Bergeron, C. D., Boudjemadi, V., Desmette, D., Donizzetti, A. R., Éthier, S., Garon, S., Gillis, M., Levasseur, M., Lortie-Lussier, M., … Tougas, F. (2020). Ageism and COVID-19: What does our society's response say about us? *Age and Ageing, 49*(5), 692-695. https://doi.org/10.1093/ageing/afaa097

Gee, S. Coronavirus: Call to introduce seniors hour at Nelson supermarkets. (2020, March 22). *Stuff.* https://www.stuff.co.nz/national/health/coronavirus/120451247/coronavirus-call-to-introduce-seniors-hour-at-nelson-supermarkets

Gorkovenko, K., Tigwell, G. W., Norrie, C. S., Waite, M., & Herron, D. (2017, September). ShopComm: Community-Supported Online Shopping for Older Adults. In *AAATE Conf.* (pp. 175-182).

Gray, D.E. (2014). *Doing research in the real world* (3rd ed). SAGE.

Guildford, J., & Heagney, G. (2020, March 21). Coronavirus: People over 70 or with compromised immune systems should stay home. *Stuff.* https://www.stuff.co.nz/national/health/coronavirus/120466980/coronavirus-people-over-70-or-with-compromised-immune-systems-should-stay-home

Gustafsson, K., Andersson, I., Andersson, J., Fjellström, C., & Sidenvall, B. (2003). Older Women's Perceptions of Independence Versus Dependence in Food-Related Work. *Public Health Nursing*, *20*(3), 237-247. https://doi.org/10.1046/j.0737-1209.2003.20311.x

Gyasi, R. M., Obeng, B., & Yeboah, J. Y. (2020). Impact of food insecurity with hunger on mental distress among community-dwelling older adults. *PLOS ONE, 15*(3), e0229840. https://doi.org/10.1371/journal.pone.0229840

Hansen, M. Supermarkets give priority to over 70s and 'vulnerable customers'. (2020, March 27). *Otago Daily Times.* https://www.odt.co.nz/star-news/star-national/supermarkets-give-priority-over-70s-and-vulnerable-customers

Hargittai, E., Piper, A. M., & Morris, M. R. (2019). From internet access to internet skills: digital inequality among older adults. *Universal Access in the Information Society*, *18*(4), 881-890. https://doi.org/10.1007/s10209-018-0617-5

Hassan, S., Sheikh, F. N., Jamal, S., Ezeh, J. K., & Akhtar, A. (2020). Coronavirus (COVID-19): a review of clinical features, diagnosis, and treatment. *Cureus*, *12*(3). https://doi.org/10.7759/cureus.7355

Henderson, J.A., Ward, P.R., Coveney, J.D., & Taylor, A., 2009. Health is the number one thing we go for: Healthism, citizenship and food choice. *The Future of Sociology*.

Hodgetts, D., Bolam, B., & Stephens, C. (2005). Mediation and the construction of contemporary understandings of health and lifestyle. *Journal of health psychology*, *10*(1), 123-136. https://doi.org/10.1177/1359105305048559

Holmes, B. A., & Roberts, C. L. (2011). Diet quality and the influence of social and physical factors on food consumption and nutrient intake in materially deprived older people. *European Journal of Clinical Nutrition*, *65*(4), 538-545. https://doi.org/10.1038/ejcn.2010.293

Host, A., Mcmahon, A. T., Walton, K., & Charlton, K. (2016). 'While we can, we will': Exploring food choice and dietary behaviour amongst independent older Australians. *Nutrition & Dietetics*, *73*(5), 463-473. https://doi.org/10.1111/1747-0080.12285

House, J. S., & Kahn, R. L. (1985). Measures and concepts of social support. In: S. Cohen & S. L. Syme (Eds.), *Social Support and Health*. Academic Press, 83–108.

Hughes, G., Bennett, K. M., & Hetherington, M. M. (2004). Old and alone: barriers to healthy eating in older men living on their own. *Appetite*, *43*(3), 269-276. https://doi.org/10.1016/j.appet.2004.06.002

Jacob, S. A., & Furgerson, S. P. (2012). Writing interview protocols and conducting interviews: Tips for students new to the field of qualitative research. *Qualitative Report*, *17*(42), 1-10.

