Community-Dwelling Older People and Falls Reporting
A Qualitative Descriptive Study

Amber Salanoa Haar BHSc (OT)

A thesis submitted for the degree of Master of Health Science (Rehabilitation)
at the University of Otago, Dunedin
New Zealand

July 2017
Abstract

One third of people aged over 65 years fall each year. Falls, and their consequences, are major concerns for individuals, health care providers and funders in terms of injury, reduced independence, and financial costs. Some risk factors for falls are modifiable if health professionals know people are falling. Not reporting falls is a well-known phenomenon, however the extent of the problem, and reasons for non-reporting, are not well understood. In the context of developing a falls-prevention service for community-dwelling older people the aim of this research was to explore why older people may not report falls to health professionals.

Qualitative description was used to explore what influenced older people, living alone at home, to report a fall. A purposive sample of ten community-dwelling older people were recruited through community nursing services and interviews of these participants provided the research material. Thematic analysis was used to identify factors influencing reporting of falls. Three themes were derived from this analysis: ‘Consequences determine what participants classify as a fall’, ‘Minimisation - Don’t mention the ‘F’ words’, and ‘Sharing and acquiring knowledge of a fall’. These themes were understood within the context of ‘Occupational independence’, which reflected the participants desire to remain independent with their daily occupations, and remain at home.

Classifying a ‘fall event’ as a fall was dependent on consequences of the fall. Participants’ perceptions of what constituted a fall were different from international research-based definitions. A number of fall events that were described met international definitions of a fall, but were not considered as falls by the participants. Participants strongly valued remaining independent at home, and fall events not affecting a person's ability to manage were viewed as inconsequential.

Participants reported talking about falls with their contemporaries; however, falls were mentioned in passing, or as a joke, in order to minimise fuss. General Practitioners (GPs) were rarely told about falls and participants saw no reason to report a fall if they continued to manage at home. GPs were not viewed as having a
role in falls prevention, but viewed as only having a role in dealing with consequences of falls, such as broken bones or ongoing pain.

These results suggest older people may not see the need to report a fall if it has no consequences for them. Within clinical settings a shared understanding of falls should not be assumed. When health professionals ask about falls, older people may be helped to recall and report events if reminded this includes occasions where they have fallen without injury.

A fall is a complex concept that is still not accurately described in a way that is congruent with, and encompasses, the understanding of researchers, clinicians, and older people. A better definition of the concept is an area for further research. Any proposed definition of falls needs to incorporate the older persons’ perspective in order for falls reporting be valid, and better represent older peoples’ experience in both clinical practice and research.
Acknowledgements

Firstly, to my primary supervisor Associate Professor Jean Hay-Smith, thank you so much for your guidance and for sharing your expertise on qualitative research. Your prompt and thorough feedback has been insightful and very much appreciated, and you have assisted me to look at things from a different perspective. You have masterfully managed to be both patient and critical, as well as encouraging and supportive on those days when writing was tough, while also challenging me to keep on track.

To Professor Mark Weatherall, thank you for sparking my interest in the topic of falls again. Having your supervision expertise on the topic of falls and older people has been invaluable. Your meticulous comments and suggestions were an enormous help.

I would like to express my gratitude to the community nurses who assisted with recruitment of participants.

Thanks to Rose and Craig, Fee and Mitch, and Estelle and Trevor for your support, and for providing a quiet space away from home to just “get on and write”.

My appreciation goes to Randa, who completed a final proof reading review of this thesis, prior to printing.

To my friends, family and colleagues that have provided support and believed in me throughout this journey, thank you so much, in particular thanks to Cheryl, Rhys, Cody, Pam, Sharon, and Lucy.

Finally, I am grateful to all the participants who took the time to share their thoughts and experiences of falls and falling with me. Without your willingness to share, this thesis would not have been possible – Thank you / Fa’afetai tele lava.
Table of Contents

Abstract ...................................................................................................................... iii
Acknowledgements .................................................................................................... v
Table of Contents ...................................................................................................... vi
List of tables .............................................................................................................. ix
List of figures ............................................................................................................. x
GLOSSARY .............................................................................................................. xi
1 Chapter One: Introduction ................................................................................... 1
  1.1 Overview ...................................................................................................... 1
  1.2 Background ............................................................................................... 1
  1.3 My professional background .................................................................. 2
  1.4 Research purpose and thesis structure ................................................... 3
2 Chapter Two Literature Review .......................................................................... 4
  2.1 Overview .................................................................................................... 4
  2.2 Ageing in New Zealand, and the West Coast region ................................... 4
  2.3 The West Coast region of New Zealand .................................................. 5
  2.4 Falls are a common source of costly morbidity and mortality in older people6
    2.4.1 Falls in older people in New Zealand .............................................. 9
    2.4.2 Falls in the West Coast Region .................................................... 10
  2.5 Defining a fall .......................................................................................... 6
  2.6 Health care burden associated with falls ............................................... 11
    2.6.1 Treatment Costs .......................................................................... 11
    2.6.2 Psychological / Functional costs ................................................. 12
  2.7 Older persons’ perceptions of falls / falls risks ........................................ 13
  2.8 Falls prevention ....................................................................................... 16
    2.8.1 Uptake of falls prevention interventions ...................................... 17
    2.8.2 Older persons’ perceptions of falls prevention interventions ....... 18
  2.9 Reporting of falls ..................................................................................... 19
  2.10 Summary ................................................................................................. 24
3 Chapter Three: Methodology and methods ....................................................... 25
  3.1 Overview .................................................................................................... 25
  3.2 Choosing qualitative description ................................................................ 25
    3.2.1 Context for the study .................................................................... 25
    3.2.2 What else informed the choice of qualitative description .......... 26
3.3 Qualitative description................................................................................27
3.4 Methods .....................................................................................................28
  3.4.1 Participant Recruitment.......................................................................28
  3.4.2 Interviews ..........................................................................................30
  3.4.3 Data analysis.......................................................................................32
3.5 Rigour ........................................................................................................34
  3.5.1 Authenticity and Credibility ...............................................................34
  3.5.2 Criticality and Integrity ......................................................................36
3.6 Ethical considerations and risk management .............................................37
  3.6.1 Recruitment of participants .............................................................37
  3.6.2 Clinician-Researcher dual role ........................................................37
  3.6.3 Safety considerations .......................................................................38
  3.6.4 Other ethical considerations ...........................................................39
3.7 Summary ....................................................................................................39
4 Chapter Four: Results....................................................................................40
  4.1 Introduction............................................................................................40
  4.2 Participant description ...........................................................................40
  4.3 Occupational Independence ................................................................42
    4.3.1 Independence and living alone ......................................................43
    4.3.2 Occupational Interdependence .....................................................43
    4.3.3 Adjusting to changes over time .....................................................45
    4.3.4 Social Connections .......................................................................46
    4.3.5 Retaining occupational independence in the context of falls and falling 46
    4.3.6 Summary..........................................................................................49
  4.4 Theme 1: Consequences determine what participants classify as a fall ....49
    4.4.1 Distinguishing between trips and falls ..........................................50
    4.4.2 Injury — severity and seriousness ................................................53
    4.4.3 Theme Summary ...........................................................................56
  4.5 Theme 2: Minimisation—don’t mention the ‘F’ Words .........................58
    4.5.1 Wait …I also had this fall...............................................................58
    4.5.2 Nothing to fuss about ....................................................................61
    4.5.3 Just a silly fall — bit of laugh really ..............................................63
    4.5.4 Explaining falls, and explaining them away ...................................64
    4.5.5 No reason to see the doctor — there’s nothing wrong .................65
List of tables

Table 4.1. Participant demographics .................................................................................... 41
List of figures

Figure 4-1. Categorising trips and falls, and how consequences may influence what is labelled as a trip or fall. .............................................................. 57
Figure 4-2. Who did the participants choose to tell about a fall......................... 71
Figure 4-3. Who finds out about an injurious fall that is passively reported .......... 74
GLOSSARY

**Accident Compensation Commission (ACC).** The Accident Compensation Corporation provides comprehensive, no fault personal injury cover for all New Zealand residents and visitors to New Zealand.

**Active reporting:** The older person makes a conscious decision to tell someone about their fall.

**Community-dweller:** “Older people living independently in their own homes or in a communal setting without health care facilities” (Todd & Skelton, 2004, p. 28).

**Fall:** "An unexpected event in which somebody comes to rest on the ground, floor, or lower level" (Lamb et al., 2005, p. 1619).

**Injurious fall:** A fall with symptomatic features and where medical attention was sought subsequently for an injury. This was identified as one of the key three definitions of injurious falls in a recent meta-analysis (Schwenk et al., 2012).

**Kellogg Report:** Produced by the Kellogg International Work Group in 1987 on the prevention falls in the Elderly. A collaboration of physicians, researchers, policy makers for the purpose of sharing ideas to improve the health of elderly populations worldwide.

**National Institute for Health and Care Excellence (NICE):** Provides national guidance and advice to improve healthcare in the United Kingdom, using the best available evidence to develop recommendations that guide decisions in health, public health and social care. (www.nice.org.uk/)

**Non-injurious fall:** A fall resulting in a minor injury without seeking medical treatment (Schwenk et al., 2012). This thesis also includes fall without injury as non-injurious falls.
Older Person: A person aged 65 years or older; this is the age at which someone becomes eligible for superannuation, and other government services for older people in New Zealand (Ministry of Social Development, 2013).

Passive Reporting: The knowledge of the fall is gained by a means other than active reporting e.g. witnessed fall, hospital admission.

Prevention of Fall Network Europe (ProFaNE) and Outcomes Consensus Group Prevention: (2005) is a collaborative project to reduce the burden of fall injury in older people through excellence in research and promotion of best practice (www.profane.eu.org).
Chapter One: Introduction

1.1 Overview

This chapter introduces the thesis research, which is a descriptive qualitative study of older persons’ experiences of falls, talking about others with falls, prevention of falls, and falls reporting. The chapter includes brief background information around the impact of falls, prevention of falls, and falls reporting. My professional background is summarised along with my clinical interest that shaped the research question. The research purpose and thesis structure are also outlined.

1.2 Background

This research explores what might influence older people, who live alone, to report a fall to a health professional. Approximately a third of people living in the community, over the age of 65, fall each year, and around 10% of falls resulting in serious injury (N. Peel, 2011). The incidence and prevalence of falls in older people, potential consequences e.g. fractures and head injuries; and the healthcare and other costs and consequences of falls are well documented in New Zealand-based research (Campbell, Borrie, et al., 1990; Robertson, Devlin, Gardner, & Campbell, 2001). There is evidence that the risk of falls can be reduced by intervention (Gillespie et al., 2012; Michael et al., 2010). Interventions that identify and manage risk factors for falls has some supportive evidence from randomised controlled trials, as does exercise as a single intervention (Gillespie et al., 2012). However older people do not always report falls to health professionals (Painter, Elliott, & Hudson, 2009; Shumway-Cook et al., 2009), and this may be needed in order for interventions that reduce the risk of falling to be offered.

There is little research exploring why falls are not reported (Dollard, Braunack-Mayer, Horton, & Vanlint, 2014; Lee et al., 2013). Understanding more about falls reporting by older people is the central aim of this thesis research. To date, the most commonly reported influence leading to non-reporting is the older person’s wish to remain independent, and fear they may lose this if falls are reported (Bunn, Dickinson, Barnett-Page, McInnes, & Horton, 2008; Hanson, Salmoni, & Doyle, 2009; Yardley, Donovan-Hall, Francis, & Todd, 2006). However, based on my clinical experience, it seems likely
the reasons for non-reporting are more complex than that. A greater knowledge around why older people do not report falls is needed to understand barriers to falls reporting. More understanding may enable service design that connects older people with falls prevention interventions that may help maintain their independence.

1.3 My professional background

I came to this study as an occupational therapist (OT) who has worked in a variety of clinical settings both in New Zealand (NZ) and the United Kingdom (UK) over the last 20 years. When working within Emergency Departments and intermediate care settings within the UK I was struck by the number of older people who noted that they had fallen prior to the fall which brought them into hospital, but had not told anyone about the previous fall(s). Working within a community falls-clinic I observed that falls prevention interventions could help reduce falls risks and restore confidence with mobility and began to think about how people could be reached if they did not tell anyone about their falls. On returning to NZ and working as a sole OT in a rural setting I saw similar patterns. Older people came into the Emergency Department as a result of falls, had fallen previously, and not told anyone about their fall.

An important part of occupational therapy is an understanding of the unique environmental context that each person operates within (Townsend & Polatajko, 2007), and I started to explore the broader contextual element when talking about falls with older people. What I heard from older people suggested that reasons for non-reporting were complex, and some reasons appeared directly related to valuing independence, and the rural and relatively remote environments in which my clients lived.

A falls prevention service was due to be set up in the area and I saw this as an opportune time to undertake research in the area of falls reporting. I wanted to understand more about how older people thought about falls, how that might influence falls reporting, and inform the service development and falls reporting from older people in the geographic area where I worked.
1.4 Research purpose and thesis structure

In brief, older people may not report falls and health professionals (who are a key access point for falls prevention interventions) may not know that an older person is falling, until they present to acute medical services with an injury. However, older people may be able to retain their independence longer if their risk of falling is decreased through falls prevention intervention. Influences on falls reporting are likely to be complex, and may also be context dependent. The purpose of this research was to develop an understanding of falls reporting by older people, through considering their environmental context, exploring who they talk to about their falls, and their experiences and perceptions of what may happen if they report a fall to a health professional.

In Chapter Two I provide a summary of data about falls in NZ and critically review the literature around falls reporting. The knowledge gap addressed by the thesis research is identified.

Chapter Three describes the framing of the qualitative descriptive study as a pragmatic choice of approach to best address my research purpose. Recruitment processes, interview data collection, and thematic analysis processes are documented along with ethical considerations, and a description of how rigour was demonstrated within the research design and implementation. Chapter Four follows, and presents the findings from ten older people who were interviewed.

Chapter Five completes the thesis with discussion of the key findings, and what the study adds to what was known previously about falls reporting. In particular, I draw attention to a lack of congruence in falls definitions and the participants' understanding of what constitutes a fall, and how the mismatch may impact falls reporting. Clinical implications of this study are discussed and areas for future research are identified.
Chapter Two Literature Review

2.1 Overview

Falls are an important clinical problem for health systems and for older people; falls are more common in older age and falls are associated with increased morbidity and mortality in older persons. Further, the ageing of the NZ and global population means the incidence and prevalence of falls is likely to rise. The clinical importance of a common problem with significant consequences has led to a wide range of falls-related research. There has been some emphasis on epidemiological research to identify the prevalence and incidence of falls, including risk factors for falls, and experimental research investigating the efficacy of falls prevention programmes. As well, there has been qualitative research exploring adherence to falls prevention programs and the psychological consequences of falls, such as an older adults' fear of falling. Most areas of falls research, whether information is gathered prospectively or retrospectively, relies on self-report of falls (Mackenzie, Byles, & D'Este, 2006).

From the broad literature available, this chapter summarises: (a) ageing statistics including data specific to the region where the research took place, (b) falls definitions, (c) the epidemiology of falls, and (d) the costs of falls. My focus then shifts to a critical review of literature about older people’s perceptions of what falling means to them, falls reporting, and falls prevention programmes. The limited literature addressing reporting of falls is also critically examined. I identify, in the process of the literature review, a research question to be addressed by the thesis research.

2.2 Ageing in New Zealand, and the West Coast region

For the purposes of this thesis the term ‘older people’ or ‘older person’ refers to those aged 65 years and older. The term ‘older people’ is used in many NZ government documents (Ministry of Health, 2011, 2016; Ministry of Social Development, 2013) and is generally defined as those aged 65 years and older. The definition of ‘older people’ being 65 years and older is consistent with reporting of statistics for NZ and overseas. In NZ, the age of 65 is also currently consistent with the age of superannuation entitlement,
and the age at which many people are eligible for many additional health services, or at which health policies are targeted.

Like other Organisation for Economic Co-operation and Development (OECD) countries, NZ has both an ageing population and increased life expectancy. The population of people aged over 65 has doubled to 600,000 between 2002 and 2012; currently 14 percent of the NZ population is aged 65 years or older. It is projected that the proportion of older adults will increase to between 20 and 25 percent by 2060 (Statistics New Zealand, 2013). An increase in older people living alone in the community is also expected (Ministry of Social Development, 2013).

The research took place in one region of NZ, called the West Coast. Ageing statistics and projections are available by region. The West Coast has a higher proportion of people aged over 65 than the national average; sixteen percent of the West Coast population are aged over 65 in comparison with the national rate of 14.3% (Statistics New Zealand, 2017).

2.3 The West Coast region of New Zealand

The West Coast is a large geographic region in the South Island of NZ, spanning approximately 660 kilometres from top to bottom. The West Coast is geographically isolated, bordered by the Tasman Sea on one side and the Southern Alps on the other. During winter, the mountain passes face closure due to snow, which can leave the region isolated for a few days at a time. It is a sparsely populated area of the country, being the fifth largest geographic region but with the smallest population. The population based on the 2013 census was 32,148 (Statistics New Zealand, 2017) and the population density being 1.4 people per square kilometre (West Coast District Health Board, 2015).

The area has a strong history of mining for coal and gold; with farming, dairy, forestry, and fishing being the other main industries. The older population living on the West Coast have often worked in very labour intensive industries with limited need for formal qualifications as staying at school and gaining qualifications were not traditionally favoured approaches (Development West Coast, 2008). It is an area of social deprivation with lower average incomes compared to national averages, and a higher proportion of
the population receiving unemployment or invalid benefits, having little or no educational qualifications, and lacking access to a motor vehicle. Additionally, 3% of the population do not have access to any form of telecommunications (West Coast District Health Board, 2015).

Lower levels of education, limited access to resources, culture and age are factors that have been linked with lower health literacy. West Coasters also have a higher overall morbidity and mortality in comparison to other New Zealanders (West Coast District Health Board, 2015).

2.4 Defining a fall
Most people have a perception of what a fall means (Zecevic, Salmoni, Speechley, & Vandervoort, 2006). The English Collins Dictionary (2017) defines a fall as “1) to descend by the force of gravity from a higher place to a lower place 2) to drop suddenly from an erect position, 3) to collapse to the ground, esp. in pieces”. However, while the concept of a fall is well known individuals may have markedly different ideas as to what constitutes a fall.

Within falls research, having a clear definition provides guidance as to what is included and what is excluded in studies of falls, and also allows for comparisons between studies (Gibson, Andres, Isaacs, Radebaugh, & Wormpetersen, 1987; Hauer, Lamb, Jorstad, Todd, & Becker, 2006; Lamb et al., 2005; Skelton, Hauer, & Lamb, 2007). Variations in definitions are one source of apparent differences in data between studies; Wolf and colleagues (1996) reported on the effect of using two different fall definitions within their study; one rated 209 events as falls and the other definition meant that only 110 of the same fall events were classified as falls.

One of the earliest, and more complex definitions of falls in the literature is from The Kellogg Report in 1987—“A fall is an event which results in a person coming to rest inadvertently on the ground or other lower level and other than as a consequence of the following: Sustaining a violent blow, Loss of consciousness, Sudden onset of paralysis, as in a stroke, An epileptic seizure, (Gibson et al., 1987, p. 4). The Prevention of Fall Network Europe (ProFaNE) and Outcomes Consensus Group discussed the need for a
simpler fall definition and recommended that for research, a fall could be defined as: “an unexpected event in which the participants come to rest on the ground, floor, or other lower level” (Lamb et al., 2005). This is similar to the World Health Organization definition of a fall, which is “an event which results in a person coming to rest inadvertently on the ground or floor or other lower level” (WHO Media Centre, 2016).

Similar definitions of falls are also found within clinical practice. The National Clinical Guideline on Falls in the UK (National Institute for Health and Care Excellence, 2013), for health professionals and others that care for older people at risk of falling, used the definition “An event whereby an individual comes to rest on the ground or another lower level with or without loss of consciousness” (National Institute for Health and Care Excellence, 2013, p. 312). The College of Occupational Therapists used an expanded version of the NICE definition in their guideline for OTs working with older people (College of Occupational Therapists, 2015). This definition came from (Close et al., 1999, p. 93)—“Inadvertently coming to rest on the ground or other lower level with or without loss of consciousness and other than as a consequence of sudden onset of paralysis, epileptic seizure, excess alcohol intake, or overwhelming external force”.

While all these definitions in research, public health, and clinical practice are slightly different, the primary similarity is that the person lands at a lower level. Most definitions also attempt to include the unintentional aspect of a fall, with fewer definitions considering the cause of a fall.

However, older people are almost certainly not aware of such internationally accepted definitions, unless perhaps they have participated in a falls study, or a health professional has used a definition when asking about falls. A discrepancy between perceptions of older people and health professionals, of what constitutes a fall, has been documented by researchers investigating older persons’ experiences of falls (Bailey, Jones, & Goodall, 2014; Ballinger & Payne, 2002; Bunn et al., 2008; Hanson et al., 2009), and by researchers exploring fall definitions and methods to measure falls (Hauer et al., 2006).

The ProFaNE Consensus group acknowledged that people in general viewed falls differently from researchers, with definitions serving different purposes. The group
recommended that, in research, falls should be asked about in a way that is understood by lay people suggesting a question like, “In the past month have you had any fall including a slip or a trip which you lost your balance and landed on the floor or ground on lower level” (Lamb et al., 2005, p. 1619).

The need to simplify a definition for use within a clinical setting has also been discussed (Dickens, Jones, & Johansen, 2006; Skelton et al., 2007). Dickens and colleagues (2006) noted that within an Emergency Department setting, they simply asked the patient “did you fall?”. Further evaluation (detailed history taking) found that five of 53 (9%) patients who stated they had not fallen, had in fact had an event that could be classified as a ‘slip’. These researchers concluded that relying on patients’ response to the simple question “did you fall?” was justified within this clinical setting. Zecevic et al.’s (2006) findings suggested that obtaining one universal definition of falls may not be possible, however it was important to have discussions with older persons about slips and trips in sufficient detail, to ensure their perception of a fall is similar to the health professional’s definition.

2.5 Falls are a common source of costly morbidity and mortality in older people

Approximately a third of people over the age of 65, living in the community, fall each year (World Health Organization, 2007), with around 10% of falls resulting in serious injury (N. Peel, 2011). Falls are also the most common cause of death from injury in those aged 65 and over (Tian, Thompson, Buck, & Sonola, 2013). The combination of falls being common, and their potential consequences e.g. fractures and head injuries, means falls can have a big impact on health and health-related costs for individuals and health services (Brito, Coqueiro, Fernandes, & de Jesus, 2014; Gillespie et al., 2012; Michael et al., 2010; Shumway-Cook et al., 2009).

A common model that describes why older people are at risk of falls and subsequent injuries is a multiple risk factor model, where multiple factors such age-related changes, including poor vision, decreased muscle strength, postural instability, cognitive impairment and polypharmacy interact with each other to increase the risk of falls. These risk factors, internal to those who fall, are probably more prominent than the extrinsic environmental factors such as stairs, poor lighting and using a bath, which may also contribute to risk (Gillespie et al., 2012). The incidence of falls increases with age
(Campbell, Borrie, et al., 1990; Shumway-Cook et al., 2009) with over half of those aged 80 or older falling each year. Falls have also been reported to be more frequent for those living alone (Painter et al., 2009).

2.5.1 Falls in older people in New Zealand

The incidence and prevalence of falls in older people in NZ is similar to comparable countries internationally. Approximately 28% of over 70 year olds in NZ fall per year (Campbell, Spears, & Borrie, 1990); similar rates are reported in the United States and Australia, with the fall rates in the over 65 year olds ranging between 22%, (Shumway-Cook et al., 2009) and 25.4% (Chan et al., 2007), and 29% (Morris et al., 2004) to 33.9% (Lord, Ward, Williams, & Anstey, 1993) respectively. The number of over 65 year olds who report their first fall is approximately 35 per 1000 per year in NZ (Campbell, Borrie, et al., 1990), 36 per 1000 in the UK (Gribbin, Hubbard, Smith, Gladman, & Lewis, 2009), and 39 per 1000 in Australia (Lord et al., 1993).

More recent NZ data are available for the oldest old and show that, in those aged over 85, 25% had a least one Accident Compensation Corporation (ACC) claim in relation to a fall in a year. Those aged over 85 had a fall-related hospital admission rate 16 times higher than those aged between 50 and 64 years, and eight times higher than those aged between 65 and 74 years (Health Quality and Safety Commission, 2015). These figures likely substantially underestimate falls as they only reflect those who have lodged claims and have an accepted claim from ACC. These numbers will not capture those who fall without seeking medical attention, or those that seek medical attention without a claim being lodged. Likewise, hospital admission numbers only include falls that come to the attention of a hospital. Therefore, these data may be an underestimate of fall rates.

There is also one NZ epidemiological study of falls in a rural population; the study is more than 25 years old, but no rural study appears to have been conducted since. Campbell and colleagues (1990) followed an entire rural population of 761 people aged over 70 years for one year. Participants recorded their falls daily in a diary, with monthly contact from health staff to review any falls not recorded. District nursing and general practice records were also checked daily (Campbell, Borrie, et al., 1990). Over the year 507 falls were recorded; the number of falls per person years was 47 in those aged
between 70 and 74 years, rising to 121 in the over 80 age group. Men were less likely to report a fall than women, and information about falls by men was often obtained from spouses, observers, or from additional prompting. Of the falls that occurred at home (n=471) medical attention was only sought for 24% (n=117). In discussing their findings, Campbell and colleagues (1990) noted that their fall rate was slightly higher that had been previously reported in two other community urban studies although this was not attributed to rurality. However, they noted that only a small number of falls came to medical attention. As the researchers had frequent contact with the study participants, it may mean more falls were known about than usual; this could mean that reporting rates in rural areas are poor.

Direct treatment and rehabilitation of falls in NZ are associated with high financial costs. In 2010, O’Dea and Warren estimated that, across all age groups, these direct treatment costs to ACC are approximately NZ$536 million per annum. There are further costs such as loss to economic contribution (NZ$271 million) and human costs (NZ$928 million) (O’Dea & Wren, 2010). Human costs encompass premature mortality, disability associated with injury, psychological distress, psychosocial effects of injury, and pain and suffering.

2.5.2 Falls in the West Coast Region

ACC data based on claims for falls for people aged over 50 in the West Coast District Health Board (WCDHB) region reported fall-claims rates of 73.1, 73.8, 82.3, 100.8 and 95.4 per thousand, respectively from 2011 to 2015. Data summaries from this data-base are not specifically available for those aged over 65 years. These rates are the lowest of all New Zealand District Health Boards. The other 19 health boards report that 99 to 166 per 1000 of their population over 50 years registered a claim related to a fall (Health Quality and Safety Commission, 2017). Like Campbell et al. (1990) the WCDHB data comes from a rural region and this is consistent with under-reporting or non-reporting of falls in rural regions.

As discussed above ACC data likely provides a lower limit estimate of fall rates, these data are only representative of those people who have reported their fall to a health
service, and have an accepted claim lodged with ACC. The data also do not take account of multiple falls per individual.

2.6 Health care burden associated with falls

Falls have a cost to the wider community in terms of hospital and medical related costs. There are also many less obvious costs such as the costs to a person’s occupational performance, decreased activity levels or mobility, decreased confidence, or carer time and absences from work to provide support for a person that has fallen (Tian et al., 2013). With an ageing population and the high incidence of falls amongst older people, understanding the associated medical and socioeconomic burden is important to health systems and health and social care providers.

2.6.1 Treatment Costs

Reported data in relation to the costs of falls to health care systems is variable. Davis and colleagues (2010) reported a systematic review of cost of falls for adults over age 60, across Europe and three other countries. They examined 17 studies with varying methodologies including population based studies of incidence or prevalence of falls, and retrospective and prospective cohort studies. Costs varied in their presentation of data, with individual hospital stays costed between US dollars (USD) 3376 and USD 26,483. Heinrich and colleagues (Heinrich, Rapp, Rissmann, Becker, & König, 2010) also reported a systematic review of 32 studies, including 15 of the same studies as Davis and colleagues; it seems that the greater number of studies included by Heinrich et al. (2010) reflected broader inclusion criteria as Davis et al. (2010) restricted inclusion to peer-reviewed published studies only.

Heinrich and colleagues (2010) also found large variations in costs of falls ranging from USD 221 to USD 20,246. Whether hospital admission costs were included in the estimates of fall costs was one source of this large variation. Other reasons for highly variable costs reported including studies in both reviews are whether costs included; emergency department and inpatient stays, the personnel costs involved in treatment by healthcare professionals, home healthcare, ambulance transport, and medications. What the two reviews demonstrate, beyond the variability in costs depending what is included as a cost, is that falls are an important economic burden for society.
Costs of implementing falls prevention interventions in New Zealand were reviewed reasonably recently (Robertson & Campbell, 2012). The authors concluded that the biggest opportunity to reduce costs for health care funders in relation to falls was by targeting interventions towards community-dwelling older people to reduce the costs associated with hospital admissions and early residential care admissions. They stated that all community-dwelling older people would benefit from a falls prevention programme and argued that effective investment in falls prevention would result in fewer emergency department presentations, reduced claims to ACC, lower hospital admission rates, and reduce premature admission to aged residential care facilities.

2.6.2 Psychological / Functional costs

The fear of falling (FoF) is a construct is frequently mentioned in falls research, and this is a psychological burden borne by the older person who falls. Tinetti and Powell (1993, p. 36) define FoF as “a lasting concern about falling that leads to an individual avoiding activities that he/she remains capable of performing”. FoF is reported to affect between 21 and 85% of people who have fallen (Kumar, Carpenter, Morris, Iliffe, & Kendrick, 2014).

Those who exhibit a high level of FoF are those most likely to have decreased functional ability and lower quality of life (Fuzhong et al. 2003). As a particular example, a study of 3202 participants, including 1600 women, reported that FoF was reported by 34 % of older women and that 25% of people that had fallen had restricted their usual activities due to injury or a fear of falling again (K. Hughes et al., 2008).

To this point, my review of the literature has suggested that the incidence and prevalence of falls of people aged over 65 in NZ is high, and with an ageing population the absolute numbers of those who fall are likely to increase with time. It also seems likely that more falls occur than are reported, and that variability in falls definitions used in research and clinical practice increases the difficulty of understanding the size of the problem. Further, associated health care costs, along with psychological and functional costs to the individual, are considerable. The following section critically discusses research on older persons’ perceptions of falls. What older people think and feel about falls and falls
prevention, and their past experiences, may influence whether they consider reporting a fall, or whether they believe there is a benefit to them reporting a fall.

2.7 Older persons’ perceptions of falls / falls risks

Falls often have a negative connotation for older people (Hanson et al., 2009), being associated with pain and injury, a decrease in occupational performance, stigma, loss of independence and even death. Falls are often viewed as a symbol of ageing and a disorder affecting the frailest and oldest people in society (Ballinger & Payne, 2002; Bunn et al., 2008; K. Hughes et al., 2008).

Older people may distance themselves from a fall event and the perceived reasons for the fall. Eight people admitted to hospital following a hip fracture were interviewed to gain their perspectives on falls and falling, predictability and consequences of falls (Ballinger & Payne, 2000). Ballinger and Payne’s (2000) discourse analysis found that older people focused on their positive personal attributes, and contested negative assessments of their capability having aligned this with an inability to take care of themselves. With regards to the perceived reasons for the fall most patients were reticent to assume responsibility for the fall event, and wanted to distance themselves from the risk of falling or a falls event to prevent stereotyping or stigma.

In addition, the same study interviewed twenty therapists (ten OTs, and ten physiotherapists) to explore therapists’ perspectives on the reasons for falls and falling, predictability and consequences of falls, and how therapists thought the older person perceived these. In contrast to the views expressed by the older adults the therapists viewed falls as predictable events and saw it as their duty to try and prevent falls for older people. Therapists attributed many personal characteristics as contributors to the falls event e.g. cognitive deficits, neurological events, and other aspects of the older person’s behaviour as a factor such as wearing inappropriate footwear. Ballinger and Payne’s (2000) interpretation was that the therapists’ perspectives were based on a risk discourse whereas the patients’ perspectives were based on a moral discourse.

A systematic review of barriers and facilitators influencing older persons’ adherence to, and participation in, falls-prevention interventions and programmes, noted a common
theme of a fatalistic attitude to falls; older people seemed to feel that falls were bad luck or chance, and therefore not preventable (Bunn et al., 2008). Twelve qualitative and twelve quantitative studies were included, encompassing a broad range of methodologies such as phenomenology, discourse analysis, randomized controlled trials and cross-sectional studies. Despite this variability, the review authors considered there was a level of high consistency in findings with prominent themes shown across the studies. In addition to fatalistic attitudes, frailty was considered to be an inevitable consequence of older age. Many people that had fallen wished to distance themselves from the perception of the older frail person, feeling that falls prevention was better targeted at other older, frailer people. Although many older people accepted that an environmental or personal change would benefit older people in general and help prevent falling, they were more likely to advocate for others to accept these changes rather than themselves. Another finding was resistance to attributing falls to any modifiable intrinsic factors, such as decreased balance or poor eyesight, with older people favouring the attribution of falls to extrinsic factors or external causes. Independence and autonomy was noted as being an important concept for older people, with people wanting to make their own decisions and analysis of risk. Finally, the authors noted that an important clinical challenge is how to notify people of their personal risk of falls without causing distress.

Similar findings were echoed in a later narrative literature review (McMahon, Talley, & Wyman, 2011) who also reported that attitudes to the occurrence of falls were fatalistic, the risks of falling were seen to be more relevant to other old people, and that older people placed a high value on maintaining autonomy and independence. The review applied a social–ecological framework to examine older person’s perspectives of falls risk and prevention. The review comprised eleven qualitative studies, including phenomenologic, ethnographic, and content or thematic analysis approaches, and seven quantitative studies with survey designs and one mixed methods study, that utilised focus groups and telephone surveys.

Bunn et al. (2008) noted the challenge of distress associated with communicating falls risk, and McMahon et al. (2011) offered a potential approach that could reduce distress by reframing older people’s individual risks in a way that is meaningful to them. Reframing risk in meaningful ways aligns with an occupational therapy or occupational
science perspective, acknowledging that people wish to engage and participate in occupations that are meaningful to them (Iwama, 2002; Yerxa, 1990).

In rating self-perceived risk of falls, people over the age of 60 were found to rate their risk as low. Hughes and colleagues (K. Hughes et al., 2008) conducted a mixed methods study, focusing on older person’s perceptions of their risk of falling. Telephone surveys were used to interview 3202 people over the age of 60. One participant group (the ‘intervention’ cohort) were from an area, five years after a five-year long falls awareness campaign was held, and a second demographically similar control group were also interviewed. Participants rated both the priority of falls prevention for them personally and their personal chance of falling. Additionally, participants were asked whether they agreed or disagreed with the statement “older people fall and there is nothing that can be done about it”. Demographic information and history of falls, general health and falls related behaviours were also collected. The study results showed those from the previous intervention cohort were less likely to agree with the statement “older people fall and there is nothing that can be done about it”, and more likely to rate prevention of falls as high priority.

Across both groups, people were most likely to rate their self-perceived risk of falling as low, with 60% of respondents rating their risk of falling as low (K. Hughes et al., 2008). Men were 40% more likely than women to perceive their risk as low. Of the 1105 people that rated falls as a personal high priority, 57% rated themselves as a low self-perceived risk of falling. Of those that had reported falling in the last twelve months 39.5% rated themselves as having a low risk of falling. This perception of increased falls risk, when one has recently fallen, aligns with review findings that older people that had experienced a fall, and understood the reasons for the fall, or their physical changes, acknowledged more personal falls risk than those who had not fallen (McMahon et al., 2011).

In the second phase of Hughes et al.’s (2008) mixed method study, focus groups were also held within the intervention community for those over 70 years evaluating the carry over messages from the previous falls awareness campaign. Participants asked to rate three possible messages that could be used in a falls prevention campaign. The statements were: (a) If you are more active, you are less likely to fall, (b) If you are more active, you
will stay independent for longer, and (c) If you are more active, you will stay healthier for longer. Of the 73 participants, none of them chose the ‘less likely to fall message’ with some suggesting it had negative connotations for them. The majority of participants chose the ‘stay independent’ message with discussions that the ‘stay independent’ and ‘stay healthy’ messages were intermingled and promoting very similar messages.

The overall conclusion reached by Hughes and colleagues (2008) from both the survey and the focus groups, was that even though the intervention cohort appeared to have recalled and retained some of the falls awareness messages e.g. falls happen to older people but they are preventable; people did not internalize this message and perceive it as personally relevant to them. This study had a good representation of older people, with those in the focus group being recruited from sports and senior’s groups as well as retirement and day care centres, and those interviewed by phone were randomly selected from electronic home pages, and stratified by gender. A strength of the study was that the random sampling from the phone pages would likely result in a sample that was representative of a general population including those with a level of cognitive impairment. Thus, in considering engagement with falls prevention programmes Hughes and colleagues (2008) suggested it may be more useful to ‘market’ these programmes with positive messages as health promoting rather than programmes which reduce risk.

The focus on a risk discourse in the above studies could however reflect the perspective of researchers summarising studies by health professionals, where the review authors, as health professionals, may consider the implication of the studies from the perspective of what older persons should think about risk or how older persons should manage risk. This may not align with how older people feel about, or comprehend falls risks, or consider how they will manage risk.

2.8 Falls prevention

Preventing falls in later life is a public health priority worldwide (World Health Organization, 2007). Key documents—such as Healthy Ageing Strategy (Ministry of Health, 2016), Needs Assessment and Support Services for Older People: What you need to know (Ministry of Health, 2011), Positive Ageing Strategy, Older New Zealanders: Healthy, Independent, Connected and Respected (Ministry of Social Development, 2013)
—that shape health and social services for older people in NZ have a focus on keeping people well in older age, and all specifically mention falls as an area for action. A particular focus on falls in NZ is demonstrated in the Health Quality and Safety Commission’s national patient safety campaign which began in May 2013 with a focus on ‘Reducing Harm from Falls’ and has been revisited as ‘Stand up to Falls’ from April to September 2015 (Health Quality and Safety Commission, 2015).

2.8.1 Uptake of falls prevention interventions

Although there is evidence that falls-prevention programmes reduce the risk of falls for older people (Gillespie et al., 2012; Robertson et al., 2001) participation in fall prevention programmes remains low. Rates of uptake in the community are generally 50% (Yardley et al., 2006) with a reported range of participation of between 21% and 67% (Merom et al., 2012; Robertson et al., 2001; Shandro, Spain, & Dicker, 2007). One possible reason for this low participation rate is that there is a marked hesitancy on the part of older people to take part in these types of programmes. Hughes and colleagues (K. Hughes et al., 2008) noted that awareness raising strategies in interventions for falls preventions have traditionally promoted two key messages—that falls are a significant health issue for older people, and that falls are preventable. They suggest that the language in promotion of a falls prevention programme would be better focused on the positive aspects of strength, balance and independence, rather the traditional message of falls being an issue for older people and being preventable.

There has been a significant body of work in New Zealand on falls prevention, based around exercise classes. One particular study compared balance, strength and falls incidence over a 12-month period, between a peer-led exercise class, with a paid professional led exercise class, as well as a comparison group. The peer led exercise classes had a high uptake and a low dropout rate of 23% after 12 months (Waters, Hale, Robertson, Hale, & Herbison, 2011).

The optimum way to promote falls education is unknown, however an important factor for successful promotion of falls education is to increase understanding of the risk falls can pose to health and independence of the older person. If people have low self-perceived risk of falling, the motivation to address a falls risk is not present and they are
unlikely to participate in falls prevention programmes. A low uptake of falls prevention programmes could potentially be due to how these programmes are marketed and what older people think of the interventions offered.

The role of health professionals can negatively or positively influence whether older people partake in a falls prevention programme. Dickinson et al. (2011) suggested that older people need to be made aware that falls are a medical problem and can potentially be prevented, and given information to highlight this. In order for older people to take part in falls prevention, referral is generally made by health professionals, however health professionals need to be aware that the older person has fallen, or is at risk of falls.

2.8.2 Older persons’ perceptions of falls prevention interventions

Similar to falls definitions being perceived differently, falls prevention can have different meanings for those delivering the service and those older people receiving it. A number of qualitative studies have been conducted evaluating older people’s perceptions of falls prevention interventions and there have also been published syntheses of these studies (Bunn et al., 2008; Child et al., 2012), which report that a focus on preventing risk of injury from falls depicted by health providers is at odds with older person’s perceptions of what falls prevention means (Bunn et al., 2008).

The synthesis of Bunn and colleagues (2008) involved 12 qualitative and 12 quantitative studies and found that many of the studies did not examine actual behaviour, but beliefs and attitudes about falls prevention. Older persons’ concerns about their self-identity and how others may perceive them, e.g. as frail and needing help, were seen as major barriers to considering attendance at fall prevention interventions. A similar report by Child and colleagues (2012) based on a systematic review and synthesis of 19 qualitative studies concluded that older people’s engagement with designing interventions and concordance with fall prevention inventions was considered to be vital to improve their perceptions of fall prevention interventions. Similarly, they reported that some older people found group exercises and types of exercise challenged their self-perceptions e.g. males not wishing to engage in Tai Chi as it was viewed as a female exercise, or not wishing to use mobility aids as this was viewed as a marker of decreased independence. Child et al. (2012) also offered a broader perspective that input from health professionals was not always viewed
as empowering, and presentation of falls prevention advice by health professionals can be perceived as dictatorial or insulting.

Additionally, one qualitative study seeking views on older people’s perceptions of advice about falls prevention found that participants (66 men and women aged between 61 and 94) regarded falls prevention as meaning hazard reduction, restricted activity levels, and use of aids (Yardley et al., 2006). They interviewed 66 participants from a broad range of community settings, sourced through oral and written advertising; as it proved difficult to recruit younger or fitter people the recruitment materials and questions were changed to ask about health promotion and balance training for retired people. Focus groups were conducted, with individual interviews for those who were unable or did not wish to attend focus groups. In line with conclusions from Child and colleagues (2012), the main findings of the thematic analysis were that people felt falls prevention advice was good advice, but perceived it as common-sense—which had the implication that older people did not use common sense to solve problems. There was broad acknowledgement of the usefulness of falls prevention advice, but participants did not feel it was personally salient. The authors noted that these findings came from participants who had not been offered or taken part in a falls prevention programme. People that have taken part in falls prevention may have a different perspective.

2.9 Reporting of falls

Under-reporting of falls is mentioned throughout the falls literature (Cummings, Nevitt, & Kidd, 1988; Freiberger & de Vreede, 2011; N. Peel, 2011; Shumway-Cook et al., 2009), with particular reference to the possible effect of under-reporting, especially when falls reporting relies on self-report, on research validity (Mackenzie et al., 2006).