Jastran, M. M., Bisogni, C. A., Sobal, J., Blake, C., & Devine, C. M. (2009). Eating routines. Embedded, value based, modifiable, and reflective. *Appetite, 52*(1), 127-136. 10.1016/j.appet.2008.09.003

Johnson, H., McBee, E., & Ling, C. (2014, December). Elderly in disasters: An integrated review. *Disaster Medicine and Public Health Preparedness, 8*(6), 580-581. https://doi.org/10.1017/S1049023X14001241

Johal, S. S. (2009). Psychosocial impacts of quarantine during disease outbreaks and interventions that may help to relieve strain. *The New Zealand Medical Journal, 122*(1296), 53-58. https://doi.org/10.31234/osf.io/4ar8z

Jones, A. D. (2017). Food insecurity and mental health status: A global analysis of 149 countries. *American journal of preventive medicine*, *53*(2), 264-273. https://doi.org/10.1016/j.amepre.2017.04.008

King, A. C., Orpin, P., Woodroffe, J., & Boyer, K. (2017). Eating and ageing in rural Australia: Applying temporal perspectives from phenomenology to uncover meanings in older adults' experiences. *Ageing & Society*, *37*(4), 753-776. https://doi.org/10.1017/s0144686x15001440

Kirkness, L. (2020, April 16). Covid-19 coronavirus: Bread makers among most sought after items during lockdown. *New Zealand Herald.* https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12325120

Koyanagi, A., Veronese, N., Stubbs, B., Vancampfort, D., Stickley, A., Oh, H., Shin, J. I., Jackson, S., Smith, L., & Lara, E. (2019). Food insecurity is associated with mild cognitive impairment among middle-aged and older adults in South Africa: findings from a nationally representative survey. *Nutrients*, *11*(4), 749. https://doi.org/10.3390/nu11040749

Kuoppamäki, S. M., Taipale, S., & Wilska, T. A. (2017). The use of mobile technology for online shopping and entertainment among older adults in Finland. *Telematics and Informatics*, *34*(4), 110-117. https://doi.org/10.1016/j.tele.2017.01.005

Larkin, M., Watts, S., & Clifton, E. (2006). Giving voice and making sense in interpretative phenomenological analysis. *Qualitative research in psychology*, *3*(2), 102-120. https://doi.org/10.1191/1478088706qp062oa

Laverty, S. M. (2003). Hermeneutic phenomenology and phenomenology: A comparison of historical and methodological considerations. *International journal of qualitative methods*, *2*(3), 21-35. https://doi.org/10.1177/160940690300200303

Lee, J. S., & Frongillo Jr, E. A. (2001). Factors associated with food insecurity among US elderly persons: importance of functional impairments. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *56*(2), S94-S99. https://doi.org/10.1093/geronb/56.2.s94

Lian, J. W., & Yen, D. C. (2014). Online shopping drivers and barriers for older adults: Age and gender differences. *Computers in Human Behavior*, *37*, 133-143. https://doi.org/10.1016/j.chb.2014.04.028

Lim, M., & Badcock, J. (2020, March 18). Coronavirus: How to battle loneliness and stay connected when you're in lockdown. *Stuff.* https://www.stuff.co.nz/national/health/coronavirus/120365719/coronavirus-how-to-battle-loneliness-and-stay-connected-when-youre-in-lockdown

Locatis, C., Williamson, D., Gould-Kabler, C., Zone-Smith, L., Detzler, I., Roberson, J., Maisiak, R., & Ackerman, M. (2010). Comparing in-person, video, and telephonic medical

interpretation. *Journal of general internal medicine*, *25*(4), 345-350. https://doi.org/10.1007/s11606-009-1236-x

Locher, J. L., Ritchie, C. S., Robinson, C. O., Roth, D. L., Smith West, D., & Burgio, K. L. (2008). A multidimensional approach to understanding under-eating in homebound older adults: the importance of social factors. *The Gerontologist*, *48*(2), 223-234. https://doi.org/10.1093/geront/48.2.223

Locher, J. L., Bronstein, J., Robinson, C. O., Williams, C., & Ritchie, C. S. (2006). Ethical issues involving research conducted with homebound older adults. *The Gerontologist*, *46*(2), 160-164. https://doi.org/10.1093/geront/46.2.160

Locher, J. L., Ritchie, C. S., Roth, D. L., Baker, P. S., Bodner, E. V., & Allman, R. M. (2005a). Social isolation, support, and capital and nutritional risk in an older sample: ethnic and gender differences. *Social Science & Medicine*, *60*(4), 747-761. https://doi.org/10.1016/j.socscimed.2004.06.023

Locher, J. L., Robinson, C. O., Roth, D. L., Ritchie, C. S., & Burgio, K. L. (2005b). The effect of the presence of others on caloric intake in homebound older adults. *The Journals of Gerontology series A: Biological sciences and Medical sciences*, *60*(11), 1475-1478. https://doi.org/10.1093/gerona/60.11.1475

Loopstra, R. (2020). *Vulnerability to food insecurity since the COVID-19 lockdown*. Preliminary report. https://foodfoundation.org.uk/wp-content/uploads/2020/04/Report_COVID19FoodInsecurity-final.pdf

Losada-Baltar, A., Jiménez-Gonzalo, L., Gallego-Alberto, L., Pedroso-Chaparro, M. D. S., Fernandes-Pires, J., & Márquez-González, M. (2020). "We're staying at home". Association of self-perceptions of aging, personal and family resources and loneliness with

psychological distress during the lock-down period of COVID-19. *The Journals of Gerontology: Series B, 76*(2), e10-e16. https://doi.org/10.1093/geronb/gbaa048

Losantos, M., Montoya, T., Exeni, S., Santa Cruz, M., & Loots, G. (2016). Applying social constructionist epistemology to research in psychology. *International Journal of Collaborative Practice, 6*(1), 29-42.

Lowrey, W., Evans, W., Gower, K. K., Robinson, J. A., Ginter, P. M., McCormick, L. C., & Abdolrasulnia, M. (2007). Effective media communication of disasters: Pressing problems and recommendations. *BMC Public Health, 7*(1), 97. https://doi.org/10.1186/1471-2458-7-97

Ludwig, F. M. (1997). How routine facilitates wellbeing in older women. *Occupational Therapy International, 4*(3), 215-230. https://doi.org/10.1002/oti.57

Lundkvist, P., Fjellström, C., Sidenvall, B., Lumbers, M., & Raats, M. (2010). Management of healthy eating in everyday life among senior Europeans. *Appetite, 55*(3), 616-622. https://doi.org/10.1016/j.appet.2010.09.015

Marston, H. R., Genoe, R., Freeman, S., Kulczycki, C., & Musselwhite, C. (2019). Older adults' perceptions of ICT: Main findings from the Technology in Later Life (TILL) study. In *Healthcare* (Vol. 7, No. 3, p. 86). Multidisciplinary Digital Publishing Institute.

Martin, T. (2020a, April). April 9 2020 COVID-19 special edition. *SuperSeniors.* http://superseniors.msd.govt.nz/webadmin/html/email/superseniors-covid-9-april.html

Martin, T. (2020b, April). April 24 2020 COVID-19 special edition. *SuperSeniors.* http://superseniors.msd.govt.nz/webadmin/html/email/superseniors-covid-24-april.html

Martin, T. (2020c, March). March 2020 COVID-19 special edition. *SuperSeniors.* http://superseniors.msd.govt.nz/webadmin/html/email/superseniors-covid.html

Martin, T. (2020d, May). May 2020 COVID-19 special edition. *SuperSeniors.* http://superseniors.msd.govt.nz/webadmin/html/email/superseniors-covid-1-may.html

McNaughton, S. A., Crawford, D., Ball, K., & Salmon, J. (2012). Understanding determinants of nutrition, physical activity and quality of life among older adults: the Wellbeing, Eating and Exercise for a Long Life (WELL) study. *Health and quality of life outcomes*, *10*(1), 109. https://doi.org/10.1186/1477-7525-10-109

Mehta, A. M., Bruns, A., & Newton, J. (2017). Trust, but verify: Social media models for disaster management. *Disasters*, *41*(3), 549-565. https://doi.org/10.1111/disa.12218

Ministry of Health. (2020a). *COVID-19: Advice for older people and their family and whānau.* https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-information-specific-audiences/covid-19-advice-older-people-and-their-family-and-whanau

Ministry of Health. (2020b). *New Zealand COVID-19 alert levels.* https://covid19.govt.nz/assets/resources/tables/COVID-19-alert-levels-summary.pdf

Ministry of Social Development (2001). *Towards a society for all ages.* https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/planning-strategy/positive-ageing/towards-a-society.html

Moir, J. (2020, March 30). Coronavirus: PM backs families battling to keep seniors in their bubble. *Radio New Zealand.* https://www.rnz.co.nz/news/political/412885/coronavirus-pm-backs-families-battling-to-keep-seniors-in-their-bubble

Morrow-Howell, N., Galucia, N., & Swinford, E. (2020). Recovering from the COVID-19 pandemic: A focus on older adults. *Journal of Aging & Social Policy*, *32*(4-5), 526-535. https://doi.org/10.1080/08959420.2020.1759758

Moskowitz, J. P. & Piff, P. K. (2021). Cooperation. In R. Biswas-Diener & E. Diener (Eds), *Noba Textbook Series: Psychology.* DEF publishers. http://noba.to/d7y9esw4

Myers, C. A. (2020). Food Insecurity and Psychological Distress: A Review of the Recent Literature. *Current Nutrition Reports*, *9*, 107-118.