For the purposes of this thesis, reporting a fall is considered to be informing a health professional about a fall. However, in most literature reporting a fall refers to a study participant reporting to a researcher that they have fallen in the past (retrospective reporting), or that a fall that has just occurred, considered ‘prospective’ reporting.

Despite a large body of falls research, few studies specifically explore falls reporting (Bailey, Foran, Ni Scanaill, & Dromey, 2011; Dollard et al., 2014). What is more
common is post-hoc definitions of potential issues for the validity of their falls data arising from uncertainties about the accuracy of falls reporting (Dickinson et al., 2011; K. Hughes et al., 2008; Shumway-Cook et al., 2009).

A descriptive quantitative study by Painter et al. (2009) aimed to identify falls prevalence and contributing factors. Community dwelling participants (n=663) aged over 50 years in the US were recruited through attendance at adult groups, churches or Seniors centres. The participants self-completed a questionnaire collecting demographic and falls data. If a respondent had fallen, further probing questions were used about the fall; such as the time, location and activity when fallen, and the use of walking aids or safety equipment.

The study reported that 62% of respondents had experienced a fall, with 56% of total respondents having more than one fall, and that more women (90%) disclosed falling to someone else, than men (80%). There was a significant association between gender and informing others about falls, although a large proportion of the participants did not identify their gender which reduced the robustness of this finding. Those living alone were more likely to fall, and also more likely to tell their friends about falls, and those living with others were more likely to tell relatives. Less than 4% of participants reported falls to physicians, emergency personnel, therapists, and neighbours. A limitation of this study is that the original intent was to disseminate falls prevention information to the public and in order to learn more about the community they requested people complete a survey. The selection of participants from these community meetings would indicate that this was a ‘selected’ sample, who demonstrated an interest in falls, rather than a representative sample, and may have excluded those who did not attend meetings due to increased frailty or those that are socially isolated.

A cross-sectional analysis from a longitudinal survey of a large Medicare population in the US examining incidence of falls and the impact of healthcare, reported a much lower rate of falls. Of 12,594 Medicare beneficiaries over the age of 65, 22% (n=2909) had fallen in the previous year, of those, 48% stated they discussed their fall with a health professional (Shumway-Cook et al., 2009). The reasons for discussing falls with a health professional were not addressed in this study. Of those participants that did discuss falls
with their health care provider, 75% felt that their health care provider had tried to understand the reasons and circumstances for their fall.

Not wanting to tell a health professional that they had fallen was a key theme in an exploratory qualitative study of 187 older people that had attended a broad range of falls prevention interventions (Dickinson et al., 2011). This study investigated the role of health professionals as facilitators or barriers to falls reporting. Of the 123 (66%) participants that had fallen in the last 2 years, 82 (66%) stated they had reported falls to a health professional. Falls were not viewed as a medical event and therefore not seen as relevant to the doctor, or the symptoms were not at a level considered to be serious enough to see the doctor. Additional reasons given for not seeing the doctor were the doctor being busy, falls being seen as a trivial matter, or feeling like a burden, or that the doctor was not interested.

A recent qualitative study explored why older women sought help from their general practitioner (GP) following a fall (Dollard et al., 2014). Eleven older women, recruited via colleagues and personal contacts and GPs, who had experienced a fall in the last twelve months (but had not attended an emergency department or been admitted to hospital as a result of the fall) were interviewed. Six women were aged between 65 and 74 years and five were aged between 75 and 85 years (Dollard et al., 2014). Six women discussed one fall, three discussed two falls, and two women discussed three falls, eighteen in total. Seven women sought medical help, with three women being persuaded to seek help by others. The remaining four women did not seek medical help following a fall. It is unclear whether help was sought after all eighteen falls as only eleven falls (one per participant) were discussed.

The reasons participants sought help were a perceived need for medical help, such as an injurious fall with unresolved pain; or because others had legitimised their fall and persuaded them to seek help. The actions taken included breaking down barriers to attending a GP, such as booking the appointment, or providing transport. The main reason help was not sought was that the fall or fall related injury was not perceived as serious enough to warrant help, similar to the findings of Dickinson and colleagues (2011). Participants further rationalised not seeking help by; self-managing the symptoms,
feeling they understood why they fell, and wanting to maintain a positive attitude and present a positive image of themselves. Congruent with the findings of Dickinson et al. (2011), the study by Dollard and colleagues (2014), reported that there were external reasons for not seeking help, such as not wanting to go to the doctor for what they perceived as trivial matters when GPs were busy, and the delay in getting a doctor’s appointment meant the symptoms had resolved and they were feeling better. Essentially, the authors’ conclusion was that participants expressed a wish to remain independent and portray positive independent attitudes and images of themselves, and the act of falling alone was not considered a legitimate reason to seek help or advice.

Promotion of a falls prevention programme is stated to be better focused on the positive aspects of strength, balance and independence (K. Hughes et al., 2008). Dollard and colleagues (2014) had an additional perspective that these messages alone may not be enough and proposed linking falls reporting with health promotion and independence messages, alongside increasing awareness that all falls were legitimate. Additionally, it was considered important to emphasise that GPs may be able to help prevent falls, which in turn could sustain better health and independence. In terms of transferability of findings, this study is limited by recruiting only women, specifically urban women.

Lee and colleagues (2013) reported a mixed methods design study that explored what encouraged 245 people over the age of 70 to have a general discussion about falls, with a health care provider. Ninety-three participants (38%) stated they had fallen in the last year. This follow-up component of the survey was conducted 12 months after the initial survey. The point of departure from other studies was that they were interested in discussion on falls in general, and not necessarily in relation to a specific fall event.

Findings from Lee and colleagues (2013) were that 38 (15%) participants had discussed falls with other health providers, such as OTs, nurses and physiotherapists, with 13% initiating the discussion. A further 55 (22%) of participants had a general discussion with their GP about falls in the previous 12 months, with only 37 (15%) of participants having initiated the discussion. Discussions included: prevention strategies, post-fall discussions, medical conditions, and screening for falls. Concordant with findings from other studies discussed in this section, reasons for participants not having a discussion
with their GP included: 1) the participants’ perception of their falls and their falls risks were low, 2) the GP was not seen at the time of the fall, 3) perceived limited consultation time to discuss falls, and 4) participants received information on falls from another source. Among the 93 participants that reported falling, 48 (52%) stated they did not discuss falls with their GP or other health professional in the preceding twelve months. The authors’ interpretation of these data were that many older adults at risk of falls did not have a discussion with their GP prior to a fall occurring, suggesting that evidence-based falls prevention information was not being provided by GPs, or it was not delivered in a manner that older people recall receiving it.

Physiotherapy NZ (2014) conducted a web-based survey through the ‘Grown-Ups’ website, for those 50 years and older, asking about exercise and falls. This study identified that 285/918 (31%) participants said that they were likely or extremely likely to report a fall to a health professional. People were asked to rate how likely they were to report near misses, non-injury falls, and minor injury falls to a medical professional. Participants reported they were likely (23.6%) or extremely likely (7.8%) to report a fall resulting in a minor injury, likely (5.9%) or extremely likely (3.6%) to report a fall resulting in no injury, and likely (3.6%) or extremely likely (2.7%) to report an almost fall or near miss. In this survey, these questions related to hypothetical behaviour and not actual behaviour. As this survey was accessible via a website it may not be representative of the population, and may be more representative of those who are more proactive about their health and with a higher educational status.

Summarising the small body of literature that addresses falls reporting to health professionals, it is clear that falls are common in older people and that not all falls get reported to a health professional. There appears to be a pattern that those living alone may be more likely to fall, and women may be more likely to report falls. Common reasons identified for not reporting falls are; not considering the fall to be serious or important enough or perceived as trivial, ability to self-manage the after effects of a fall, perceptions that their personal falls risk is low, proximity of visiting the doctor to the fall event, doctors perceived as busy, and limited time during consultations. Reasons for visiting a GP following a fall were to deal with the consequences of a fall, such as unresolved pain.
There are several aspects of falls reporting about which relatively little is known; what older people think a fall is, given that definitions of falls are not uniform, and it is unclear how this may influence their perspective on falls reporting. It is also not clear exactly what health professionals are expecting older people to report, such as slips, trips and near misses, feeling dizzy, or thinking that they may fall.

2.10 Summary
The population is ageing in NZ, as elsewhere, and the West Coast (the area in which study for this thesis was undertaken), may have a disproportionate number of older persons. Further, they may be a group with lower than average health literacy, living rurally, with more constraints on access to services.

Falls are common in older people and are a source of costly morbidity and mortality in older people, as well as a potential psychological cost to older people that fall. The definition of a fall does not have a shared understanding amongst older people, clinicians and researchers, which can lead to older people believing they have not fallen. Older persons may have a different perspective of falls and their risk of falls, and alongside a desire to remain independent and living at home, this may have a bearing on reporting a fall or their uptake of falls prevention intervention programmes.

Within the literature non-reporting of falls within a research or community setting is well documented. However, reasons for not reporting falls are not well researched or understood.

The study reported in this thesis explored falls reporting in older people in a rural NZ setting. In particular, the study aims to identify what may influence older people, living alone, to report a fall to a health professional, as well as understand why older people may not report falls. The methodology (qualitative description) and methods used are described in the next chapter.
3 Chapter Three: Methodology and methods

3.1 Overview

This chapter provides an overview of the methodology used to address the aims of the research. The chapter begins with an outline of the methodologic approach, outlining why and how qualitative description was utilised for this study. This is followed by detailed explanation of the recruitment, data collection, and data analysis processes. Rigour within the study, and ethical considerations and are also discussed.

3.2 Choosing qualitative description

3.2.1 Context for the study

The aim of the study was to explore what older people living at home alone thought about falls and falls reporting, and why they held these perceptions. In particular, this study explored who older people talked to about falls, what influenced older people living at home alone to report a fall, and how their perceptions may have influenced their reporting behaviour. My interest arose from my work as an occupational therapist with older people, and my clinical observation that older people would often fall and not report this to a health professional (see 2.9) In addition, at the time I planned the study, the rural area I worked in was in the process of scoping a falls prevention programme, and it appeared likely this programme would only reach older people most likely to benefit if health professionals were aware of who had fallen, or were at high risk of falling. As the majority of the referrals to the falls prevention programme would likely be generated by health professionals, they may not refer someone if they were unaware of the person’s falls, or falls risk. If people self-referred, we would need to understand why and how an older person would self-refer, which equates to them reporting a fall or recognising a falls risk.

Quantitative research methods can identify the extent to which older people do not report falls to a health provider. However, a deep understanding why older people do or do not report falls is difficult to capture with quantitative methods. Qualitative research is “well suited for ‘why’, ‘how’ and ‘what’ questions about human behaviour, motives, views and barriers” (Neergaard, Olesen, Andersen, & Sondergaard, 2009), congruent with the aims of my research described above. The usefulness of qualitative data lies in its ‘subjectivity’
i.e. what the subjects, or participants, are actually saying or their perspective of a phenomenon, that may help clinicians or researchers understand why interventions may, or may not, work (The PLoS Medicine Editors, 2007). Thus, qualitative description, as a methodology, offered the opportunity to describe the phenomenon of interest with a focus on informing and supporting clinical practice (Neergaard et al., 2009), which was an intervention to facilitate falls reporting and promote self-referrals or health professional referrals to a falls prevention programme.

3.2.2 What else informed the choice of qualitative description

Qualitative research can be described as an approach which is interactive, subjective and systematic, used to describe people’s experiences and give them significance. When establishing a framework for qualitative research it is necessary to identify the worldview that guides the researcher (Guba & Lincoln, 1994). It was important to me as the researcher to view the participants as active contributors within the research and to understand that the contexts they operated in would have an influence on their experiences. Also, I recognised that my own views and experiences would have an impact on the research and analysis of the data. (Sandelowski, 2000, p. 335) stated that “Descriptions always depend on the perceptions, inclinations, sensitivities, and sensibilities of the describer”. A qualitative approach was the obvious choice for me, as this acknowledges the multiple perspectives (participants and researcher) and that the knowledge generated by the research is constructed and produced through a critical and questioning approach (Braun & Clarke, 2013). In addition, qualitative approaches appreciate the discourses and systems that we as humans reside within, which change over time, accepting there is not just one ‘truth’ (Burr, 2015).

Looking for a qualitative method to explore the multiple realities of a ‘real’ clinical problem (not reporting falls), lead me to consider qualitative description. My research purpose fit within a pragmatic paradigm as I wished to gain utility from the study results to inform clinical practice. Shaw (2010) suggests qualitative description aligns with a pragmatic approach rather than a theoretical approach, as it pays attention to the practical nature of reality, locating truth within the consequences of actions and solutions to everyday problems. Qualitative description, typically, explores the phenomenon of
beginning the research process, I was aware of different types of qualitative research from discussions with my supervisor. I had also read fall-related research, and had clinical experience as an OT working with older people in a number of settings. However, knowing that I held existing knowledge about falls, and had experience of working with older people who had fallen, was not seen as problematic. Rather, because qualitative description is “founded in existing knowledge, thoughtful linkages to the work of others in the field and clinical experience of the research group” (Neergaard et al., 2009, p. 2), the choice of qualitative description seemed congruent with my researcher position.

3.3 Qualitative description

Qualitative description is a useful method for smaller scale qualitative research that seeks to accurately represent and describe participants’ perceptions without the need to interpret the data based on existing theories or pre-existing knowledge of a given subject (Neergaard et al., 2009). While data analysis is inductive, this methodology recommends low levels of interpretation by the researcher. Sandelowski (2010, p. 78) noted that in qualitative description: “description of any kind was unavoidably interpretive”; acknowledging there is inevitably some interpretation because the researcher acts as a ‘filter’ for the research. Congruent with the low levels of interpretation the researcher stays close to the data to present a rich and ‘straightforward’ description of the phenomenon in language similar to those of the participants (Sandelowski, 2000, 2010). It is noted that while qualitative description is not committed to a particular theory or philosophical foundation, this does not mean it is not influenced by theories. Sandelowski (2010) notes that any researcher will have knowledge preconceptions and theoretical learnings that they will bring to their research. For instance, I have already documented my occupational therapy training and clinical experience, as an influence on my research, and this is seen again in the framing of ‘occupational independence’ as a theme (see 4.3).

Design issues for qualitative description are described by Sandelowski (2000) and have been further elucidated by Sullivan-Bolyai (2005) and Neergard (2009). Purposeful sampling is suggested to identify those who have experience of knowledge of the
phenomenon to be studied, in this case falls and falls reporting, which may also include identifying unique cases to demonstrate typical or atypical cases of a phenomenon. The main purpose is to have a sample which will have rich data about the purpose of the study. Data is generally collected via interviews and focus groups with semi-structured interview schedules or questions. The question focus is on the ‘who’, ‘what’ and ‘where’ and ‘why’ of a particular experience. Observations of target events by the researcher and data from health records can also be included within the data collection process (Sullivan-Bolyai et al., 2005).

When data are analysed, it is not bound by pre-existing theories, which allows the data analysis to stay ‘close’ to the participant’s viewpoints. Users of qualitative description have suggested a range of useful data analysis strategies (Neergaard et al., 2009; Sullivan-Bolyai et al., 2005), such as 1) quasi-statistical analysis, using numbers to summarise data alongside descriptions; 2) content analysis, using coding systems that can be modified as the data develops; and 3) description of the event, with low level interpretation of the data. Neergard (2009) suggests the characteristics of the data analysis strategies are: organising data into codes; recording insights and reflections on the data; identification of similar patterns, phrases and themes; identifying commonalities and differences, and deciding on generalisations that hold true for the data; and presenting data in a way that stays close to participants descriptions. Thematic analysis is also suggested as a strategy for analysing qualitative descriptive data (Sandelowski, 2010).

3.4 Methods

3.4.1 Participant Recruitment

A purposive sampling approach was employed using criterion sampling (Patton, 2015). Purposive sampling was used to include a range of ages, both men and women, and those of differing ethnicities, that are representative of the West Coast. Inclusion criterion included people over the age of 65, living alone on the West Coast, who had experienced a fall. Eight to ten participants were sought to take part in the study. Small samples are typical of qualitative research, a suggested sample size for a qualitative descriptive study, “may be as few as three to five persons, ranging up to about 20 participants” (Magilvy & Thomas, 2009, p. 299). They also noted that a small sample size, using a method such as qualitative description, can produce data that is manageable for a novice researcher.
Potential participants were identified from the caseloads of community nurses, with gerontology nurses being the main recruiters. As recruitment to the study was initially slow, recruitment was broadened to community nurses. Nurses had information about a person’s falls history as part of their roles of visiting people at home, or identified a previously unreported fall as part of their usual assessment when visiting people at home.

Discussion was held with community nurses, at different localities, to discuss inclusion criterion and identify methods for introducing the study to potential participants. A cue card (Appendix A) was developed to help the nurses identify potential participants. Nurses were supplied with information packs to offer potential participants, which included the letter of invitation (Appendix B), a consent form (Appendix C), participant information sheet, (Appendix D), the researchers contact details and a stamped addressed envelope. Fifty information packs were given out to community nurses across the West Coast. Potential participants were given the opportunity to think about whether they wished to be part of the study, being informed they did not have to make a decision immediately.

One potential participant contacted me (as the researcher) directly to ask further questions about the study and indicate their willingness to take part; potential participants were also able to ask the community nurse to contact me on their behalf and pass on their contact details to me, which the rest of the participants did. If, when I then telephoned them, verbal consent was given to take part in the study, an interview day and time was agreed. This was followed-up with a written appointment as confirmation, along with another patient information sheet and a consent form. A stamped addressed envelope was enclosed to allow the person to return the completed consent form in the post, prior to the interview.

Only three potential participants returned a consent form by post. One agreed to take part in the research and the other two declined. When the other potential participants did not return consent forms by post I contacted them by phone to determine if they still wished to take part in the study, or ask further questions. One further potential participant declined at this stage. If potential participants repeated they were still willing to take part, then the interview day and time was confirmed, and a consent form was taken to the
interview where it was signed. For all participants, verbal consent was sought again prior to beginning the interview.

It is difficult to determine how representative this sample is of the older people that are experiencing falls on the West Coast. The nature of the study design meant that I was only aware of the thirteen people who agreed to have their name passed to me. Of those thirteen potential participants, ten agreed to take part.

3.4.2 Interviews

Semi-structured interviews, which ranged from 45 to 75 minutes in length, were used to gather data. I conducted all interviews face to face, and all took place in the participants’ homes. Participants were able to have a support person present if they wished, and only one participant did so. The support person did not contribute to the interview. All interviews were digitally recorded, and all participants confirmed their consent for recording prior to starting the interview. At the completion of each interview, the information given by each participant was summarised, demographic information collected (see 4.2), and participants were offered a grocery voucher to acknowledge their participation. Participants were not made aware prior to the interview that they would be offered a voucher.

The interview questions (Appendix E) were open-ended and included questions about: managing at home, maintaining independence and how ambulation contributes to independence, thoughts about older people’s general risk of falling and their own risk, experiences of having had a fall, sequelae of events following the fall, reported and unreported falls, and reasons why falls are or are not reported.

An interview schedule for qualitative description is generally based on expert knowledge, to focus on areas that are poorly understood within a health context (Neergaard et al., 2009). The interview schedule was developed from my knowledge based on reading falls research and clinical experience. This was also informed by feedback on my research proposal from two academic peer reviewers, as well as one supervisor’s expertise on older person’s rehabilitation and another supervisor’s expertise in qualitative research interviews.
Practice interviews were held with colleagues and two older people I knew personally. I explained why I wanted to do practice interviews, and that what they said was not contributing data to the research. The purpose of the practice interviews was to allow me to become familiar with the questions, check the flow of questions, assess whether any questions might need adjustment for better participant understanding, and to practice research interviewing skills. I was aware that as a researcher I needed an enquiring and open approach, which might contrast with a more structured and focused approach I might use as a health professional during a clinical interview.

As each research (not practice) interview was completed, I debriefed with a supervisor and we reviewed the interview transcript and this process included feedback about interview technique and areas where additional questioning may elicit further details were suggested. At the end of each interview I also digitally recorded my own thoughts about what appeared important to the participant, similarities to other participant’s perspectives, thoughts about the interview process and my perspectives of facilitating the participant to share their thoughts within the interview in terms of whether a lot of prompting was needed, or they were willing to share with minimal prompting. These ‘field notes’ were also transcribed and added to the bottom of each participant transcript.

Intelligent verbatim transcription was used. I removed most of the conversational pauses where this did not change the meaning of what the person said; similarly, ‘ums’ and ‘ahs’, and colloquial phrases such as ‘and that’, were removed unless they indicated a pause for thought or were acknowledging something that had been said. I did not change the participant’s language. For example, if the participant used contractions such as ‘cos’ or ‘gonna’ these were kept, as were colloquialisms and swearwords. During transcription, I removed any identifiers (such as names of places and people) and assigned each participant a pseudonym.

Following transcription, I sent a content summary of each participant’s interview to them, with a self-addressed envelope, for participant validation. Participants were invited to check factual errors, and to verify or comment on the summary to ensure that it reflected their descriptions. Only three of the individual summaries were returned, without any changes requested. It is possible that follow up with participants to return the summaries
may have resulted in more summaries being returned, however it is not known if that would have meant some changes in the unreturned summaries or not.