New COVID-19 Variants. (2020, December 30b). Centers for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/transmission/variant.html

New Zealand Government (2020). *New Zealand COVID-19 alert levels summary.*

Niles, M. T., Bertmann, F., Belarmino, E. H., Wentworth, T., Biehl, E., & Neff, R. A. (2020). The Early Food Insecurity Impacts of COVID-19. *Nutrients*, *12*(7), 2096. https://doi.org/10.3390/nu12072096

Noy, C. (2008). Sampling knowledge: The hermeneutics of snowball sampling in qualitative research. *International Journal of Social Research Methodology*, *11*(4), 327-344. https://doi.org/10.1080/13645570701401305

Orbell, S., & Verplanken, B. (2010). The automatic component of habit in health behavior: Habit as cue-contingent automaticity. *Health Psychology*, *29*(4), 374. https://doi.org/10.1037/a0019596

Parker, G., Lie, D., Siskind, D. J., Martin-Khan, M., Raphael, B., Crompton, D., & Kisely, S. (2016). Mental health implications for older adults after natural disasters–a systematic review and meta-analysis. *International Psychogeriatrics*, *28*(1), 11-20. https://doi.org/10.1017/s1041610215001210

Payette, H., & Shatenstein, B. (2005). Determinants of healthy eating in community-dwelling elderly people. *Canadian Journal of Public Health/Revue Canadienne de Sante'e Publique*, S27-S31.

Pham, L. T. M. (2018). A review of advantages and disadvantages of three paradigms: Positivism, interpretivism and critical inquiry. *University of Adelaide*.

Pietkiewicz, I., & Smith, J. A. (2014). A practical guide to using interpretative phenomenological analysis in qualitative research psychology. *Psychological Journal*, *20*(1), 7-14.

Pond, R., Stephens, C., & Alpass, F. (2010). Virtuously watching one's health: Older adults' regulation of self in the pursuit of health. *Journal of Health Psychology*, *15*(5), 734-743. https://doi.org/10.1177/1359105310368068

Portela-Parra, E. T., & Leung, C. W. (2019). Food insecurity is associated with lower cognitive functioning in a national sample of older adults. *The Journal of Nutrition*, *149*(10), 1812-1817. https://doi.org/10.1093/jn/nxz120

Power, M., Doherty, B., Pybus, K., & Pickett, K. (2020). How COVID-19 has exposed inequalities in the UK food system: The case of UK food and poverty. *Emerald Open Research*, *2*(11), 11. https://doi.org/10.35241/emeraldopenres.13539.2

Rajeev, M. M. (2016). Post disaster issues and challenges of elderly Populations in India: Experiences from natural disasters. *Soc Sci*, *2*, 3-4.

Roberto, K. A., Henderson, T. L., Kamo, Y., & McCann, B. R. (2010). Challenges to older women's sense of self in the aftermath of Hurricane Katrina. *Health Care for Women International*, *31*(11), 981-996. https://doi.org/10.1080/07399332.2010.500754

Robson, S. (2020, May 3). More support needed for the elderly even outside lockdowns. *Radio New Zealand.* https://www.rnz.co.nz/news/national/415706/more-support-needed-for-the-elderly-even-outside-lockdowns

Rowe, J. W., & Kahn, R. L. (1998). *Successful aging*. Pantheon Books.

Rubinstein, R. L., & de Medeiros, K. (2015). "Successful aging," gerontological theory and neoliberalism: A qualitative critique. *The Gerontologist, 55*(1), 34-42. https://doi.org/10.1093/geront/gnu080

Russell, E. (2020, March 19). Coronavirus: How do we keep older Kiwis safe during Covid-19 pandemic? *New Zealand Herald.* https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12317655

Santini, Z. I., Jose, P. E., Cornwell, E. Y., Koyanagi, A., Nielsen, L., Hinrichsen, C., Meilstrup, C., Madsen, K. R., & Koushede, V. (2020). Social disconnectedness, perceived isolation, and symptoms of depression and anxiety among older Americans (NSHAP): a longitudinal mediation analysis. *The Lancet Public Health*, *5*(1), e62-e70. https://doi.org/10.1016/s2468-2667(19)30230-0

Shahid, Z., Kalayanamitra, R., McClafferty, B., Kepko, D., Ramgobin, D., Patel, R., Aggarwal, C. S., Vunnam, R., Sahu, N., Bhatt, D., Jones, K., Golamari, R., & Jain, R. (2020). COVID-19 And Older adults: What we know. *Journal of the American Geriatrics Society*.