3.4.3 Data analysis

Analysis of interview content followed the general principles of thematic analysis described by Braun & Clarke (2006). I found their clear description of the process of analysis easy to follow, and this helped me move through the stages of familiarisation with the data and noting reflections on the data, coding and recoding as I gained insights about the patterns in the data, understanding the relationships within the data, e.g. commonalities and differences within and between participant’s experiences, and deciding on the how the data would be grouped to provide a comprehensive descriptive summary of participant experiences.

Transcribing the interviews began the process of familiarisation with the data. The transcripts were then checked against the recordings of the data to ensure accuracy, and re-read to provide further opportunity to become immersed in the data. Notes were taken during reading to record items of potential interest, similarities or disparities with other participants or potential codes. Notes were also made by listening to the digital recordings without transcription and these were compared along with field notes made at the end of each interview to identify whether my impressions were consistent; for instance, regarding the level of prompting needed or overall thoughts about the interviews. This also helped me to focus on the broader aspects of what participants described and whether I as the researcher had added my perspectives alongside the participant descriptions of their experiences.

Codes represent information in the data that can be grouped in a meaningful way (Braun & Clarke, 2013). I coded all the data in each transcript that related to independence, falls, and reported falls as these were the three topics I was interested in. To ensure rigour in the coding process, anonymized transcriptions were also coded by a research supervisor (JHS). The first two interviews were independently coded and compared for verification of codes. The later interviews were fully coded by me and then the supervisor reviewed the coding and any differences in coding were discussed and agreement sought on codes.
As each interview was transcribed I coded data into tables with first level codes, which reflected the participant’s language, and second level codes, which sorted first level codes into similar groups. For instance, the first level code ‘Falls don’t count as they were years ago’ was part of a second level code called ‘Falls definition’, and another called ‘Minimising impact of fall’. Interviews were coded in descriptive narrative units about a topic or event. As each interview was coded, new codes were identified if the data did not fit into existing codes. During coding of the ninth and tenth interviews, very few new first level codes were identified, and no new second level codes were derived; it seemed further interviews may not yield any new second level codes.

Next, I looked for relationships between second level codes and started to sort these into broader categories congruent with my interests in independence, experience of falls, and falls reporting. In order to identify the breadth of each of these broader categories (which I called ‘themes’) I regrouped the first and second level codes into a table for each theme. I used diagramming (Copeland & Agosto, 2012) to help elucidate the relationships within the data and consider ways to present a coherent description of the data.

Writing the results began at this stage and this helped me question the grouping of codes into the themes and how well these aligned with the research question. I found some themes were difficult to explain clearly, or seemed to overlap with another theme, or were a ‘thin’ rather than detailed description of participant experiences. For instance, seven potential themes (‘Making sense of the fall event’, ‘Is it a fall’, ‘Do I tell/who do I tell/how do I tell’ – ‘Reporting / not reporting’, ‘Outcome/consequences of reporting’, ‘Falls prevention’, and ‘I can manage at home’) were condensed into four themes that had a “progressive focus” (Sandelowski 2000 p339) from broader context to specific focus on falls reporting.

The refined themes were discussed and checked against the data set. Theme tables were created, and each code was checked against the themes to check that all codes were included in the themes, and each theme had a clear focus for the descriptive summary. Quotes from participants that illustrated important elements of each theme were considered at this stage; quotes were included to provide authenticity to the research and allowed to reader to assess the credibility of findings. I chose a number of quotes for each
theme and as writing progressed I worked more of the participants’ experiences into my summary description and became more selective about the quotes that best reflected or described the meaning of each theme.

3.5 Rigour

Demonstrating the credibility of the research is considered a vital part of qualitative research, (Mays & Pope, 1995; Milne & Oberle, 2005) in a similar way to a quantitative researchers attempts to conduct research with good ‘internal validity’ or low risk of bias. (Johnson & Rasulova, 2017). There is debate in the literature about how best to demonstrate qualitative research is credible and trustworthy research and on what basis these judgments are made (Johnson & Rasulova, 2017; Mays & Pope, 2000; Rolfe, 2006); some authors postulate that qualitative research should be assessed with similar, but adapted, concepts to quantitative research (Mays & Pope, 2000), and others arguing that conventional measures of quality in quantitative research that apply to ‘single truths’ independent of a researcher, cannot be applied to research that acknowledges multiple realities and the influence of the researcher (Guba & Lincoln, 1994; Milne & Oberle, 2005)

To determine rigour in this research thesis, I have used several of the strategies as detailed by Milne and Oberle (2005) as described below.

3.5.1 Authenticity and Credibility

The credibility of any study is the directness of relationship in methods, to fulfilling the purpose of the study, and that the study achieved what it intended to accomplish (Milne & Oberle, 2005). The purpose of this research was to develop an understanding of falls reporting by older people; through considering their environmental context, exploring who they talk to about their falls, and their experiences and perceptions of what may happen if they report a fall to a health professional.

3.5.1.1 Participants are free to speak

Study design decisions can influence whose perspectives are captured (Milne & Oberle, 2005). A purposive sample (Patton, 2015) of people over the age of 65, who had fallen and lived alone, was chosen because of their experiences of falling, and to enable
exploration of the phenomena of falling and reporting, or not reporting that fall to others. While collection of data was based on semi-structured interviews, this still allowed participants to drive the data collection and discuss something that was of importance to them, in the context of falls and falls reporting.

3.5.1.2 Ensuring participants’ voices are heard
Probing was used to elicit detailed data and provided clarification and more in-depth information, rather than using superficial descriptions. Participants often offered pared-back descriptions of their falls in the first instance (see 4.5). Focus groups are also suggested to lessen the role of the researcher in the interview process (Milne & Oberle, 2005). Focus groups were not used in this research study because I postulated a reluctance to talk about falls. In addition, focus groups were practically difficult as participants lived in a large geographical rural area and were sufficiently elderly that I anticipated many may not drive.

3.5.1.3 Ensuring participants’ perceptions are accurately represented
Accuracy of the transcription was enhanced by doing this myself, which allowed for any non-verbal aspects (observation) to be considered within the data. During transcription, any areas where the words recorded were unclear, were replayed at a slower speed to obtain accuracy and a full transcript. The transcripts were also reread while listening to the digital recording to ensure accuracy. Additionally, notes were made by listening to the interviews without transcribing and these were compared with field notes and codes.

3.5.1.4 Analysis of content: ensuring data driven coding and categorising
It is imperative that codes are derived from the data, rather than being imposed by pre-existing perceptions or theories in order to ensure authenticity of data (Milne & Oberle, 2005). Anonymised transcriptions were also coded by a research supervisor (JHS), with the first two interviews independently coded and compared for verification of codes (see 3.4.3). The later interviews were fully coded by me, reviewed and discussed with the research supervisor, and any differences in coding were discussed and agreement sought on codes. Critical review, ongoing analysis, discussion and diagramming, occurred regarding relationships between codes and development of categories. Congruence of
codes and categories was compared with the data to ensure the categories were derived from the data.

3.5.2 Criticality and Integrity

3.5.2.1 Reflecting on researcher bias
Within qualitative research, the researcher is linked to all aspects of a study and has the ability to influence the study, knowingly or unknowingly with biases, or knowledge and world views that they hold (Milne & Oberle, 2005). My role as a clinician working in the community, predominantly with older people, and working with those that have reported falls, represented a potential foundation for bias in this research. Open-mindedness and consideration of what participants described with data collection, driven by participants’ stories, rather than a rigid interview schedule, allowed me to view the participants as authorities of their own experiences. Additional strategies, mentioned previously, such as debriefing with a supervisor, cross checking of codes, and use of a journal, helped me discover any areas where I had ‘fixed’ ideas, or where my analysis was potentially influenced by my clinical experiences, and not driven by the data.

3.5.2.2 Respondent Validation
To ensure that participants’ viewpoints were accurately described within context, a single page summary was sent to each participant following each interview (see 3.4.2). Only three summaries were returned with no changes noted.

3.5.2.3 Peer review
As a novice researcher, peer review occurred throughout the research process from design of the study, development of the interview schedule, collection of data, through to data analysis. Peer review was particularly valuable when the meaning of a ‘descriptive narrative unit’ was less apparent; discussion, along with reading and rereading the ‘descriptive unit’ and context, were considered to ensure the participant’s voice was heard. Similarly, categorised data were reviewed to: cross check codes, ensure clarity of categories and discussed to ensure a logical flow from the findings, and consider alternative low-level interpretations.
3.6 Ethical considerations and risk management

Ethical approval was given by Otago University Human Ethics Committee (Health) (H15/047) (Appendix F) and feedback from the committee was integrated into the research protocol. Ethical approval was also given by Ngai Tahu Research consultation committee. (Appendix G). Additionally, locality approval was sought from West Coast District Health Board (WCDHB) (Appendix H). A number of ethical considerations listed below, were addressed at the design phase of this study, and ways to address these issues were discussed in supervision.

3.6.1 Recruitment of participants

It was important that potential participants, especially as some may have had previous contact with me in my clinical OT role, did not feel coerced into taking part in this thesis research. Use of third party recruiters allowed potential participants to be able to decline participation in the study, without feeling that they would be coerced by me, as the researcher. Recruitment to studies by third party recruiters is now considered to be standard behaviour in health research (E. Peel, Parry, Douglas, & Lawton, 2006). Potential participants were also allowed time to consider whether they wished to take part, and they decided if and when to contact me, or asked the nurses to pass on their details to me.

The staff members recruiting potential participants were made explicitly aware by discussion and in writing that I could not identify whether or not any potential participants they identified, took part in the research, or be discussed at any point. This was the case even if the staff member was advised by the participant that they had taken part in the research. It was important to delineate my clinical and research roles with the recruiters, who were also work colleagues and mostly known to me, clinically.

3.6.2 Clinician-Researcher dual role

The dual role of a clinician-researcher can be fraught with ethical and clinical complications, and practicalities when designing and conducting research need to be carefully considered (Hay-Smith, Brown, Anderson, & Treharne, 2016). At the time of the research study I was working as an OT, in the community, in one of four broad geographical areas on the West Coast. Through this role I was aware that there was the
potential that some participants may have previously received input from me in my role as an OT, where the ethical issue of being both a clinician and researcher arose. I decided not to interview any people that I was currently seeing in my role as an OT, to help participants focus on the research study and not their involvement with me as an OT, but also to allow me as the researcher to focus on the participants’ narrative rather than their occupational needs.

I also needed to be able to separate myself from the role of an occupational therapist when visiting people in their homes. Working as an OT in the community involves observing a persons’ occupational performance within their environment including daily tasks like getting on and off a chair, or walking around their home. Therefore, I attempted not to use my ‘clinical eyes’ to observe their function, but focus on what the person said. Supervision was used to identify potential areas of conflict at both the design phase and during analysis of data. This ensured that prior knowledge about a participant was not included in the analysis phase, and only information that was offered by the participants during the research interviews were used.

I wore a uniformed shirt in my role as an OT, and did not wear my uniform or work name badge to any of the interviews. Four of the participants had been seen previously, in my role as an OT. Only one of the participants recognised me as an OT. I explained to her that I was not in a therapy role, but in a research role and that any information I held about her from my role as an OT would not be used in the research process and vice versa. This participant appeared to understand the difference in roles. One other participant stated she thought she had met me previously as an employee of the WCDHB, but was not clear that it was in the role of an OT. Similar reassurances were given about confidentiality of information across roles.

3.6.3 Safety considerations.

All interviews were conducted at the participants’ homes and safety of the researcher and participants was considered. As an OT working in the community I was familiar with safety considerations when visiting people in their homes. Colleagues or friends were informed when I was due to attend an interview, I carried a mobile phone and called them prior to beginning interviews and again following the interviews, with up to ninety
minutes allowed for each interview. Some areas on the West Coast have limited mobile phone reception, only one participant did not have phone reception at their home. In this case calling others for safety was completed with a ten-minute drive from the participant’s home. For confidentiality, the interview address was not given to colleagues or friends, but written down in a sealed envelope, and could be accessed if needed in the event of an emergency.

3.6.4 Other ethical considerations

Potential discomfort for the participants was also considered as an ethical issue. It was envisaged that discomfort, if any, may be a level of emotional discomfort in recalling or talking about a falls experience. One participant described her fall experience as “bloody awful” and initially declined to describe details about the fall. She reported she was alright to carry on the interview and subsequently described details about a traumatic fall resulting in hospitalisation. Following the interview, she was asked about how she was feeling and whether she felt she needed any emotional support. She declined any support, stating that she was “okay”, however she was given a list of local support services, including local GP services, which was offered to all participants.

3.7 Summary

I used a qualitative descriptive approach to describe the perspectives of older people living alone, about reporting or not reporting falls. Ten interviews were conducted, and thematic analysis was used to analyse the data. Rigour within the research process was demonstrated by consideration of ethical issues such as recruitment, informed consent, confidentiality. Further demonstration of rigour was demonstrated by consideration to the methods and methodology aligned to the research design, and use of a range of research tools to demonstrate concepts such as authenticity, credibility, criticality and integrity within the data collection process and subsequent analysis.
Chapter Four: Results

4.1 Introduction

This chapter provides an account of the themes derived from the interviews with ten older people living alone in a rural community, who have fallen. The chapter begins with brief demographic information about the participants and falls, followed by a section called ‘Occupational Independence’ that describes the participants’ perspectives on living alone and independently. These perceptions of occupational independence provide a narrative of occupational independence and provide essential context to understanding: (a) how participants understood was a fall is, and (b) how, when and why this group of participants talk to someone about a fall.

Next I address the three themes in turn: (1) ‘Consequences determine what participants classify as a fall’, which explains that participants were not inclined to use the word ‘fall’ to describe an event in which they had fallen, if the consequences of the event had not significantly or permanently impacted on their independence; (2) ‘Minimisation - Don’t mention the ‘F’ words’, which shows that participants did not wish to fuss about a fall, and wished to minimise any fuss from others about falls that did not require immediate medical attention; and (3) ‘Sharing and acquiring knowledge of a fall’, which elucidates the process by which other people gain knowledge about a fall and how that is often dependent on where the participant fell, the consequences and impact of the fall on the older person’s life. In each of the three themes the participants’ strong sense of managing independently at home (i.e., occupational independence) is manifest, and provides the context in which their decisions about falls reporting were made.

4.2 Participant description

Eight women and two men aged between 80 and 94 (mean age 86 years) were interviewed (see Table 4.1). All identified as being NZ Pākeha, of European descent. This ethnic make-up does not necessarily reflect the overall New Zealand population, but may be reflective of the West Coast population where 79.6% of the total population identify as European and only 4% of the population of those over 65 identify as Māori.
Table 4.1. Participant demographics

<table>
<thead>
<tr>
<th>Pseudonym Names</th>
<th>Age In years</th>
<th>Gender</th>
<th>Number of years living alone</th>
<th>Family living locally</th>
<th>No of Self-reported Falls ¥</th>
<th>Falls (with hospital presentation)</th>
<th>Falls ¥ Reported to GP*</th>
<th>Falls ¥ Reported to others**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthur</td>
<td>87</td>
<td>M</td>
<td>36</td>
<td>N</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Betty</td>
<td>87</td>
<td>F</td>
<td>8</td>
<td>Y</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Margaret</td>
<td>92</td>
<td>F</td>
<td>38</td>
<td>N</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Daphne</td>
<td>81</td>
<td>F</td>
<td>14</td>
<td>N</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Ethel</td>
<td>94</td>
<td>F</td>
<td>42</td>
<td>N</td>
<td>7</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Charles</td>
<td>84</td>
<td>M</td>
<td>4</td>
<td>N</td>
<td>17</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Gertrude</td>
<td>91</td>
<td>F</td>
<td>5</td>
<td>Y</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Carol</td>
<td>90</td>
<td>F</td>
<td>35</td>
<td>Y</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Ida</td>
<td>80</td>
<td>F</td>
<td>18</td>
<td>Y</td>
<td>12</td>
<td>5</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Joan</td>
<td>80</td>
<td>F</td>
<td>1</td>
<td>Y</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Total number of falls 58 11 3 40

* Excludes falls with a hospital presentation.

¥ Self-Reported Falls during interview

** Includes falls that involved hospital presentation or were reported to GP
In total, 58 falls were described by nine participants, with one participant unable to recall any falls. Eleven of the 58 falls resulted in hospital presentations, and of the remaining 47 only three were reported to a General Practitioner (GP). Participants thought ‘others’ were aware of 40 of the total 58 falls, whether that was a result of hospital presentation, the fall being witnessed, or the participant actively telling someone about their fall (see Table 4.1).

4.3 Occupational Independence

I asked participants about their daily lives, and living alone in the community. In talking about their daily lives, the participants valued and promoted views of their own independence. As an OT, I conceptualised this narrative of independence as ‘Occupational Independence’. Interestingly, all the participants received some form of care at home so from an external viewpoint ‘others’ may not share the participant’s perspective of being occupationally independent. Nevertheless, the participants provided detailed information supporting their position of being occupationally independent. I summarise it here, along with representative and illustrative participant quotes, to provide an understanding of the context in which this group of participants fall, how they understand what a fall is, and who they talk to about their falls (including reporting to a health professional).

This section has five subheadings: (1) Independence and living alone, which describes how the participants view themselves as independent; (2) Occupational interdependence, which describes how varying levels of assistance with daily occupations helped the participants to maintain their occupational independence; (3) Adjusting to changes over time, which covers the adjustments participants made to remain independent; (4) Social connections, which describes how being socially connected aided the participants in remaining independent and provided others to talk to about their falls; and (5) Retaining occupational independence in the context of falls, which describes how participants self-managed following a fall and strove to retain their occupational independence.
4.3.1 Independence and living alone

For all the participants, living alone and independently was consequent on their life partner or sibling passing away, or being in residential care. The participants had lived alone for between one to 42 years (see Table 4.1). One participant disliked living on her own, however for all participants going into care or living with other family members were seen as less palatable options than living alone.

Occupations that enabled the participants to stay living at home were valued, as was the assistance they received that helped them meet their goal of staying at home. Being “positive” (Ethel), “independent” (Betty), and “determined” (Ida), were words that participants used to describe themselves.

* A lot of people don’t you know, they get the people that see to them and make their bed and all that, but I don’t like that, I’d sooner do my own... I well, like to be independent (Betty) *

Participants benchmarked their occupational performance against others of a similar age, which demonstrated to them, and others, their ability to manage. The participants highlighted their performance favourably in comparison to others, as their focus was on the occupations they were still able to engage in.

* (P) Just walking around, I can just walk around by myself, you know not using one of those things you know *

* (I) One of those things? *

* (P) You know those things like the lady over there has.... the one with wheels, you know, for walking. *

* (I) Oh like a walking frame? *

* (P) Yes that’s it – I don’t have to use one of those (Arthur) *

Nevertheless, participants talked about the assistance they did receive that helped them to remain independent.

4.3.2 Occupational Interdependence

The household and personal care occupations that participants described, each sat somewhere on a continuum between occupational independence and dependence.
Between these anchors came ‘occupational interdependence’; that is being assisted with specific occupations to remain independent overall.

Assistance came from family, paid caregivers, or neighbours. Reluctance to accept any assistance was described by some participants. Accepting assistance was an acknowledgement to themselves, and others, that one was unable to complete a specific occupation independently. Accepting assistance with specific occupations is, literally interpreted, a form of dependence. Yet, having assistance helped the participants to live at home independently and they viewed themselves as functioning at the upper end of the continuum. Thus, occupational interdependence enabled them to keep their occupational independence and stay at home.

Ooh yes... So I have the people that come in... So I don’t have to go into care... If I didn’t have that support it would be a different story...(Gertrude)

Occupational performance in personal care, household and leisure occupations was described with a wide range of variance in both execution and participation. Despite having physical limitations, everyone tried to engage where they could. Congruent with the occupational independence perspective, participants highlighted their role within specific occupations, even when being assisted by others.

My meals... meals on wheels, they bring them I cook them, heat them. (Arthur).

Perhaps the best, single, common example of the varied levels of occupational interdependence was in personal cares. Some participants were independent with showering, others had people present in the house while they showered, while others had hands-on assistance for showering, or transferring into the shower.

Yeah only she doesn’t help me with the shower she’s just here you know... just in case I slip or anything... well... to help me if I need... (Daphne)

Various environmental aids, such as shower seats and rails were mentioned in relation to personal cares to compensate for standing tolerance or fatigue, decreased balance and increased risk of falls. Equipment was also viewed through an independence lens, rather than focusing on why the equipment was needed.
Participants focused on what they could achieve, and talked about being independent in specific occupations, regardless of whether they needed some assistance in that occupation. Receiving assistance meant that all the participants had regular contact with others who then had knowledge about the daily lives of the participants (family, paid caregivers, or neighbours). These ‘others’ may have an important role in falls ‘reporting’ (see 4.6.1)

4.3.3 Adjusting to changes over time

Past levels of occupational performance were frequently referred to by participants and how they had to adjust to changing physical capabilities over time. For example, some occupations such as walking, or dressing took longer, but doing these one-self independently, was preferred to receiving assistance.

_I get up at 8 o’clock every day... In the morning at roughly 8 o’clock and it takes me a long time to get dressed... So not really dressed up and that... Until about 10 o’clock... it’s a proper struggle at times... but I wouldn’t want it... Anybody... Anyone else you know... (Charles)_

Some tasks may even take days to complete independently. One participant spent days cleaning her windows whereas previously she had been able to complete this occupation, to her standards, within one afternoon. Despite these physical changes and adjustments, people strove to do what they could.

_I wished I could do more... I mean I do try to clean the windows... And clean the bench and that... down and clean the stove and that and I have home help an hour a week. It’s only an hour or so... but I manage to do everything else... (Joan)_

Mobility is one area where a change in occupational performance over time can be easily identify other changes e.g., starting to use a walking aid as a sign of balance difficulties. The majority of the participants had some form of walking aid.

Falls occurred for this group of participants within the context of ageing and occupational adaptation. It is possible that falls, or falls risk, is something else that these participants have found a way to adapt to or manage in the context of viewing themselves as occupationally independent.
4.3.4 Social Connections

Social connections contributed to the participant’s independence. A broad range of social occupations and roles were described – having people call in, keeping an eye on your neighbours, visiting friends and going out for shopping or coffee. Half of the participants had family living locally (see Table 4.1). Family provided practical assistance at times, but more importantly provided the social context for continuation of roles such as parent, aunt, sister or brother, grandparent, and so on.

Paid caregivers were social connections too. Some participants talked about the caregivers as being “like friends” (Daphne) who did more than their caregiving role, such as offering to do shopping or run small errands to help.

A reciprocal neighbourly role was described with a mix of social support and practical assistance; having a cup of tea together, mowing the lawn, bringing in the paper, or keeping an eye on each other were all examples. This neighbourly concern may reflect the small rural towns where the participants lived; the population is generally stable, and most people know their neighbours well.

Pets were also important, and participants talked fondly about caring for their pets and the responsibility they had to ensure their pets were well cared for. One participant also talked about the care her cats had shown her when she fell in the middle of the night and could not get up.

(I) Gosh, so you were on the floor for about five hours?
(P) Yes until the home help came... I had the cat that was all... She came and kept me warm... (Gertrude)

Having social supports and social roles within the broader community may mean that these social connections become important in terms of who gets to know about a fall.

4.3.5 Retaining occupational independence in the context of falls and falling

When the participants described their falls, including talking to others about their falls, there was strong sense of retaining their occupational independence through self-management following a fall. This included: (a) being able to manage the fall oneself
(e.g., being able to get up without help); (b) being able to self-manage the consequences of the fall; and (c) being able to continue living and being occupationally independent at home, despite some falls.

Many falls were unwitnessed, and participants often did not tell others about falls from which they were able to get up and did not incur injury needing treatment at the time or later (see 4.5.3). Essentially,

(l) Well I immediately got up... To see what the damage was
(P) Right...
(l) And I realised that I was bleeding and that... So I thought I better do something about this... So I think I put some little bandages or stuff... like that... Put that on it and that... Well... That was it... (Charles)

Even when there were others who might be able to help the tendency was to self-manage:

... I never thought to go into anyone’s place to ask them to give me a bit of cloth or something... or just to bandage me leg up and stop the bleeding... but I just kept dabbing it with my hankie and that, and got home (Ethel)

The most commonly described self-management strategies were curtailing any bleeding, dressing wounds, and taking over the counter analgesics to manage pain; essentially, participants felt they needed to rely on themselves rather than bother others (see 4.5.2). Within a context of occupational independence and a tendency to minimise or limit any fuss about non-injurious falls (see 4.5.2), most participants felt that they could self-manage the after-effects of a fall that they were able to get up from.

Being able to manage was important both for the participants’ sense of self, but also to make others aware that they were still able to manage. Thoughts that the doctor or others may think that you are not managing was concerning for some participants.

(l) One of the things that people have said to me is that they’re worried if they tell people that they have a fall - people might say they can’t manage and need to go into a home... What are your thoughts about that?
Only two participants specifically mentioned concern that their doctor may ‘put’ them into residential care if they told their doctor about a fall. However, they all knew others of a similar age around them; neighbours, friends, and acquaintances, who had gone into residential care following a fall. Most of the participants mentioned or discussed the thought of going into residential care as something that may eventually happen for them, with most were adamant that this was not what they wanted or needed right now. Not being able to manage following a fall and going into care, was a concept that was strongly rejected by the participants, as they made an effort to maintain their occupational independence.

When asked specifically if they were worried that telling someone about a fall may lead to residential care, the responses focused on not wanting to go into care in general, rather that the link between telling someone about falling with the possible consequence being residential care. Margaret was clear that just because she had a fall, this did not mean she could not cope at home.
Participants were clear that they were able to remain independent and living in their own homes for now and felt that they would be able to make the decision on when things were too difficult for them to manage.

4.3.6 Summary
When viewed from ‘outside’ it may be easy to see this group of participants as dependent, as they all received some form of care assistance. The participants however saw themselves as independent. They described how they strived to maintain their occupational independence and, often by comparing themselves with their contemporaries, focussed on what they were able to achieve. A continuum (occupational independence to dependence) was evident, with occupational interdependence positioned centrally. For every occupation described, the participant ‘sat’ in a different place on the continuum, but overall the participants were and perceived themselves to be occupationally independent, regardless of the level of support they received for each occupation. Occupational independence was also fostered by a strong sense of self, having made adjustments to their living situations, adapting to physical changes and the ageing process. They remained socially connected.

In the analysis process, I was challenged by the context of occupational independence when interpreting the data pertaining to falls, and falls reporting, which was the focus of the study. I began to ask whether falls, and falls risk, is something else that the participants had adapted to, or manage, in the context of viewing themselves as occupationally independent; self-managing a fall demonstrated that independence.

4.4 Theme 1: Consequences determine what participants classify as a fall
The WHO Global Report on Falls Prevention in Older Age (2007) noted that with falls research it is important to clearly define the study’s operational definition of a fall. Not defining a fall leaves room for interpretation by study participants, resulting in different understandings of what a fall is. The commonly used WHO (2007, p1) definition of a fall is “inadvertently coming to rest on the ground, floor or other lower level, excluding intentional change in position to rest on furniture, wall or other objects”.
Rather than assume this was how the study participants would ‘define’ a fall, or adopt this as an *a priori* definition, I asked participants to tell me what a fall was in their own words. I was interested in exploring what parameters or definitions they used to define a fall because I thought this might influence falls reporting behaviour. I also specifically explored whether there was difference in meaning between the words ‘trip’ and ‘fall’ from the participants’ perspective.

The central finding of this theme was that the participants were not inclined to use the word ‘fall’ to describe an event in which they had fallen (by WHO definition) if the consequences of the event had not significantly or permanently impacted on their independence.

### 4.4.1 Distinguishing between trips and falls

In all, nine of the ten participants felt that trips and falls were different events. Most had more than one fall event and defined some as falls and others as trips. Trips generally had a known cause.

> Well a trip is when you trip over... not sure what else to say... it's like when you catch your foot on something and fall over, but it's a trip not a fall, cos you tripped on something (Betty)

Betty made the distinction between a trip and a fall based on cause. Trips were also distinguished from falls more in line with the WHO definition of a fall, noting that a fall involved unintentionally ending up on the ground.

> Well a trip is when you don’t fall, you stumble, and a fall is when you go flat down on the ground, bit like a pancake (laughs), yeah flat on the ground. (Arthur)

This view was not shared by all participants, as falling to the ground could still be counted as a trip if one was able to get up quickly, with no or minimal injury. For instance, Ethel described events that met the WHO definition for a fall; ending up on the ground, but in the interview classified these as trips, as she got up quickly.

>(I) Did you actually land on the ground on all four of those falls?
(P) No I don’t

(I) So those falls, you say you didn’t actually fall on the ground?

(P) Oh yes I fell on the ground outside all those times...yeah but just for a second or two... but I’m not one for thinking about it, even if I have a fall at home or trip...I just carry on... get up straight away...if I can.

Conversely the mechanism of ‘tripping’ and landing on the ground with injury was considered to be a fall.

(I) If you caught your foot on something, like tripped on something and then broke your leg... Would that be a trip or a fall?

(P) It’d be a fall ... wouldn’t it?

(I) I don’t know, what do you think? Why would you define that as a fall?

(P) Because you’ve fallen really heavy... You’re really coming down with a weight and the fall of it... When you trip, it’s more light...

(I) Ah okay - that makes it clearer for me now

(P) yeah a trip... Well you don’t really hurt yourself much with a trip... It’s kind of lighter... (Joan)

This perspective of a trip being “lighter” than a fall was echoed by Gertrude who distinguished trips from falls by the consequence of the fall event. Minimal injury was classified as being a trip and moderate injury, like a broken bone, was classified as being a fall.

A trip is like something lighter...you know you don’t really hurt yourself... a fall is more when you fall quickly and hurt yourself...like when I broke my arm. (Gertrude)

Thus, the cause e.g. catching a foot, and where the person ended up e.g. on the ground, were not agreed distinctions. However, all the participants thought a trip was not as serious as a fall. Trips were described as “something lighter” (Gertrude) or something “not to take any notice of” (Daphne), an event that one would “get up quickly” (Ethel) or “recover quickly from” (Carol), or simply an event that “doesn’t matter” (Betty).
Participants had varied, yet clear, ideas about what they felt constituted a fall for them, and this was evident from their language used when describing their fall events. Two participants corrected me when I referred to their event as a fall, and iterated that these were trips and not falls.

(I) So, did you tell anyone about this fall?

(P) Well it was more like a trip ... (Ethel)

For Ethel, categorising the above event as a trip contrasted with another event that she classified as a fall because it required her to seek immediate medical attention. Similarly, Betty, categorised a fall event without injury as a trip, and corrected me when I called it a fall. She described two falls from a height, both off a step ladder, and two ‘trips’. When asked to describe what happened she used language that minimised the latter two events using phrases like “I just tripped on the edge.” “I just got up straight away” “I just tripped there” and made it clear neither event incurred what she perceived as injury or harm.

Stronger and more emotive language was used to describe a fall. Participants used words like “shakes your whole body up” (Ida); “from a height” (Betty); “propelled through the air” (Ida); “break something” (Joan); with one participant when asked to define a fall simply stating, “bloody awful” (Daphne). Immediately, the language used gave me the sense that what participants called a ‘fall’ was a much more significant event for them. These events also included reference to sustaining moderate to severe injury (e.g. breaking bones), the inability to get up from the ground, or the need for assistance to get up. Further, as mentioned previously even if the person had ‘tripped’ on something and then sustained a moderate injury (e.g. could not get up, or broke a bone) this event was then classified as a fall, even though the mechanism of falling was to trip or stumble.

Overall trips were less serious; they were “lighter” and any consequences or injuries did not have a significant or lasting impact on the participant’s independence and ability to perform their daily occupations. Any event, regardless of cause, that resulted in moderate to severe injury, and had a significant impact on their ability to manage was deemed to be a fall regardless of cause.
4.4.2 Injury — severity and seriousness

While there are some widely used definitions of a fall, there is no clear consensus of the definition of an injurious fall (Schwenk et al. 2011). Some studies included strains and bruises in an injurious fall definition, others measured injurious falls by health care use, and in some studies only falls resulting in fractures were considered injurious. Similarly, the participants in this study had varying perspectives about what constituted an injury.

Injury was viewed on a continuum of severity determined by the degree of injury and the extent to which this could be self-managed, or had longer-term consequences for independence. At the lower end of the continuum was minor injury, and it seemed events where a minor injury occurred e.g. a cut or a bruise, were not always considered to be falls (see 4.4.1) Gertrude described four events she had experienced in the last month, with one “winding” her and another requiring assistance of the neighbour to get up. No significant injury or change in independence levels was experienced for these two falls and she was able to self-manage the after effects and they were described to me as something less than a ‘valid’ fall. In contrast, Gertrude said her only ‘notable’ fall resulted in a broken arm, which she could not self-manage.

(P) Well I don’t have very many falls really…

(I) Oh okay

(P) You know all the years I’ve been going… Only had that one breakage you know (Gertrude)

Similarly, Ethel had four events where she had tripped when walking. Two ‘trips’ incurred no injury, one ‘trip’ included a small cut on her leg, and with the fourth ‘trip’ she cut her knee.

... just tripped on something ... and me knee that was bleeding like mad and I couldn’t get home quick enough...but I never thought to go into anyone’s place to ask them to give me a bit of cloth or something...or just to bandage me leg up and stop the bleeding...but I just kept dabbing it with my hankie and that... and got home and that was another one [trip]...(Ethel)
Ethel did not feel that she had sustained any ‘valid’ injuries. Thus, one of the difficulties in talking about injury, or the severity continuum, was that participants had different standards for determining injury. What was more consistent was that injury severity was judged based on its immediate impact, e.g. the cut, the bruise, the fracture, not being able to get up.

Seriousness was linked to severity of injury, as more severe injuries were more likely to have both immediate and longer-term impacts. Participants’ views of the seriousness of the fall were increased if it had longer-term consequences on their independence. For example, having a fall and presenting to hospital; or ongoing effects of an injury, were generally considered to be serious. A serious fall warranted immediate medical attention, although consistent attempts were made to downplay seriousness, often with the use of humour (see also 4.5.3).

However, even if an injury was more severe at the time (e.g. a broken arm), once the injury healed and if there were no lasting consequences then the fall may not be classified as a serious fall event, just an injurious one. An example of this came from Joan who fell onto a concrete planter pot. She was able to get herself up and sat on her chair in the lounge to recover. When a family member (a health professional) came to visit unexpectedly Joan actively tried to hide her facial injuries. The participant also reported that she had vomited later that night, but when asked about seriousness, she did not think that this was serious even though it seemed she knew this symptom could be indicative of concussion.

(P) ...yeah could’ve got a bad head injury through it. I think I must have had a bit of concussion because I lost me tea that night... “Yeah [family member] said it’s a sign of a bit of concussion.

(I) So you vomited?

(P) Yeah... Brought me tea up.

(I) Oh gosh

(P) Well I got quite a bang on the forehead... Had quite a huge lump there.

(I) Ah okay... You don’t think that’s serious?
It seemed the participant did know that concussion was serious, yet this was downplayed in retrospect and at the time. Perhaps the lack of longer-term consequence meant that it was possible to see this event as less serious than it might have been at the time.

Two participants described injuries they did not consider to be severe at the time. However, they had ongoing impact (unresolved pain) and this meant these events become more serious. Thus, one characteristic of serious falls (independent from injury severity) was that the effects lasted longer; either in impact on current day to day life or in memory of day to day life after the fall.

The later participants in the study were asked to define what a serious fall meant to them. Their responses included making the assessment of seriousness with respect to longer term consequences and supported the link with injury severity; serious falls were described as those where bones were broken, or involving a lot of blood. Beyond injury there were other characteristics of seriousness, such as being “incapacitated” (Ida) or “having your function affected” (Margaret); these descriptors were more related to the concept of self-managing and independence.

Two participants put their falls in perspective in view of other life experiences. Charles felt even though he had experienced a large number of falls, some with injury (including being outside on the ground for 90 minutes on one occasion), that this was not serious in comparison to other incidents he had dealt with in his working life.

(P) There was blood and that... But it wasn’t so bad...

(I) Oh okay...

(P) Well I worked in [industry with high work-related injury rate] ... And that... well stuff in there... that was pretty serious... (Charles)

Gertrude reflected on her four falls in the context of her life span.
Thus, seriousness might be considered and perceived in the whole of life context; this whole of life context might include other experiences (as above), number of events across a life span (see above), and ageing (see 4.3.4) or impact on current daily occupations.

Figure 4.1 (p54) shows the continuum of falls and trips. The ‘because’ ellipse represents the participants’ reasoning that moves events from falls to trips and vice versa, and the top rectangle represents those events that are not considered to be either a trip or a fall. For example, it was not really a fall because I got up quickly, or it was a trip because I did not hurt myself, or it was a fall because I broke my arm, or it was not determined to be a trip or a fall. The general characteristics of a trip and a fall, as described by the participants, are shown. The change in injury severity over time is shown (dotted line), where a minor injury is unresolved and therefore moves the event into the category of a fall due to the consequences (injury that cannot be self-managed, or starts to have a longer-term impact on the participant’s ability to manage). The arrows at the bottom of the diagram show whether the participants were more likely or less likely to self-report their fall; get up by themselves; or minimise the fall event. Passive reporting e.g. a witnessed fall, occurred for both trips and falls.

4.4.3 Theme Summary

I chose not to define a fall from an internationally understood, health professional, or occupational therapy perspective, but to allow the participants to express their thoughts on how they defined a trip or a fall. I wanted to understand if they distinguished between trips and falls. In essence, participants classified an event as a ‘fall’ if the injury severity or seriousness (consequences at the time or subsequently) warranted it.

Some participants viewed some falls with minor injury as non-injurious as they did not impact on their occupational independence, or they were able to self-manage the after effects of the fall. Having a fall where the effects are not deemed to be injurious, serious or important means the older person is less likely to be of the view that the fall is of importance to anyone else, and be less likely to seek help or report a fall.
Injuries that were not considered to be severe were those that participants were able to self-manage or that did not have any lasting impact on their occupational independence. Injurious falls may incur severe injury but might not be classified as serious if there is no longer-term impact in the participant’s life i.e., occupational independence has not changed once recovery from the severe injury is complete. Seriousness trumps severity though, because it is the longer-term consequences that matters more than the severity of the injury at the time.

*Figure 4-1. Categorising trips and falls, and how consequences may influence what is labelled as a trip or fall*
4.5  Theme 2: Minimisation – don’t mention the ‘F’ words

The ‘F’ words were fall and fuss. There was a perceptible change in the interviews when we came to discuss falls compared with how freely participants talked about their occupational independence. In particular, the nine participants who reported falling appeared to find it challenging to think and talk about the details of their falls and why they would or would not tell someone about a fall. The first description offered was usually a pared-down version. I often needed to use more directed prompting than “what happened next?” in order to elicit further detail (see 4.5.1). In addition, repeated prompts were needed for the number of, as well as detail of, trips or falls. Some participants were aware they had experienced more falls than those they were able to recall and describe; especially if they had experienced a number of falls, or their falls were a number of years ago.

The pared-down description was also accompanied by a sense that falls were generally not something to fuss about; in effect, minimal impact (for the participant) meant that they essentially put the matter out of their minds and did not bother others with it (see 4.5.2). While falls might come up in casual conversation with contemporaries for example, again participants tended to deflect any fuss by giving minimal detail delivered in a ‘joking’ manner (see 4.5.3). Participants were also often able to find an explanation for a fall, in effect ‘explaining it away’ (see 4.5.4).

4.5.1  Wait …I also had this fall

This study did not put a time limit e.g. twelve months, on remembered falls events. Participants were asked about any trips or falls they had experienced as an older person. The nine participants who recalled falling were, with some prompting, able to give me some detail (when, where, how, what next) about one or more of their falls. The remaining participant, Arthur, did not recall having any falls even though the referring health professional had mentioned, when identifying Arthur as a potential participant in the study that he had fallen. Having experienced at least one fall was an inclusion criterion for the community based health professionals referring potential participants (see 3.5.1). Even though Arthur was unable to recall or discuss any falls he had experienced, his perception may reflect the population of people living alone, where some may have forgotten falling, forgotten specific details of their fall events, or he may
be experiencing some cognitive decline which might have reduced his ability to recall the fall event. This variability in recall is in line with existing literature that finds that recall of falls over time is variable (see 2.7).

For the nine participants that were able to recall falls, it seemed that some falls came to mind more readily than others. For instance, Ethel described two falls with no injury and two falls with minor injuries, as well as two other trips or falls outdoors for which she was unable to recall any detail.

(I) You’ve told me about four of the falls that you had outside…but you thought there might be a couple more

(P) Yeah there is… but I uh… I can’t remember that other ones…all I know is that I had about six falls outside… I used to remember them all… but I said... told you about three was it... no four...

(I) Yeah… that’s okay if you can’t remember the others...

(P) Oh… I used to remember them all... is that okay? (Ethel)

While a health professional might wish to know how many falls a person has had, it seemed it was harder or less important for participants to keep track of this. During the interviews, it was common for another fall to be remembered with further prompt. For instance, three participants remembered another fall just as the interview was drawing to a close. Daphne had stated three times during the interview that she had no other falls than the one we had discussed, yet when I asked once more before ending the interview:

(I) So you’ve talked to me about one trip or fall that you have had... would that be all the falls or trips that you’ve had, or are there any more?

(P) No there’s no more

(I) Okay um (talks over)

(P) I did... I was telling lies

(I) Ah okay

(P) Year before that I fell down an escalator in [place]

This event resulted in brief loss of consciousness, fractures and hospitalisation. It was not clear whether this participant had truly ‘forgotten’ this particular fall; which seems unlikely given the seriousness of the injury, or was reluctant to talk about it; she was
initially reluctant to talk about her other fall, which also resulted in considerable physical injury. Two other plausible explanations consistent with the study findings were that the mechanism of the fall (on an escalator, as opposed to a fall while walking) was not considered to meet the participants’ own ‘definition’ of a fall, or the event occurred far enough in the past that it was discounted.

It appeared that some participants viewed their falls as a singular past event; when that event was complete, no more thought was given to it. Some falls, particularly past non-injurious falls, were not memorable.

*Well it just went out of my head... You know I’d had a fall... Nothing happened...* (Carol)

In some cases, it may even be that the fall event is perceived as no longer relevant, or having any current ‘validity’.