Sherwin, S., & Winsby, M. (2011). A relational perspective on autonomy for older adults residing in nursing homes. *Health Expectations*, *14*(2), 182-190. https://doi.org/10.1111/j.1369-7625.2010.00638.x

Sims, T., Reed, A. E., & Carr, D. C. (2017). Information and communication technology use is related to higher well-being among the oldest-old. *The Journals of Gerontology: Series B*, *72*(5), 761-770. https://doi.org/10.1093/geronb/gbw130

Smith, J. A., & Shinebourne, P. (2012). *Interpretative phenomenological analysis*. American Psychological Association.

Souza, B. F. D. N. J., & Marín-León, L. (2013). Food insecurity among the elderly: Cross-sectional study with soup kitchen users. *Revista de Nutrição*, *26*(6), 679-691. https://doi.org/10.1590/s1415-52732013000600007

Springer, S. (2012). Neoliberalism as discourse: between Foucauldian political economy and Marxian poststructuralism. *Critical Discourse Studies*, *9*(2), 133-147. https://doi.org/10.1080/17405904.2012.656375

Starks, H., & Brown Trinidad, S. (2007). Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative Health Research*, *17*(10), 1372-1380. https://doi.org/10.1177/1049732307307031

Steinman, M. A., Perry, L., & Perissinotto, C. M. (2020). Meeting the care needs of older adults isolated at home during the COVID-19 pandemic. *JAMA Internal Medicine, 180*(6), 819. https://doi.org/10.1001/jamainternmed.2020.1661

Stephens, C. (2017). From success to capability for healthy ageing: Shifting the lens to include all older people. *Critical Public Health*, *27*(4), 490-498. https://doi.org/10.1080/09581596.2016.1192583

Stephens, C., Breheny, M., & Mansvelt, J. (2015). Volunteering as reciprocity: Beneficial and harmful effects of social policies to encourage contribution in older age. *Journal of Aging Studies*, *33*, 22-27. https://doi.org/10.1016/j.jaging.2015.02.003

Sydner, Y. M., Fjellström, C., Lumbers, M., Sidenvall, B., & Raats, M. (2007). Food habits and foodwork: The life course perspective of senior Europeans. *Food, Culture & Society*, *10*(3), 367-387. https://doi.org/10.2752/155280107X239845

Sylvie, A. K., Jiang, Q., & Cohen, N. (2013). Identification of environmental supports for healthy eating in older adults. *Journal of Nutrition in Gerontology and Geriatrics, 32*(2), 161-174. https://doi.org/10.1080/21551197.2013.779621

Szabo, A., Allen, J., Stephens, C., & Alpass, F. (2018). Longitudinal analysis of the relationship between purposes of internet use and well-being among older adults. *The Gerontologist, 59*(1), 58-68. https://doi.org/10.1093/geront/gny036

Tani, Y., Kondo, N., Takagi, D., Saito, M., Hikichi, H., Ojima, T., & Kondo, K. (2015a). Combined effects of eating alone and living alone on unhealthy dietary behaviors, obesity and underweight in older Japanese adults: Results of the JAGES. *Appetite, 95*, 1-8. https://doi.org/10.1016/j.appet.2015.06.005

Tani, Y., Sasaki, Y., Haseda, M., Kondo, K., & Kondo, N. (2015b). Eating alone and depression in older men and women by cohabitation status: the JAGES longitudinal survey. *Age and ageing, 44*(6), 1019-1026. https://doi.org/10.1093/ageing/afv145

ten Bruggencate, T., Luijkx, K. G., & Sturm, J. (2018). Social needs of older people: A systematic literature review. *Ageing & Society, 38*(9), 1745-1770. https://doi.org/10.1017/s0144686x17000150

Townsend, L., Sathiaseelan, A., Fairhurst, G., & Wallace, C. (2013). Enhanced broadband access as a solution to the social and economic problems of the rural digital divide. *Local Economy, 28*(6), 580-595. https://doi.org/10.1177/0269094213496974

Tuffour, I. (2017). A critical overview of interpretative phenomenological analysis: A contemporary qualitative research approach. *Journal of Healthcare Communications, 2*(4), 52. https://doi.org/10.4172/2472-1654.100093

Tuohy, R., & Stephens, C. (2012). Older adults' narratives about a flood disaster: Resilience, coherence, and personal identity. *Journal of Aging Studies, 26*(1), 26-34. https://doi.org/10.1016/j.jaging.2011.06.002

Tuohy, R., Stephens, C., & Johnston, D. (2014). Qualitative research can improve understandings about disaster preparedness for independent older adults in the community. *Disaster Prevention and Management, 23*(3), 296-308. https://doi.org/10.1108/dpm-01-2013-0006

Turrini, A., D'Addezio, L., Maccati, F., Davy, B. M., Arber, S., Davidson, K., Grunert, K., Schumacher, B., Pfau, C., Kozłowska, K., Szczecińska, A., de Morai, C. M., Afonso, C., Bofill, S., Lacasta, Y., Nydahl, M., Ekblad, J., Raats, M. M., & Lumbers, M. (2010). The informal networks in food procurement by older people—a cross European comparison. *Ageing International, 35*(4), 253-275. https://doi.org/10.1007/s12126-010-9060-5

Van Deursen, A. J., & Helsper, E. J. (2015). A nuanced understanding of Internet use and non-use among the elderly. *European Journal of Communication, 30*(2), 171-187. https://doi.org/10.1177/0267323115578059

Vesnaver, E., & Keller, H. H. (2011). Social influences and eating behavior in later life: A review. *Journal of Nutrition in Gerontology and Geriatrics, 30*(1), 2-23. https://doi.org/10.1080/01639366.2011.545038

Walls, J. (2020, March 29). Covid 19 coronavirus: PM Jacinda Ardern urges older Kiwis to stay home and stay safe. *New Zealand Herald.* https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12320711

Wang, K., & Bishop, N. J. (2019). Social support and monetary resources as protective factors against food insecurity among older Americans: Findings from a health and retirement study. *Food Security*, *11*(4), 929-939. https://doi.org/10.1007/s12571-019-00945-8

White J. V. (1991). Risk factors for poor nutritional status in older Americans. *Am Fam Physician*, *44*(6), 2087–2097. https://doi.org/10.3945/an.115.011254

Whyte, A. (2020, March 17). 'Be strong, be kind, we will be OK' – PM's message in face of coronavirus impact. *1 News.* https://www.tvnz.co.nz/one-news/new-zealand/strong-kind-we-ok-pms-message-in-face-coronavirus-impact

World Health Organization. (2002). *Active ageing: A policy framework*. Geneva: World Health Organization.

World Health Organization. (2020). *Mental health and psychosocial considerations during the COVID-19 outbreak, 18 March 2020*. World Health Organization.

Wright, L., Vance, L., Sudduth, C., & Epps, J. B. (2015). The impact of a home-delivered meal program on nutritional risk, dietary intake, food security, loneliness, and social well-being. *Journal of Nutrition in Gerontology and Geriatrics*, *34*(2), 218-227. https://doi.org/10.1080/21551197.2015.1022681

Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education*, *48*(2), 311-325. https://doi.org/10.1111/ejed.12014

Appendix A: Participant Recruitment Poster

MASSEY UNIVERSITY

PARTICIPANTS NEEDED

For study investigating older adults' experiences of eating during a pandemic.

RESEARCHERS FROM MASSEY UNIVERSITY ARE INVESTIGATING HOW FOODS, ROUTINES, AND SOCIALISATION HAVE BEEN IMPACTED BY THE PANDEMIC.

What will be required?	What will I receive?	Contact
A one-hour interview to discuss your experiences during the 2020 COVID-19 pandemic: • **Your experiences of acquiring food** • **How your routines have changed** • **How the social aspects of eating have been impacted**	**You will be offered a $30 grocery voucher to acknowledge your time and contribution.**	**Researcher:** **Ashley Richmond** [redacted] [redacted]**@massey.ac.nz**

Appendix B: Information Sheet

Older Adults' Experiences of Eating During a Pandemic: How Foods, Routines, and Socialisation Have Been Impacted.

INFORMATION SHEET

My name is Ashley Richmond and as part of my Master of Science (Psychology), I am researching the experiences of adults over the age of 70 living in New Zealand during the 2020 COVID-19 pandemic. I am especially interested in how acquiring food, eating routines, and social interactions around food have been impacted.

When New Zealanders over the age of 70 were instructed to stay home and not to go to grocery stores during the COVID-19 pandemic, this changed food shopping habits for many: some relied on others to conduct their shopping and deliver their groceries, others risked their health by still going to the grocery store, and some have had to get to grips with online shopping. I am interested in all the resulting change in routines, particularly around food. If you are over 70 years old and have been residing in New Zealand since February 28th, 2020 and have experienced changes in eating habits or routines, grocery shopping, or the people you normally eat with, you are invited to take part in this study. Whether you decide to take part or not is your choice. If you do not want to take part, you do not have to give a reason.

This Information Sheet will help you decide if you want to participate in this study. You do not have to decide immediately whether or not you would like to participate. Please take the time to read and understand all the pages of the Information Sheet before providing consent.

Who can participate in this research?

You can participate in this research if you:

- Are over 70 years of age, and,
- Live in an independent dwelling (own house or rented), and,
- Stopped going to the supermarket during the pandemic or changed shopping routines.