*... but they don’t count cos that was years ago and cos I fell... well tripped* (Ethel)

While this participant was able to recall details of most of her falls she felt some did not count as they were “years ago”, even though she was over the age of 70 when they happened. Given her age at the time she fell, a health professional may have viewed these as an ‘older person’s fall’

The interview process; both the focus on falls, and the available time given to talk about them, may have prompted participants to remember more falls, or more detail about them, than usual. Ida prepared for the interview by writing down all the falls she could remember, noted she was surprised and “...was quite astonished when I wrote down how many it was”. It appeared that some fall events were recalled with clarity (with or without prompting) and less detailed or lucid accounts were given of other fall events. Further, it was not always easy to establish the chronology of falls if there was more than one; the most recent fall was not necessarily the most easily recalled or the most detailed account. Therefore, it seemed that what was remembered was influenced by a variety of factors such as the severity of any related injury, the perceived seriousness and consequences of a fall; this is congruent with the distinction participants made in section 4.4.2. Further,
labelling the event as a fall or not (see 4.4.1), may influence people’s ability to recall it. Inconsequential falls may lead the person to feel there was no reason to fuss about a fall, or tell anyone about it.

4.5.2 Nothing to fuss about

A non-injurious fall was viewed by participants as ‘nothing to fuss about’. Half of the participants talked about not wanting to tell others who might make a fuss about the fall, and they did not want to bother others. The sort of fuss participants wanted to avoid was other people suggesting they seek help when they did not think it necessary, or others wanting to try and look after them when (again) they did not think the help was needed. For example, Ethel said;

*I just got me self up... the people... the men were coming over to help me... but I didn’t need it, just got up and you know carried on with me business... what’s anyone going to do really... it was in town... so there was a lot of people there and they just want to make a fuss... but I don't... well I don't see that you know... I just get up and carry on*

Ethel was not concerned about having fallen, so found it difficult to understand why others should be fussing, when she was happy to minimise the event. While in general the participants talked about not wanting to make a fuss, there were times when they did deliberately seek help; this was more likely to be at time when they were injured or distressed.

The desire to avoid others fussing, or being bothered, extended to participants’ families. Joan banged and cut her head as a result of a fall, and later experienced symptoms of vomiting and headache. She was reluctant to contact her daughter (a health professional) immediately after the fall, as she did not want to bother her.

*(P) Me son came down and he said have you rung [daughter] up and I said no and he said well you should. So I rung her up to tell her. She came straight round. But I wouldn't have rung her up*

*(I) oh you wouldn’t?*
Oh well... Guess there’s nothing she could have done really. I know she’s only just down the road but no I don’t know I just... no I don’t know why I didn’t ring her... Just didn’t really want to bother her... Me son had to prompt me to ring... Yeah wouldn’t have rung her otherwise... Me son stayed there while I called her

why do you think you didn’t call her?

I don’t know... Just thought I could manage really... I didn’t want to put too much onto her... Cos she does enough as it is... You know she’s always here helping me... And she visits [participant’s husband] all the time... Yeah she just does a lot (Joan)

It seemed the son may have felt there was a reason to ‘fuss’ and his sister, as a health professional, could make a decision on whether any further help was needed. Joan felt she could self-manage and wished to minimise the effects of the fall.

Participants felt that their peers were less likely to make falls a focus of attention or conversation. For instance, Carol described her experiences of conversations among her contemporaries

Well I guess people don’t really want to make a fuss. They just say I’ve had a fall. We all say ‘oh okay’ or something like ‘are you all right?’... and then we don’t talk about it anymore.

Reassurance that the other person was alright, or if they were the person who had fallen reassuring others they were alright, decreased the fuss around a fall discussed with peers.

Throughout the interviews, I noticed the language participants used was suggestive of minimising the fall event and this was also potentially a way to reduce the associated fuss. Participants chose to say, for example, “a bit of fall” rather than “a fall” which appeared to distinguish a lesser from a more important event. Participants also downplayed the outcome of their falls making comments like. “But I didn’t hit my head anything like that” (Gertrude). Another linguistic clue was the use of “just” or “only” as a minimising term, signalling that nothing really occurred, and that particular fall was nothing to fuss over.

it was just a fall... You know

It was just a fall... Okay... what does that mean?
(P) Well that’s just it ...it was only a fall...that’s all really. (Gertrude)

4.5.3 Just a silly fall – bit of laugh really

Another minimisation, no fuss, linguistic strategy was the use of humour. Six of the ten participants mentioned ‘joking’ about their falls or “making light of the situation” (Ida). This may also be a strategy for downplaying the seriousness to themselves or others.

(I) Why do you think you joke about it?

(P) ...don’t really know.. I’ve had so many falls...if it’s a joke then ... well I don’t have to worry about it... you know ... it’s just something I make light of, well I don’t think it’s serious...I suppose it could be serious like breaking a leg or something. (Ida)

Participants were able to recount the fall as a funny story, putting themselves ‘outside’ the event, imagining how the fall might look funny to others “a bit like one of them TV shows where everything is a disaster but it’s funny” (Joan). Telling such a story could provoke a laugh in response:

(P) Oh just got myself up and carried on...well I had to get some dry clothes on... but just get up and carry on...

(I) Did you tell anyone about that?

(P) Oh yes probably the neighbours, well...they all laughed thought it was funny...

(I) Is it funny because....

(P) Because I hadn’t hurt myself yeah...

(I) Do you think it would be different if you had hurt yourself?

(P) Oh yes it definitely would be because they would be most concerned I know they would... (Margaret)

Joking about falls occurred mainly when participants were talking about their non-injurious falls or falls where there was minor injury. The distinction was made that if someone had injured themselves then people would be concerned about their wellbeing and not joking about the fall.

Joking was potentially a less serious way to tell the story of a fall, and perhaps deflected any concern or minimised any fuss or worry for others. Humour may also be a way of
expressing relief, or a way for participants to minimise or cope with the (potential) seriousness or severity of a fall (see 4.4.2).

4.5.4 Explaining falls, and explaining them away

Participants looked for explanations of why they fell. It may be that finding an explanation potentially minimised concern because the event became understandable. With trips, there was a reason for the fall (see 4.4.1), because they had caught their foot on something. Explanations for falling were more difficult because suddenly finding yourself on the ground when you were not expecting it was hard to make sense of. Margaret described a fall on her garden path (sustaining bruising, resulting in a hospital presentation). She felt there must have been a reason, and she gave a plausible explanation:

_Going crossways and my slipper must have caught the crack that’s the only thing I could think of and I fell flat on my stomach_

Advancing age was viewed by half of the participants as a contributory reason for falling, providing some kind of understanding for a fall event.

_Yes... because I have known people to say you know why it is as we get older why do we all fall? (Margaret)_

Similarly, Ethel who had fallen outside several times was able to advance a credible reason in “I reckon it’s the roads… because they [falls] are all outside”. In the absence of a known reason for a fall, creating a believable account had the effect of explaining the fall away – it became understandable in the participant’s mind, and had the potential to happen to anyone.

Betty who fell off a step ladder twice, explained her falls away by noting that it was her fault that she fell, as she climbed up onto the step ladder, almost as if falling may be an expected result for climbing on a step ladder. Other ways of explaining falls away included: the falls being years ago, only being on the ground for a few seconds, tripping on something, not being injured, not being as bad as a previous fall, being accident prone, being able to carry on with what they were doing, and preservation of ‘occupational independence’ and managing at home.
You know because I mean falling out there I didn’t really hurt myself only just banged my head... but I mean apart from that I could get up and walk and that... (Joan)

At times, the fall events appeared to “just happen” (Margaret) and the feeling was that nothing could be done. Two participants made the point that they could not prevent their falls if they did not know that they were going to happen.

... I mean you can’t prevent them can ya... you don’t want to fall ... it just came that night... well I’d just come home from Christchurch and I was a box of birds... you know... until this happened... it wouldn’t of happened if I’d known it was going to happen... but I didn’t... (Daphne)

Participants looked for and generated reasons as to why they might have fallen. Some of those reasons included advancing age and the ‘fact’ that older people are expected to have falls. Participants also used strategies to explain why their fall was not really a fall (see 4.5.4), if there were no immediate or ongoing consequences of the fall on their occupational independence.

4.5.5 No reason to see the doctor – there’s nothing wrong

I specifically asked participants what they thought might happen if they reported a fall to their GP. Reporting a non-injurious fall to a doctor had not even been considered as an option for some, which seemed to reflect a belief that there was no need to visit (or bother) a doctor if you do not have a moderate injury. Three of the ten participants said that their GP knew about a fall that might otherwise have not been reported; two because they sought treatment for unresolved pain after a fall, and the other fell on the way to a doctor’s visit and arrived with a bleeding cut. Participants also had experiences of visiting their GP after a hospital admission following a fall, where the GP would usually have received a discharge letter from the hospital. Carol distinguished between mentioning the fall to her GP, when visiting the GP for another (more legitimate) reason, from making an appointment to report a non-injurious fall that did not require the doctor’s help.

For those that fell, did not sustain an injury, and were able to get up, the perception was that they had nothing ‘wrong’ with them the doctor could fix and that would make a
doctor’s visit legitimate. In addition, such events tended not to be categorised as a fall (see 4.4.1), potentially further decreasing the reason to visit the doctor.

(I) You mentioned before that you wouldn’t tell the doctor if you had a fall… What’s your reasons for not wanting to tell the doctor?

(P) Why worry the doctor… I haven’t broken anything… You know that’s the way I look at it… Don’t know if that’s the right way… I don’t know… if I’d broken a bone or something like that… It’d be a different story… You know I wasn’t hurt (Gertrude)

Carol, a retired health professional, added that (in addition to providing treatment for consequences of a fall) the GP could also investigate possible causes. However, Carol had not discussed a recent non-injurious fall with the doctor, and felt that there was no need to. While Carol understood the potentially broader role of the doctor in falls management, including investigation of causes, her over-riding perception was that a non-injurious fall was not important enough to bother the doctor with.

Three participants believed they knew what the doctor would say in response to a report of a non-injurious fall. Ongoing consequences of a fall; notably unresolved pain, was considered a legitimate reason to visit the doctor. Pain was only a legitimate reason if self-management failed; this meant the reporting of a fall was delayed. Two participants who visited their GP for this reason stated they were told that nothing was broken, and advised to take Panadol.

Well they didn’t even examine it or anything the doctor just seemed to accept that it was just old age or something… Just put her on Panadol and that’ll do the job or something… but my shoulder is still bothering me a bit. And my poor son often has to come and give me another rub with his Zen (Ida)

Neither participant perceived they had a tangible outcome of the GP visit because both continued to have ongoing issues with shoulder pain. There was a perception that minimal attention was paid to the impact of the fall e.g. little investigation, and the basic advice offered was no more than their existing self-management.

Overall, seven participants were unsure of what the outcome might be, or perceived that there would be no useful outcome if they reported a fall to a doctor. While doctors might
arrange tests or manage symptoms, it was perceived the most likely outcome was standard advice like “be careful” (Gertrude) or “take Panadol” (Ida).

While injury or ongoing symptoms were generally seen as a reason to tell the GP about a fall, this was tempered by a feeling of not wanting to bother the doctor. Doctors were perceived as very busy, and a precious resource to be used judiciously for high priority health issues; on the West Coast there has been a shortage of doctors for a number of years. Another issue that influenced reporting was a lack of continuity of care, which was allied to the doctor shortage e.g. use of locum doctors

> It’s always a different doctor so they don’t always know. (Betty)

Ida, who described twelve falls in total, expressed concern about the consequences of frequent reporting of falls to her doctor. She described a mixture of injurious and non-injurious falls, some requiring hospital admission. However, she had not reported non-injurious or minor injury falls to her GP. She worried that, despite how well she was managing at home (i.e. independent with personal cares, meal preparation and shopping, only requiring assistance with house work), frequent reporting to her doctor may raise concerns that she was unable to manage.

> (I) if you tell a doctor that you’ve had a fall are you worried about what they might think or what might happen next?
> (P) No I don’t know if I am all that worried about that yet... I think that if I was going to them too often in too short a time... I might get a bit worried about it though because they might think well she’s just not capable of being left in a big house like that on her own.
> (I) Right – that sounds like that’s important to you
> (P) yeah... To stay in my own home... Yes definitely. (Ida)

Thus, minimising the number of falls reports was potentially a means to reduce the likelihood of a challenge to, and retain her perception of, her occupational independence.
4.5.6 Theme Summary

Participants found it more difficult or challenging to talk about their falls than their independence. Frequent prompting was needed to elicit greater levels of details about their falls and to aid in recalling falls. Variability in falls recall was shown across participants, as well as variability within individual participant’s recall of their falls.

Participants did not wish to fuss about a fall and wished to minimise any fuss from others around a fall that did not require immediate medical attention. Strategies used to minimise the fall included; not talking to others about a fall, to mention the fall briefly, or to use joking as a way to deflect any concerns about the fall, for both for themselves and others. ‘Explaining falls away’ was another strategy used to minimise falls and in some cases the legitimacy of falls e.g. explaining why some falls did not count as falls or they were explainable, often perceived as not preventable reasons for falling. Further, reasons to report a fall to a GP were minimised or considered not valid, as participants did not see the point in seeing their GP, or wish to make a fuss or bother the GP. A GP visit was generally seen as unnecessary if they could self-manage or thought the GP would not recommend anything more than what they were doing for themselves.

4.6 Theme 3: Sharing and acquiring knowledge about a fall

This study had a specific focus on finding out who older people talked to about their falls, and what influenced them to report their falls (see 1.2). Often when falls reporting is mentioned in the literature it is discussed in terms of reporting a fall to a health professional. However, as the study progressed it became clear that very few falls the participants had experienced were reported to a health professional, and it was others (non-health professionals) who were more likely to be told or find out about a fall. Who knew about a participant’s fall, and how they gained that knowledge, were both linked. The two main influences on who gained knowledge about a fall and how they got to know this were: (1) the relationship between the ‘other’ and the participant, and (2) the context in which the participant fell.

Who got to know about any single fall varied by participant. In some cases, the participant fell (unobserved) and was able to get up without assistance and did not have an injury they thought needed treatment and they chose not to disclose their fall to
anyone; in these situations, the knowledge of the fall remained with the participant alone. However, in other circumstances the fall was observed, or the participant needed help e.g. to get up, for an injury, and others did get to know about a fall. The range of those who knew about falls included: neighbours, friends and others in their age group, paid and informal carers, family, and health professionals; such as ambulance services, hospital emergency and ward staff, general practice doctors and nurses, OTs, and physiotherapists. In addition, all the participants lived in a small community and so other citizens often got to know about the fall in any case.

The way others gained knowledge of a fall fit two patterns: active reporting and passive reporting. In active reporting, the participant made a choice to tell someone about their fall, and they had some control about who had knowledge of their fall and how they obtained that knowledge. For example, a participant who fell (unobserved) chose to tell a family member. However, sometimes this felt more like a forced choice.

(I) You mentioned that you told your daughter about your fall... what was your reason for telling your daughter?

(P) Oh well if I didn’t tell her someone else would if they got to know (laughs) (Ethel)

In contrast, with passive reporting the participant did not have any control over who gained knowledge of the fall, at least initially. Passive reporting included situations where the fall was witnessed by someone else, or the result of the fall was witnessed e.g. found on the ground unable to get up, or visible bruising or cuts. There may be situations where both passive and active reporting occurred. For instance, a person falls and uses their personal alarm (active choice), the ambulance attends and may decide to take the person to hospital where emergency staff then become involved (passive), and the person later tells friends or family about the fall event (active). People that witness falls, or the consequences of a fall, are potentially important ‘persuaders’ of the person who has fallen, in terms of seeking help. Enquiring about visible bruising or cuts may also persuade an older person to disclose a fall to someone else.
4.6.1 Telling somebody else about a fall

Telling someone else about a fall occurred within the wider context of ‘minimising’ falls (see 4.5), such as the general reluctance to talk about falls, wanting to avoid fuss, and using minimising language and humour. Interestingly, eight of the ten participants stated that they had no concerns around telling anyone that they had fallen. When asked if they were concerned or fearful about telling others a typical response was “No, ooh no that wouldn’t worry me no” (Margaret). Equally, participants also stated they did not want anyone to know. Some participants had a number of falls that they did not tell anyone about (see Table 4.1).

Not telling others about a fall because it was not a source of concern to the participant was a common reason for not telling anyone else. This was congruent with not wanting to have others make a fuss about a fall (see 4.5.2) and minimising (see 4.5) or normalising a fall.

(I) if you fell over and you weren’t injured, would you tell anybody?

(P) If I wasn’t injured no... No I wouldn’t do that... I get these things all the time...

(I) Right when you say I get these things all the time do you mean that you fall all the time...

(P) Oh yeah... Here and there... In the garden and that... (Charles)

It was easier to tell no one if the fall was not witnessed, the participant was able to get independently, and there was no injury requiring help and/or no injury visible to others. It seemed participants were less likely to talk about or report this type of event.

Figure 4.2 (p. 71) shows the likely order in which others might get to know about a fall if it is the type least likely to be talked about, i.e. self-managed non-injurious fall, or injurious fall not requiring immediate medical attention. In some cases, the participant may choose not to tell anyone about the fall and the knowledge stays with them alone.
When a participant did make an active choice to tell another about their fall it was most commonly mentioned in casual conversation with their friends, acquaintances or neighbours.

(I) What is your experience of reporting a fall to someone or telling someone about your trip or fall?

(P) Oh it’s just normal conversation and... don’t make too much of a thing about it

(I) Right, so that’s amongst other people your age?

(P) Yes, just my friends and neighbours (Margaret)

Half of the participants talked to their friends or neighbours, and in most instances the friends and neighbours were described as being people that were close in age to them. Some participants also reported that some neighbours and friends also experienced falls themselves. Joking about falls was reasonably common between participants and their friends and neighbours (see 4.5.3).

Beyond friends and neighbours, the next most likely group to be told about a fall were carers or family, with carers more commonly mentioned as a recipient of the information than family. The participants saw their carers frequently and in fact often referred to their
carers as ‘friends’ (see 4.3.4). One participant talked about not knowing who to tell, and on discussion stated that if she told anyone she would probably tell her carer. Two participants felt that the carer would need to tell someone else. However, none of the participants told me that they knew that their carer had mandatory reporting requirements for falls; although the majority of care agencies do.

Family were sometimes told, less frequently than carers, and with more reservations. Not telling family, may in some instances, reflect that only half of the participants had family living locally, whereas all of the participants had care needs in some form. Another reason for sometimes not telling family was that participants did not want to “worry” or “bother” family (see 4.5.2), as they were viewed as having their own busy lives. Two participants said they only told their family about a fall quite some time later. Gertrude told me about a fall that she had not reported to her family, and then checked later to make sure that I would not tell them.

The health professionals (in the outermost layer of Figure 4.2) often were not told about a fall at all. The majority of the participants stated they would not report a non-injurious fall, or an injurious fall that was not broken bones. The doctor was viewed as someone who only played a role in fixing injuries and if their help was not needed for this then they were not told (see 4.5.5).

(I) So, have you spoken to a doctor or a health professional about that fall at all?

(P) No I don’t need a doctor... I didn’t break anything

(I) So, you didn’t need a doctor... (Talks over)

(P) Not that time no...(Gertrude)

4.6.2 Context may determine who knows about a fall and when

Where somebody falls also has an influence on who finds out about the fall and how they gain that knowledge. If the participant fell in a public area, or in view of others that fall was ‘unavoidably’ or ‘passively reported’ as other people witnessed it. Having to request assistance in the event of not being able to get up, whether that involved calling out to
neighbours or calling for an ambulance, were other mechanisms for other people to become involved. For example,

(I) You said you were on the ground for about an hour and a half when you couldn’t get up from the garden... Before [neighbour] came... How long do you think you would wait for before you pressed the alarm?

(P) Almost certainly is that if [neighbour] didn't return I would have pushed the alarm

(I) Right okay

(P) when I was just laying there because I knew [neighbour] was coming back approximately at this time...and uh...yeah...I knew... (Charles)

Continuing to talk about the same fall Charles almost seemed to feel, his neighbour would expect him to seek help from him first, rather than use his alarm.

(P) And uh... It came to me that if was waiting for [neighbour] and [neighbour] come down... Then the people arrived and... whatever they’ve got... Then [neighbour] would say why didn’t you call me?

(I) Right so you’re saying if you used the alarm first... That [neighbour] would be saying... Why didn’t you call me first?...

(P) Yeah.. Yeah he would be

It seemed that participants talked more easily to me and to others, about a fall if someone had been present at the time of the fall, or provided assistance, as the fall was already ‘out’. Nevertheless, the participant may still decide not to tell anyone else or actively report (e.g. to family members), but in a small rural town it can be difficult to keep knowledge of witnessed falls events contained.

Figure 4.3 (p. 74) shows the likely order in which others might get to know about a fall if it was an injurious fall and required immediate medical attention, or was attended by ambulance services. Nevertheless, as noted earlier, some participants described falls where it sounded like immediate medical attention was appropriate, but chose not to tell others and the knowledge of the fall stayed with the older person alone.
Often the first group that gained knowledge of an injurious fall were the health professionals, which was opposite to Figure 4.2. St John ambulance services were usually the first health professional group to be aware of a potentially injurious fall; all participants had a personal alarm at the time of being interviewed, but not all the participants had an alarm at the time of each of their falls. If a hospital presentation was required, then further health professionals were involved, and this generally resulted in a report back to the GP. The GP may even be involved with hospital level care as, in this large rural area with small population, local GPs also covered the local hospital beds outside of Greymouth.