You cannot participate in this research if you:

- Lived with extended family or friends during the pandemic, or,
- Live in a rest home or retirement village, or,
- Live with any form of dementia such as Alzheimer's, or,
- Live with a chronic health condition that requires a specific diet for medical reasons such as diabetes.

What will be required of participants?
You will be invited to take part in one interview. You may partake in a phone or online interview via Skype, Zoom, and Facetime or if you are comfortable, we can conduct the interview face to face. This can be conducted at a time and place most convenient for you. We will discuss your experiences during the 2020 COVID-19 pandemic, especially in regard to your experiences of acquiring food, and how your routines and the social aspects of eating have been impacted.

These discussions will be audio recorded and transcribed by me. I will send you a copy of this to read over to ensure I have accurately captured what you wanted to say. You will be able to make changes to this and can have a second interview if you feel as though you have more you would like to say. Once you are happy with the transcript, a Transcript Release Authority Form will be provided for you to sign if you wish, allowing me to use the information from the transcription. If you have not responded within 3 weeks, we will assume you consent to the release of the transcript.

In recognition of the reciprocal research relationship, participants will be offered a $30 grocery voucher to acknowledge their time and contribution. While it is expected that participants will benefit from the opportunity to share their experience of the COVID-19 pandemic, there is the possibility that thinking and speaking about how the pandemic has affected you may be upsetting. Participants are in control of how much or what they say, and interviews can be paused or ended at any time.

Management of information
My supervisor and I will be the only people who know who is participating in this research. The content of the approved transcript is considered the 'data' of this study, and it will be analysed by the researcher to interpret themes and ideas present. All identifying information will be removed from the transcript to ensure that it is not possible for you to be identified. The qualitative data will only be accessible to the researcher and supervisor initially, however, there is the possibility that your de-identified responses may be used in research publications.

Any personally identifying information that you provide will be stored on a password-protected computer and hard-drive until the research is complete in November 2020, and then it will be deleted. However, a deidentified form of your transcript will be stored for 5 years in the Massey H drive, as Massey University's network is the most secure place due to it being secure and backed up.

A summary of the project's findings will be available once the project is complete in November 2020. I will send this to you if you request this.

Participant Rights

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- *decline to answer any particular question;*
- *withdraw from the study at any time during the data collection and up to 3 weeks following the interview;*
- *ask any questions about the study at any time during participation;*
- *provide information on the understanding that your name will not be used;*
- *be given access to a summary of the project findings when it is concluded;*
- *ask for the recorder to be turned off at any time during the interview*.

Researcher:	***Supervisor:***
Ashley Richmond [redacted] [redacted]@massey.ac.nz	Dr Kathryn McGuigan School of Psychology, Massey University Private Bag 102-904 North Shore Auckland 0745 Tel +64 9 414 0800 ext 43115 K.Mcguigan@massey.ac.nz

You are invited to contact either the researcher or supervisor if you have any questions about the study.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application NOR 20/23. If you have any concerns about the conduct of this research, please contact Dr Fiona Te Momo, Chair, Massey University Human Ethics Committee: Northern, telephone 09 414 0800 x 43347, email humanethicsnorth@massey.ac.nz

Appendix C: Consent Form

Older Adults' Experiences of Eating During a Pandemic: How Foods, Routines, and Socialisation Have Been Impacted.

PARTICIPANT CONSENT FORM - INDIVIDUAL

I have read, or have had read to me in my first language, and understand the Information Sheet. I have had the details of the study explained to me, any questions I had have been answered to my satisfaction, and I understand that I may ask further questions at any time. I have been given sufficient time to consider whether to participate in this study and I understand participation is voluntary and that I may withdraw from the study at any time.

1. I agree/do not agree to the interview being sound recorded.
2. I wish/do not wish to have my recordings returned to me.
3. I agree to participate in this study under the conditions set out in the Information Sheet.

Declaration by Participant:

I _____ hereby consent to take part in this study.

[Please print full name]

Signature: _____ Date:_____

Appendix D: Transcript Release Form

Older Adults' Experiences of Eating During a Pandemic: How Foods, Routines, and Socialisation Have Been Impacted.

AUTHORITY FOR THE RELEASE OF TRANSCRIPTS

I confirm that I have had the opportunity to read and amend the transcript of the interview(s) conducted with me.

I agree that the edited transcript and extracts from this may be used in reports and publications arising from the research.

Signature: ..... **Date:** .....

Full Name - printed .....

If this form is not returned within 3 weeks from the date of your interview, it will be assumed that you consent to the release of your transcript.

Appendix E: Interview Schedule

INTERVIEW SCHEDULE

Older Adults' Experiences of Eating During a Pandemic: How Foods, Routines, and Socialisation Have Been Impacted.

PRIOR TO INTERVIEW

Inclusion criteria:

- Are over 70 years of age, and,
- Live in an independent dwelling (own house or rented), and,
- Stopped going to the supermarket during the pandemic or changed shopping routines.

Exclusion criteria:

- Lived with extended family or friends during the pandemic, or,
- Live in a rest home or retirement village, or,
- Live with any form of dementia such as Alzheimer's, or,
- Live with a chronic health condition that requires a specific diet for medical reasons such as diabetes.

Participant Rights

If you decide to participate, you have the right to:

- *decline to answer any particular question;*
- *withdraw from the study up to 3 weeks following the interview;*
- *ask any questions about the study at any time during participation;*
- *provide information on the understanding that your name will not be used;*
- *be given access to a summary of the project findings when it is concluded;*
- *ask for the recorder to be turned off at any time during the interview.*

I agree to the interview being sound recorded.

BROAD NARRATIVE

Can you tell me about your experience of the 2020 COVID-19 Pandemic?

- How does your current way of life compare to life before the pandemic?
- What have been the biggest changes or adjustments?

CHANGE OF HABITS, ROUTINES OF EATING

How did your eating routines and habits change after you were instructed by the New Zealand government to stay at home?

- Did the places where you usually eat change?
- Did you normally eat out at cafes, restaurants, takeaways?
- Have the foods you normally eat changed?
- Are you eating the same amount as before the pandemic?
- Are you eating at the same time as previous?
- Do you feel as though you are eating as nutritiously as before the pandemic?

Have the social aspects of eating changed for you during this time?

- Did you normally eat out at cafes, restaurants, takeaways?
- Did you often meet people for meals, coffee, or have people over?
- What was it like having to eat by yourself all the time?

How have you been managing to stay healthy during this time?

- What does being healthy mean to you? Has this changed since the start of the pandemic?

FOOD ACQUISITION

How were you able to obtain food during the lockdown?

- Did you have family, friends, neighbours who could drop groceries off to you?
- Did you utilise any online shopping or grocery delivery?
- Were you previously aware of the supports to help with food delivery?
- How did you feel relying on others to choose and bring your groceries?
- Do you normally like to do the shopping yourself?
- Did you go out shopping during the time the government said to stay home?
- How did you feel being out in the community?

Have the foods you would normally choose changed?

- Were there instances where your first choice had run out?

- Did you decide to start eating different foods to what you normally eat?
- Did you ever have difficulty in obtaining food?

REDUCED SOCIALISATION

How have the social aspects of eating been impacted for you?

- Did you normally eat out at cafes, restaurants, takeaways?
- Did you often meet people for meals, coffee?
- Did you often go to family/friends' houses to eat?
- Did people come to your house to eat?
- Did you belong to any groups, churches where you would share food?
- Have you felt socially isolated?
- Did you utilise technology to keep in contact with friends or family?

IMPACT ON LIVELIHOOD

How has the pandemic and its consequences impacted on you and your life?

- Have you experienced feelings of loss of control/independence/autonomy?

CONCLUDING IMPRESSIONS

Was there any other aspect of your life that was impacted by the pandemic?

- What was the most challenging aspect of this experience?
- How have you been able to maintain some normalcy?
- How has it felt to be uncertain of access to food?
- What are you most looking forward to at the end of this?

END OF INTERVIEW

- These discussions will be transcribed by me. I will send you a copy of this to read over to ensure I have accurately captured what you wanted to say. You will be able to make changes to this and can have a second interview if you feel as though you have more you would like to say. Once you are happy with the transcript, a Transcript Release Authority Form will be posted for you to sign if you wish, allowing me to use the information from the transcription. If you have not responded within 3 weeks, we will assume you consent to the release of the transcript.

- I will mail you a grocery voucher – confirm address – which supermarket?

Appendix F: Ethics Letter

Date: 07 July 2020

Dear Ashley Richmond

Re: Ethics Notification - **NOR 20/23** - **Older Adults' Experiences of Eating During a Pandemic: How Foods, Routines, and Socialisation Have Been Impacted.**

Thank you for the above application that was considered by the Massey University Human Ethics Committee: **Human Ethics Northern Committee** at their meeting held on **Tuesday, 7 July, 2020**.

Approval is for three years. If this project has not been completed within three years from the date of this letter, reapproval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

Professor Craig Johnson
Chair, Human Ethics Chairs' Committee and Director (Research Ethics)

Research Ethics Office, Research and Enterprise
Massey University, Private Bag 11 222, Palmerston North, 4442, New Zealand **T** 06 350 5573; 06 350 5575 **F** 06 355 7973
E humanethics@massey.ac.nz **W** http://humanethics.massey.ac.nz