A dashed line between first and second layers of Figure 4.3 shows that who knows about the fall first might be a health professional, or possibly a neighbour or member of the general public. If a neighbour was summoned to provide help they could be first to know, or if the fall was in a public place, then other citizens witnessed the fall and were involved first. Just under half of the participants called out to their neighbours as their first point of assistance, with three of those participants subsequently seen by the ambulance.
What was consistent in the accounts of falls where help was needed was that either family, friends and the carers were likely to find out last. Family are generally called as next of kin in the event of a hospital presentation. Friends and acquaintances will likely hear about the fall, through local contacts. The carers will generally hear about a fall through their agency, especially if the person has been admitted to hospital.

4.6.3 Theme summary

Telling others about a fall or others gaining knowledge of a fall or is often dependent on where the person has fallen and the consequences and impact of the fall on the older person’s life. The older person may choose to actively report to a fall to their friends and family. Active reporting to health professionals was less common. Health professionals more commonly came to know (passively) when the fall resulted in the need to emergency services, or medical services for immediate or delayed consequences.

4.7 Chapter Summary

Participants valued their independence and described themselves managing in what I termed as ‘occupational independence’. Falls that did not have an impact on their independence, or that they self-managed the after effects of were not considered to be falls. Falling with an injury, or more specifically severity of injury, also determined whether an event was classified as fall.

An initial reluctance to talk about falls was shown with prompting needed to elicit further details. Variability in falls recall was shown across participants, as well as variability within individual participant’s recall of their falls.

Minimisation of fuss following a fall was described by participants. Talking to others about falls was something that was mentioned briefly, and strategies such as joking or ‘explaining away’ their falls help to minimise any fuss and deflect any concern shown by others.

Falls were not regularly reported to their GP; however, falls were reported to friends and neighbours, and family to a lesser extent. Overall the participants did not see a reason to report their falls.
5 Chapter Five: Discussion

5.1 Introduction

I undertook this research to understand the reasons why older people did or did not report falls, and why they held these perceptions, in order to inform development of a falls service that aimed to reach older people at risk of falls. Taking a qualitative descriptive approach, I interviewed ten older adults living alone in the community about their experience of falls and reporting of falls.

The themes encapsulated three patterns in the data that helped me understand more about falls reporting, namely: (1) consequences of a fall helped determine what participants classified as a fall, (2) the participants minimised the personal effect of any falls, and (3) participants did tell others about their falls, or others came to know about them e.g. the fall was witnessed, but health professionals rarely came to know.

In this chapter I focus the discussion on findings that illuminate some likely influences on the lack of falls reporting, to health professionals. First, participants did not interpret their fall, by internationally accepted definitions, as a fall. Second, participants did not see a reason to actively report most falls events, unless the severity of their injury warranted medical attention. Both influences are embedded in the participants’ perception of themselves as ‘managing’, and being occupationally independent. Further, the chapter includes reflections on my experiential learning through doing this research, and some of the strengths and constraints of this study. The chapter finishes with consideration of the clinical implications that this study has for reaching those who may benefit from fall prevention services, and recommendations for future research are given.

5.2 Defining a fall

As an occupational therapist (OT) that had worked in the community for over 20 years, and had talked with numerous older people about falls, I was taken aback that, within the research setting, what I heard was that the participants viewed falls very differently to me, to the extent that what I would label a fall, they would not. If I, as an OT, used the World Health Organization (WHO) definition of a fall then I considered that the participants described falls to me that they did not classify as falls. This suggests that
while it might seem that what constitutes a fall is common-sense and widely understood, it is plausible that older people have different perceptions of what constitutes a fall. Thus, I was pleased that I had made the *a priori* decision when planning the interviews not to start by defining a fall for the participants, but let them express what they thought. Indeed, their responses helped me understand more about why a fall might not be reported; the event was not seen as a fall.

Having an agreed definition of a fall is important for valid epidemiological and intervention research to enable comparison between study findings, collating findings for use in clinical guideline developments. (Gibson et al., 1987; Hauer et al., 2006; Lamb et al., 2005; Skelton et al., 2007). Even so, it appears there is still not a single specific definition that is used in falls research (see 2.5). A systematic review of falls definitions used in randomised trials noted that of the 90 papers included only 17 studies used an internationally accepted definition, and 11 of the 17 made amendments to an accepted definition (Hauer et al., 2006). This high rate of amendments suggests that existing, accepted standard, definitions are not adequate or accurate, and do not meet researchers’ needs. The need for a clear falls definition, for research, continues to be advocated for (Gillespie et al., 2012; Mayo & Figueiredo, 2016; World Health Organization, 2007). Further, if falls definitions used in research are not intuitively or universally understood by older people, this poses a problem in clinical practice because cross talk may occur between health professionals and older people.

The WHO has a shorter, and a more extended, definition of a fall. These definitions along with definitions from the Prevention of Falls Network Europe and Outcomes Consensus Group (ProFaNE)(Lamb et al., 2005), and Frailty and Injuries: Cooperative Studies of Intervention Techniques (FICSIT)(Buchner et al., 1993) are probably the most widely used of all falls definitions in research and clinical practice. The WHO website states that a fall is “an event which results in a person coming to rest inadvertently on the ground or floor or other lower level” (WHO Media Centre, 2016). The similar, but expanded, definition in their Global Report on Falls Prevention in Older Age, is that a fall comprises “inadvertently coming to rest on the ground, floor or other lower level, excluding intentional change in position to rest in furniture, wall or other objects” (World Health Organization, 2007). However, neither of these definitions is consistent with how the
participants in this study defined a fall (see 4.4.1); my participants were more focused on the consequences and outcomes of a fall, and the impact on their occupational independence, than where they ended up.

It is unclear what evidence base the WHO definition was based upon. For instance, it is not clear if definition development included consultation with older persons, or drew on qualitative studies of older persons’ perceptions of falls. It seems the definition is based on work from the Kellogg Report (Gibson et al., 1987), and later refined by the Prevention of Falls Network Europe and Outcomes Consensus Group (ProFaNE) in 2005 (see 2.5). It is of interest that both the short and longer WHO definitions are referred to within the literature as ‘the WHO definition of falls’. However, unless one is aware of the referencing, it is unclear which definition has been used. Having slightly different definitions can influence inclusion and exclusion criteria (of participants, and what is considered a fall) and therefore affect the outcomes of a study Wolf et al., (1996), and reduce comparability between studies.

There is little literature describing a definition of a fall from an older person’s perspective (Zecevic et al., 2006) and this may contribute to the development of definitions inconsistent with the understanding and language of older persons. Further, the ProFaNE Consensus group noted that older people and health professionals differed in their understanding of what a fall was, and this may also be variation across different cultures (Lamb et al., 2005). An implication of this is that if the definitions used in research and clinical practice are developed by health professionals, the content and language reflect their perspective and not those of older people. It is possible that researchers and clinicians may wish to retain a simple definition such as that proposed by the WHO or the ProFaNE Consensus group, but if such a definition is to be used then additional explanation or some guidance on how to ask older people about falls is needed to improve the accuracy of information gained from older people. Therefore, studies such as that reported in this thesis assume some importance in trying to develop a definition, or explanation, or set of questions that may be used to find out about falls, with utility in both research and clinical practice.
The need to simplify a definition for use within a clinical setting has been noted (Dickens et al., 2006; Skelton et al., 2007). The ProFaNE Consensus group has recommended that asking about falls needs to be done in a way that is understood by lay people, such as “In the past month have you had any fall including a slip or a trip which you lost your balance and landed on the floor or ground on lower level” (Lamb et al., 2005, p. 1619). In contrast to this Dickens et al. (2006) advocates for simply asking an older person “did you fall?”, suggesting that older persons’ responses to this question is adequate within a clinical setting.

These recommendations are not fully supported by the data from my study. First, the simple question suggested by Dickens et al. (2006) relies on an older person and health professional understanding the same thing by the word ‘fall’, and this does not seem to be the case. Second, while Lamb et al. (2005) expand on what is meant by a fall (to include trips and slips, which does reflect data from my participants) they do not include any explanation that this is regardless of whether the fall, slip, or trip has resulted in any injury or not. Third, Dickens et al. (2006) imply a single question will be enough to elicit the information. This differs from the findings presented here. In this study participants needed multiple prompts to discuss their falls in detail (see 4.5.1). However, as Dickens et al. (2006) undertook their study in emergency departments (where people had presumably presented to hospital with injury) and I interviewed participants at home in the community, it might be that the difference in context alters the question that can be successfully used to elicit information about falls.

In summary, it is possible that the way a fall is currently and commonly defined by health professionals and researchers, is not serving its purpose well because it is not well understood or is misunderstood by those who report falls, namely the older person. The WHO definition focuses on the attributes of a fall, which for research offers some discrete criteria to decide whether an event is a fall or not. The ‘lay language’ question outlined above (Lamb et al., 2005) has the advantage over WHO definitions in that it includes the words ‘slip’ and ‘trip’ as well as ‘fall’, which may improve understanding by older people. However, none of the definitions or suggested questions to elicit information about falls appears to go far enough to gather accurate information, because they lack the element of consequences. The participants in my study were very unlikely to call any
event that did not have consequences, such as needing medical attention, a fall. In describing their falls event, the emphasis participants in my study gave as to why the event happened, e.g. they ‘tripped’ on something, and the consequences of the event, e.g. bleeding, or a broken bone. The deficiencies in current definitions led me to consider whether it might be useful to think about a fall as a ‘concept’.

5.2.1 Understanding falls as a ‘concept’

A fall could be viewed as a concept that has antecedents, specific attributes and consequences. A concept is defined by the Collins English Dictionary as “the conjunction of all the characteristic features of something” (2017). In order for the concept of a fall to have occurred, it could be considered in terms of antecedents, (what happened prior to the fall), and consequences (what happened after the fall) and attributes (does this meet certain criteria in order for it to be labelled a fall. e.g. ending up on the ground, having an injury, bleeding). While my study was not a concept analysis, I found that thinking about falls in terms of antecedents, attributes and consequences was a helpful way of understanding the differences in the way participants in this study thought about a fall, and how their ‘definitions’ differed from mine and the WHO definition.

When asked to define falls my study participants found it hard to do so, and tended to describe their falls, rather than provide a definition (see 4.4.1). Their descriptions focused mainly on the consequences of the fall in relation to their occupational independence, or on their injury and its impact on their independence, with some participants also describing the antecedents to their fall. Zecevic et al. (2006) similarly found that where older people defined falls they tended to associate falls with antecedents and consequences, and gave descriptors rather than a definition per se. Further, in the present study it seemed that the participants thought less about where they ended up e.g. on the ground or at a lower level, rather than why they fell, antecedents, or what happened after the event i.e. consequences, when deciding whether to label an event as a fall.

External antecedents of a fall were described such as objects in unexpected places, tripping on twigs, or uneven pavements. Having an external antecedent that could not be avoided also explained the fall event, meant that the event was more likely to be called a trip than a fall. Ageing was also considered an antecedent, in that the participants felt
falls happen as one gets older and therefore it was “just one of those things” and something out of their control. Similar findings were identified by Dollard and colleagues (Dollard, Barton, Newbury, & Turnbull, 2012) whose participants noted that bad luck, freak accidents, unpredictable occurrences or environmental factors, such as uneven footpaths, were explainable reasons for falling; therefore, they felt that they could not be held responsible for falling. However, in contrast to my findings, despite their participants being of a similar age, and eight of their nine participants having experienced a fall, their participants stressed that falling was not due to ageing.

One’s own actions were also considered an antecedent. Inattention or doing something ‘silly’ was described by my participants to be a causal factor for some falls. In these cases, participants stated that the fall was due to their actions such as not paying attention, rushing, or climbing on a step ladder, and was their responsibility. However, because the reason for the fall could be explained, it tended not to be classed as a fall in their minds. Dollard et al. (2012) also noted their participants took responsibility for explainable falls as a result of their own actions, shying away from the idea that there was something intrinsic that caused their fall, such as poor balance or decreased vision.

In terms of consequences of a fall, the participants described both injurious and non-injurious falls, with the majority of falls being non-injurious. In addition, most of the individual fall events did not have consequences for the participants’ level of independence; they continued to manage at home and remain occupationally independent. If the consequences of a fall are such that older people are able to maintain their occupational independence, then it is possible that the event does not meet attributes of a fall in their mind i.e. the event requires a bothersome consequence to be classed as a fall.

Returning to the WHO definition of a fall “A fall is an event which results in a person coming to rest inadvertently on the ground or floor or other lower level” (WHO Media Centre, 2016), it is clear that the most important feature of the definition is an attribute; that is, landing on the ground or lower level. However, participants in my study described events in which they had landed on the ground or lower level but did not call these falls. Having an explainable antecedent (e.g. inattention), or lacking consequence (e.g. injury,
effect on occupational independence), the attribute of landing at a lower level was insufficient on its own to call the event a fall. Thus, the participants had a broader concept of a fall that influenced their naming of these events, and this was in contrast with my health professional focus on a single attribute i.e. where they landed.

5.2.2 Understanding the full picture

In the absence of an agreed fall definition, or congruence between health professional and older person’s understanding of what a fall is, it seems likely health professionals will need to elicit sufficient detail about such events in order to assess falls and falls risk. In thinking about participants’ understanding of falls it was noted that this sample were substantially older (aged between 80 and 94, with a mean age of 86 years) than the ‘cut off point’ for ‘older’ people at 65 years. It is possible that this older age group may potentially have multiple medical conditions, and falls may not be a high priority or something that troubles them on a daily basis; such as pain, fatigue or breathlessness.

It was notable to me in conducting the interviews how much I needed to prompt participants to elicit further details about falls, and why these were reported or not. This level of prompting was needed even though the context for the questions was a study about falls. Participants often gave minimal detail and pared back descriptions of their falls and I needed to dig deeper and provide further prompts to get further information, or help the participants recall falls.

It is unclear why so much prompting was needed for the participants to recall or talk about their falls. Reluctance of older people to talk about falls has been noted in the literature, suggesting it may be an emotive topic (Hanson et al., 2009). However, in the present study the participants did not appear reluctant to talk about their falls, rather they did not appear to consider their falls to be relevant or important enough to discuss in detail, giving minimal details when first asked about their falls.

Not wanting to make a fuss (see 4.5.2) was another reason that participants did not discuss their falls with others. As they did not view their falls as important, it was difficult to understand why others would make a fuss over their falls. Even when the topic of falling came up with contemporaries, minimal discussion was had, other than peers being
reassured that the other person was alright, or if they were the person who had fallen, reassuring others they were alright. In accordance with the present results, previous studies have demonstrated that falls were viewed as a trivial matter and not important enough to discuss with a doctor (Dickinson et al., 2011) or not serious enough to warrant seeking help or discussing with the GP (Dollard et al., 2014).

It is likely that there is a fine line here, because over prompting may cause the participant or patient to not respond, or respond with an answer they think the interviewer or clinician is looking for. Nevertheless, it seems some prompting may be needed in many cases as merely furnishing older people with a definition of the word ‘fall’ may be not be enough for the health professional and older person to have a common understanding of what type of event, or how many, has occurred. It could be considered that if the definition of a fall provided to an older person only focuses on the attributes of a fall, then the health professional will then need to cover the entire aspect of the event; antecedents, attributes and consequences to have an understanding of why the older person has considered, or not considered, this to be a fall.

5.2.3 Summary

A fall is a complex concept that is still not accurately described in a way that is congruent with, and fully encompasses, the understanding of researchers, clinicians and older people. Delineating the concept warrants further attention, and any proposed definition needs to incorporate the older persons’ perspective in order for falls reporting to become more valid and better represent older peoples’ experience in both clinical practice and research.

While a standard definition is important within research settings, in the clinical setting a health professional may need to elicit more detail e.g. ‘the story’, and be open to using language such as trips and slips, as well as ‘falls’, and use of qualifiers e.g. without hurting or injuring yourself, with the key being understanding that different perspectives and different language may be used by an older person, so falls can be discussed in language that is meaningful to them.
Exploring the detail of fall events with participants, and listening with a ‘researcher’s ear’, challenged my previous understanding of falls reporting. Fortunately, I had taken an open and curious approach to falls events and asked participants to describe these. My surprise at the contrast between my interpretation of a fall and the perceptions of the participants was a catalyst that moved me from my original clinical position of ‘why don’t they report falls?’ to have an understanding of ‘why they may not report falls’.

5.3 Falls risk and reporting

Aside from any misunderstanding about the definition of a fall, and the contribution this might make to non-reporting of falls, the other main influence I found on non-reporting was the way the participants thought about falls from a viewpoint of ‘managing’. The participants considered themselves occupationally independent. They were all community dwelling with some support for daily tasks. They were clear that they did not want to lose this independence, and this might have contributed to not wanting to report a fall. However, what seemed more evident to me in the way participants talked, was their feeling that there was not any reason to report a fall that did not require anything to be fixed (such as a broken bone, see 4.5.2) or did not change the way they were ‘managing’ to avoid falls i.e. manage risk, or their level occupational independence after a fall. Falls were seen to be important mainly due to the consequences, rather than the act of falling itself; if the consequences of a fall did not appear to have any immediate or longer lasting effect on occupational independence this endorsed non-reporting. It also accorded with the participants’ desire to avoid any sort of fuss (see 4.4.2, and 5.2.2).

5.3.1 A mindset of managing

The participants considered themselves as physically competent and occupationally independent. Simultaneously they were able to distance themselves from being at risk of falls, or from acknowledging a fall (if this is seen to be a symptom of not managing) as this may be at odds with older peoples’ perception of themselves. It is also possible there is some stigma attached to falling, where older people may feel stigmatised as a result of falling and being labelled a ‘faller’ and reporting a fall attaches that stigma to oneself (Hanson et al., 2009) (see 2.7). Therefore, older people may be reluctant to report and discuss falls as it may portray them as different to their contemporaries.
In addition, a common theme in the falls literature is fear (Clemson, Donaldson, Hill, & Day; C. Hughes, Kneebone, Jones, & Brady, 2015), and fear of falling in particular (see 2.6.2). A falls incident or fear of falling (even if one has not fallen) can induce fear (Kumar et al., 2014; Lawson, 2014), including fear about life changing implications following a fall (Bailey et al., 2014) such as the fear of being seen as ‘not managing’ and having to move into institutional care.

Going into this study I expected that the participants would express a fear of falling and possibly link falls and the consequences of falls with the concern or fear about having to go into residential care, and this may be a possible reason for not reporting a fall. While the participants spontaneously discussed going into care, they did not align the need for residential care with falls specifically. Going into care was seen as the outcome of occupational dysfunction and not being able to manage overall, rather than not being able to manage following a fall. It may be that the reason I did not find a fear of falling in this sample, was my participants were community dwelling older adults, who lived alone, who saw themselves as occupationally independent and managing in the community. They may have had a way of thinking about themselves that focused on managing rather than worrying about not managing.

Thus, distancing oneself from falling, using strategies such as explaining falls away (see 4.5.4) or not naming an event as a fall (see 4.4.1) or presenting a fall as a joke or with humour (see 4.5.3), is understandable in a context of managing within an ageing body, avoiding stigma, and not living fearfully. Use of distancing mechanisms, in a way that attributes a fall to chance, allows an older person to identify themselves as a person who does not fall, (Ballinger & Payne, 2002; Hanson et al., 2009), dissociating themselves from others that are frail, elderly, or ‘at risk’ (Hanson et al., 2009). Dissociation enables the older person to present an identity that is considered desirable to others, and construct an identity for themselves which matches their own ideal self (Baumeister & Hutton, 1987).

In researching threats to one’s identity (Petriglieri, 2011) proposed that individuals may recognise an experience as threatening to their identity, assess its impact, and then decide on a response. This could suggest that in the case of non-injurious falls, or falls that were
able to be self-managed, the participants assessed the impact of a fall on themselves, and if they were still managing, their response was not to label their fall event as a fall, as they felt it had limited impact for them.

I did not directly ask participants about their perception of their risk of falling. However, they talked about some reasons why they were more likely to fall e.g. poor vision, decreased mobility; and some of the strategies they used to reduce falls risk e.g. using hand rails. Their evaluation of likely catalysts, and their strategies, echoed to a large extent the factors I might have asked about if I had visited them as an OT to do an environmental, occupational, and falls assessment. Their risk reduction strategies were congruent with their evaluation e.g. I use a walking stick outside because I am more likely to fall due to my poor balance if the ground is uneven. Thus, perhaps knowing they had given the matter of falls risk some thought and instituted some changes to reduce risk that made sense to them, and they remained independent, there was little perceived value in reporting a fall because they were doing all they thought could be done.

In a similar vein, a study based on older people’s experiences and views about advice on falls prevention, Yardley and colleagues (2006) suggest that older people may reject the idea that they are at risk of falling, based on their optimism around their capabilities. Bunn et al. (2008) also similarly found that remaining independent and autonomous were important to older people, and they wished to make their own decisions and determine their own risks for falling. Older people may view that reduction of falls risk strategies or falls prevention interventions are ‘common sense’ and they ‘know’ what they need to do to manage their risk of falling (Child et al., 2012). This view was echoed by some participants in the way they viewed their personal risk of falls.

From my professional perspective as an OT, the risk of falling is a potential threat to the occupational independence, so prized by my participants. If the falls risk is high, then more falls are more likely with consequent increased risk of injury and deleterious impact on independence. In a qualitative study of therapists (OTs and physiotherapists), and older people with fractured hips (Ballinger & Payne, 2000), the authors reported that therapists viewed falls as a preventable event. Therapists positioned themselves within a risk discourse, as experts in assessing risk factors for falling, identifying a number of risk
factors that may help prevent falls. Older people were seen to position themselves within a moral discourse which highlighted their abilities, attributes and qualities. Likewise, participants in my study wished to highlight their abilities, and expressed in their perception of themselves as occupationally independent and physically competent. They were concerned about the risk to their personal and social identities, and reporting a fall or being at risk of falling, challenged these self-perceptions. McMahon and colleagues (2011) suggest health professionals could reframe older people’s risks of falling in a way that was meaningful to them. Reframing falls risks avoids direct messages advising older people they are at risk of falling and focuses on maintenance of abilities, including balance, strength and remaining independent. This strategy would align with my participants' perceptions of themselves as being independent. Similar views of participants wishing to retain independence, regardless of their current level of physical function have been echoed by others (Ballinger & Payne, 2002; Calhoun et al., 2011; Hanson et al., 2009; Yardley et al., 2006).

5.3.2 Deciding if a fall is important

Some of the participants in this thesis research had multiple falls and it is possible that they may benchmark the importance of their falls by comparing: one fall with another, their falls with the falls of others, or falls versus other life events. It is also possible that if an older person has experienced a number of falls, without injury, the importance of these is diminished because the consequences did not affect their independence. With time, falls also appeared to lose potency or currency in the present context; some participants said that a fall event did not count as a fall because it had happened years ago. My findings were that the severity of an injury often delineated how important a fall event was perceived by the participants. If the outcome of a fall effected current functioning or resulted in an injury then it was more likely to be considered to be a fall, and became more important.

Making decisions about severity was linked to whether medical help was needed or not, at the time or for ongoing pain or limitations. Dollard and colleagues (2014) reached similar conclusions in an exploratory qualitative study of urban older women. Not perceiving a fall to be serious enough to warrant GP attention, or seek help was highlighted, along with wanting to be associated with a positive image of being
independent. They concluded that for these older people, a fall itself was not considered to be legitimate enough to seek medical assistance or advice. Bailey and colleagues (Bailey et al., 2011) also report that older people tended to minimise any fall-related injuries e.g. “injury was just bruising” and thereby these falls were less important, and not likely to be considered a reason to seek medical help.

The same authors (Bailey et al., 2014) suggested that people’s understanding of falls is embedded within their cultural and social understandings of falling, developed over their lifetime. The majority of the participants in my study grew up and lived in rural and remote areas. Employment was typically in high-risk working environments such as coal and gold mining, fishing, farming, and heavy industry. Further, due to their relative isolation people had to be relatively self-reliant. Even if the participants did not work in these industries themselves, it is likely their family, friends or neighbours did. It is possible participants’ cultural understanding of falls, may be particular to this group of older people who have grown up in a culture of self-reliance due to geographical isolation, and may lend itself to participants’ benchmarking the importance of falls against other factors in life, and down-playing the importance of non-injurious accidents.

5.3.3 Discussing a fall with others, and reporting a fall to a health professional

About two-thirds of the falls participants described to me were known about by others, either directly or indirectly (see 4.6.1). However, it was relatively uncommon for a fall to be directly reported to a health professional. Participants were more likely to mention their falls to their social peers or neighbours. This was a finding similar to that of Painter and colleagues (2009) who found that 90% of women and 80% of men in their study reported a fall to others; those who lived alone were more likely to tell friends, however less than 4% reported their falls to their GP (see 2.9) When a participant in my study made an active choice to tell another about their fall it was most commonly mentioned in casual conversation with their friends, acquaintances or neighbours, rather than topic of in-depth discussion (see 4.6.1). It is possible that falls are mentioned to others in the same age group because it is expected that they will understand and possibly have experienced falls themselves.
In general, the falls prevention literature appears to make the assumption that reporting a fall to a GP is important and ideal, in the belief that older people have the potential to benefit from discussions about falls with their GP (Bailey et al., 2011; Dollard et al., 2014). This translates, it seems, to the clinical emphasis on health professionals encouraging older people to report falls to their GP so that the GP can assess personal risk factors, and modifiable risk factors, with a view to preventing falls (ACC, 2016; Injury Control Council WA, 2012). Further, reporting a fall to a GP or health professional may be a key pathway to accessing falls assessment and prevention services (National Institute for Health and Care Excellence, 2013)

In this thesis research only three of the 47 falls, which did not result in a hospital presentation, were recalled as being discussed with a GP; this included one fall on the way to the GP surgery. This low rate of reporting to the GP is congruent with findings in other studies that also found that few older people who fall present to their GP as a result, although rates of reporting vary from less than 4% (Painter et al., 2009), to 48% (Shumway-Cook et al., 2009) and 66% (Dollard et al., 2014). Differences in methodology and sample sizes (and therefore the precision of the estimate) could account for this large variability and the proportions should be interpreted with caution. While small sample sizes in qualitative studies are ideal for exploring participant’s perceptions through in-depth interviews, estimates of the proportion of falls reported to the GP are probably skewed by having one or two participants who have a number of falls, do not consider their falls to be important, and do not subsequently report them.

The most comparable study was that by Dollard et al. (2014); my study and theirs had similar sample sizes. Differences in samples were; my participants all lived alone and were heterogeneous in terms of gender (although predominantly women), ages ranged from 80 to 94 years and were rurally dwelling, whereas all their participants were women, half of them were married, ages ranged from 65 to 74 (5 women) and 75 to 84 (5 women) with one participant of 87 years and they were all urban dwelling. Dollard and colleagues (2014) asked their participants about falls in the last twelve months, where they had or had not sought help from a GP, and excluded hospital or accident and emergency presentations. My study enquired about any falls they could recall as an older adult (over 65 years) and included falls where an, ambulance was called, a GP was seen, or a hospital
presentation had occurred. I wished to understand why individual participants sought help after some falls and not others, and who older people talked to about their falls. The research questions were also similar in that this study explored who older people discussed falls with and who they reported falls to, and the study by Dollard and colleagues (2014) explored older women’s reasons for seeking help from a GP following a fall. There are subtle differences in these research questions. I wished to understand who older people talked to following a fall and why, and Dollard et al. (2014) wished to understand why older women may or may not seek help from their GP following a fall.

Dollard et al. (2014) noted that eighteen falls in total were discussed, however only one fall per participant (n=11) was noted in the analysis, more than half of the participants were also recruited via a GP practice, which would suggest that falls had already been reported to the GP (as part of their purposive sample). The present study included a higher number of falls (n=47) that did not result in hospital presentation and was calculated at number of falls reported, rather than number of participants reporting to the GP. The results of this thesis research were analysed in this way as the majority of participants in this study had more than one fall, with only some of those falls being reported to others (including GPs).

Despite the differences in samples and analysis of data the findings of Dollard and colleagues (2014) and my thesis research were similar. Whatever the actual proportion of falls that are reported to GPs it seems that: (a) few are reported, and (b) older people can advance many reasons why they do not report falls to GPs. In the present study, these reasons included: not considering their fall event to be a fall (see 4.4.1), not feeling it was serious enough (see 4.4.2), not aware that health professionals hoped they would report falls to a GP, nothing needed fixing e.g. a broken bone, and feeling that the GP would not be able to do anything (see 4.5.5) or not feeling it was serious enough to bother the GP (see 4.5.5). In most instances, the participants felt that the GP could not offer more than what they were doing, and help was only sought if the fall-related injury was considered serious, and unable to be self-managed. Alongside this, the participants also mentioned how busy GPs were, and how scarce this resource was in their area, and how important it is to use this resource for the most important health issues (see 4.5.5). These
findings raise the question whether the participants felt a fall was a legitimate reason, or an important signal, to seek further advice or help from a health professional or GP.

In a study of older people’s health-related help seeking behaviour in general (Howse, Ebrahim, & Gooberman-Hill, 2004), it seemed older people declined to accept or seek help because they did not feel they were entitled to seek help. However, my findings suggested non-reporting was more related to whether the fall event was a legitimate reason to seek help. Congruent with my findings, Dollard and colleagues (2014) reported that many women did not voluntarily report falls to their GP unless they felt they had a legitimate reason to seek medical help; they concluded that falling itself was not considered a legitimate reason to seek help or advice. This thesis research supported the findings of Dollard and colleagues (2014) but went further than legitimacy to suggest that the participants did not see a need or a reason to discuss their falls with a GP.

Another explanation offered for not seeking help for falls is that some older people may feel that they understand what is causing their balance problems (Bailey et al., 2011); they may have put strategies in place to manage any further falls and seeing their GP would not increase their understanding of the problem or its management. Again, this echoes my study findings as the participants were not sure that the GP could help them and therefore mentioning a fall may not be a good use of their time with a GP (see 4.5.5). Further, it may not be clear that the GP has a role in falls prevention and identification of risk factors because the GPs role in dealing with the consequences of a fall e.g. dealing with cuts, or a broken bone, may be more obvious. Finally, because the participants in this study were ‘managing’ there may have been no obvious benefit for them, in talking to a GP about falls.

As mentioned above, the participants noted that GPs were busy, and it is well known locally that GP’s are a scarce resource in rural areas; participants may have been unable to see the doctor for a few days after a fall after which time any symptoms may have resolved, or were no longer bothersome, and they were feeling better. Others have also found that not seeing a GP at the time of the fall was also a factor for not reporting a fall to a GP (Bailey et al., 2011; Dollard et al., 2014). This could indicate the proximity of a fall to GP visits may influence under-reporting. The effects of time might include:
forgetting the fall, dismissing the fall, based on the absence of consequences, as inconsequential and unimportant to them, seeing the fall as ‘over and done with’. In addition, if GP’s are seen as a scarce resource and appointments are time-limited, older people may feel they have more pressing issues to discuss.

It may, then, be an important part of the role of the GP or other health professional to take a proactive approach and ask older people about falls. The 2013 New Zealand initiative of ‘Ask, Assess, Act’, from the Health Safety and Quality Commission, suggests that older people are routinely asked about falls. However, the proximity of the enquiry to a fall event may also play a part in what a person remembers or imparts. The problems of accurate recall of falls events is discussed at length in the falls literature (Freiberger & de Vreede, 2011; Mackenzie et al., 2006; Masud & Morris, 2001) (see 2.9). A recent fall event may result in detailed recall, whereas a fall event that happened nine months ago may have experienced slight changes each time the story is told, or the story has not been told before and recall of events becomes difficult.

Another important finding of my study was that the role of the GP within falls prevention and management was viewed differently by older people and health professionals. In reality, the participants in this study did not view the GP as having a preventative role, but a role in managing consequences, such as injury. Similar findings were reported by Dickinson and colleagues (see 2.9) where their participants in an exploratory study did not view falls as a medical event falls with minor injury were not warranted to be serious enough to discuss with a GP (Dickinson et al., 2011). More broadly, the same mismatch is seen between older person’s perceptions and research conclusions that suggest older persons should seek GP assistance to prevent further falls (Dollard et al., 2014; Hill, 2004), and clinical guidelines (National Institute for Health and Care Excellence, 2013).

5.3.4 Summary
As a clinician embarking on this research I had an idea that a mismatch between older person and health professional perspectives on reporting may exist. Having conducted the research it appears that older people have strong views about being occupationally independent and managing and this influences their falls reporting behaviour, and their perception of the GP role in falls prevention and management. Living in their own home
and managing was important to my participants, so much so that it appeared that their self-construct of managing and being occupationally independent may have shaped their understanding of what appropriate actions were to prevent falls (reduce falls risk themselves), what to do when a fall happened (carry on), and who they might tell if they fell.

Falls were not considered to be important unless they affected the participants’ ability to manage and take part in their daily occupations. Telling others about the fall was not deemed as necessary and falls were often mentioned to contemporaries within casual conversation. Telling the GP about a fall was not considered to be important or a good use of the GP’s time unless the injury was deemed serious and medical intervention was deemed to be necessary.

5.4 **Researcher skills, study strengths, and limits to transferability**

Within qualitative research, the ‘quality’ of data and subsequent analysis are in part dependent on the competency of the researcher (Yardley, 2015). As a novice researcher, I considered ways to develop my skills as an interviewer and data analyst (see 3.5.2.3). With regard to interview skills I completed practice interviews to check the flow of questions, and identify if any questions needed further clarity for participant understanding. Practice also allowed me to develop qualitative research interviewing skills in allowing the data collection to be driven by the participant, and I utilised feedback from the colleagues and older people I interviewed to adapt my interview style and the interview schedule as needed. Reviewing transcriptions of initial interviews in supervision also included discussion of my interview technique and the feedback helped me develop approaches to and areas of questioning that could elicit additional detailed data. Reviewing each transcript with a supervisor who had experience of qualitative research interviewing created a continuous quality improvement cycle.

With respect to analysis, use of a manual approach to transcription of the data and identifying codes and themes was adopted to allow me as a novice researcher to have a good understanding of the data. Reflecting back on how this study went, one area I felt went well in the study, and rang true to the design of the study, was identification of codes and themes; I identified the codes, and these were reviewed and discussed with my
primary supervisor to determine how these codes were derived from the data. A similar approach was employed when identifying themes, and diagramming was used to show connections between codes. Potential themes were changed a number of times to ensure that the themes chosen were actually reflective of the data, and articulate clear boundaries for each theme, what was ‘in’ and what belonged elsewhere and why.

Study rigour is considered elsewhere (see 3.5). Now the study is completed, I consider that a particular strength of this study is that it portrays the in-depth perspectives of a specific group of older people around falls and falls reporting. Qualitative descriptive studies typically recruit small numbers of participants and furnish detailed data about the phenomenon of interest. Purposive sampling was undertaken to have a sample that was representative of the area. The sample was relatively homogeneous, being older people, rural, living alone independently, from a relatively isolated and socio-economically deprived area of NZ. This strengthens the sense in which the data give a coherent view of the perceptions of the sample. I am not aware of what the baseline population is i.e. the population of older people living on the West Coast that are falling. Therefore, it makes it difficult to know what the response rate was, or whether the sample were representative of the population of older people, that are experiencing falls on the West Coast.

The corresponding limit is the extent to which these perceptions are representative of older persons living in other parts of NZ or elsewhere, and direct transferability of the findings into other settings. Having described the participants, and their perceptions in detail, staying close to the data as is typical of qualitative description, I hope that readers will be able to make their own judgements about transferability to other contexts. As this was a NZ study, it was unfortunate that I was unable to recruit any NZ Māori participants; this could reflect of the lower number of Māori living on the Coast and that there are fewer older Māori people.

5.5 Reflexivity
Past experiences and prior assumptions can help shape or influence the research process and it is important within qualitative research that these biases are considered and acknowledged to help promote trustworthiness of the research (Milne & Oberle, 2005).
Demonstrating reflexivity is important when listening, and analysing other’s descriptions, as there can be a tendency to highlight the aspects that fit with one’s experiences and knowledge.

The idea for this research arose from my experiences as clinician, having worked within older persons’ health and in falls-clinics, therefore it was not possible for me to come to this research without having *a priori* ideas about falls reporting. While wishing to hold an open and enquiring mind I became aware that I held the view that older people should report a fall to a health professional, so that risk factors could be identified and modified, if possible, and as an individual younger than the participants I found it difficult to understand why they would not report a fall. As an occupational therapist, I was aware that I held knowledge about falls through reading research and my work experiences and talking with older people, however, I had not experienced a fall in the context of an ageing body and changing abilities.

Reflective practice is one of the ethical competencies within occupational therapy and completing this research has allowed me to develop further reflective skills, by being open to ideas and concepts that arose, that were different to my own knowledge and experience. While the findings confirmed some of my thoughts about why older people did not report falls, the analysis also produced findings that I had not considered. Rolfe (2002) suggests that one could identify some ‘truth’ in qualitative research when the results ‘ring true’ or resonates with one’s own experiences. While some of the findings resonated with my knowledge and ‘experience’ of falls, the approach of ‘ringing true’ as a guide for credibility of research could be open to researcher bias.

### 5.6 Future Research Recommendations

Research can be a costly exercise (both in time and money) and it is important that future research provides practical benefit, adds value by impacting on both policies and practice, and does not merely add to the fund of knowledge (Hanney, Packwood, & Buxton, 2000). Falls prevention and management is a broad and complex field, and growing problem as the world’s population ages. Perhaps correspondingly, the body of falls research continues to grow. As noted, however, it is important that research efforts help inform directions around falls prevention and management.
I have identified three areas where research may contribute something important to understanding more about falls reporting. First, a concept analysis of falls may offer insights on the complex and contested concept and support more accurate understanding and definition of a fall. Second, more qualitative research to explore falls reporting may be useful; specifically, some comparison of the perceptions of those that have reported falls to their GP with those who have not, gender, cultural, and ethnicity-related differences in reporting, and context-specificity in reporting such as urban/rural and socioeconomic status. Future qualitative research could also explore why health professionals think older people do not report falls. This would help get a deeper understanding of health professionals’ understanding and could assist in bridging the gap in perceptions of falls reporting. An alternative approach would be to investigate such potential differences in a prospective longitudinal observational study looking at the association between reported falls and such demographic variables. Third, more qualitative work is needed to understand older person’s perceptions of the GP role within falls prevention and management.

5.7 Clinical Implications

Different perceptions of what constitutes a fall and difficulties with falls recall may mean that simply asking an older person about a fall may not be enough to elicit an accurate response. The ‘Reducing Harm from Falls’ programme from the Health Quality and Safety Commission New Zealand, started the ‘Ask, Assess, Act’ initiative in 2013 which involves health professionals routinely asking older patients if they have had a fall in the past year and providing them with information to help prevent further falls. It is suggested that three screening questions are asked. 1) Have you slipped, tripped or fallen in the last year? 2) Can you get out of a chair without using your hands? 3) Have you avoided some activities because you are afraid you might lose your balance? (Health Quality and Safety Commission, 2015).

However, when I asked people if they had any trips or falls they did not always tell me straight away whether they had fallen. Some participants needed a number of prompts to help them recall their falls, with one participant stating that he had not fallen, and was subsequently unable to recall any falls. This suggests that when asking about falls in a
clinical setting it cannot be assumed that the first time one asks that the full story is given e.g. the number of falls, or the details. Revisiting the topic of falls and further prompting may be needed to elicit additional details and get a good understanding of why someone is falling. Underlining the possibility that multiple prompts will be needed, is that my participants were ‘primed’ to know I would ask about falls in the interview. In clinical practice, these questions may be asked ‘cold’ or ‘out of the blue’. While my participants potentially had time to reflect on their past falls, when they happened and why, this may not be the case clinically.

One reason for the ‘Ask, Assess, Act’ initiative (Health Quality and Safety Commission, 2015) discussed above, is recognition that an older people may feel defensive, vulnerable or anxious following a fall and prompting from a credible person such as a health professional may enable them to report a fall. However, the three screening questions are also, potentially, insufficient to accurately elicit whether someone has fallen or not because they do not address consequences; it is the consequences that may worry the older person most because of the what it means for independence. How an older person perceives the consequences following a fall will likely determine their next course of action, in terms of whether they need help, seek help or tell someone about their fall event.

Asking about the antecedent or mechanism of a fall, mentioning slips and trips, may help prompt an older person to recall a fall incident that occurred. Defining whether an event was a trip or a fall is not important, but understanding that older people do not often classify a trip as being a fall, has implications for older people not believing that they have fallen. This could suggest that when asking if a person has slipped, tripped or fallen, specifically mentioning that this includes ‘fall events’ or trips, where injury has not occurred may be of benefit. It is possible that with older people that there may be some cognitive impairments or memory loss that is impacting on their ability to remember falls, and the ability to distinguish one fall from another (Cummings et al., 1988). Mackenzie et al. (2006) noted that retrospective recall of falls can be erroneous due to forgetting or recalling when that event happened. Provision of prompting may also assist with recall of falls.
Highlighting the potential role of the GP within falls prevention is important as the participants did not understand that their GP potentially had a role in falls prevention and assessment as well as treating the consequences of the fall. GP practices could possibly address this by routinely asking questions about falls, highlighting their role in prevention when they see people, and health professionals in wider community health services could also emphasise the role of GPs in fall prevention. Understanding the GP’s role in falls as supporting independence – that reviewing falls prevention strategies are not time wasting, fuss, or invalid – rather than only as source of treatment, may encourage older people to report falls.

Falls prevention programmes could also potentially work with practice nurses in identifying those that may be at risk. Materials could be distributed within GP waiting room to reach older people directly. What is likely to be important though, in all referrals by health professionals or by the older person, is that access to services is easy and seamless. For instance, if a patient identifies from promotional material or questioning that falls prevention may be beneficial to them, then referral can be made directly to the service. Either the health professional can refer on the spot (without putting the onus back on the older person to do so), or the older person can self-refer and does not need endorsement from a health professional. Alternatively, there could be a falls hotline’ which older people could call.

Zecevic and colleagues (Zecevic et al., 2006) note that in order for health services to help older people prevent falls that all stakeholders should be speaking the same language. Using their language, reframing the risk of falls in a way that is acceptable to older people, and repeating back in the language of the person describing the fall, may all be ways for people to know that they have been heard, and what they say is important. The use of language (e.g. slip, trip) was also found to be important while exploring older people’s perceptions of what constituted a fall.

In summary, the key points regarding falls reporting within a clinical setting are; 1) Consider the differences in what older people consider to be a fall, ask about falls, including those that do not involve injury, 2) Multiple prompts may be needed to help
people recall falls and obtain additional detail, 3) Promotion of the GP role with in falls prevention, and 4) talk to older people using their language.

5.8 Summary
This study concurred with previous research findings that older people do not view non-injurious falls or falls with minor injury as being legitimate reasons to report falls. However, it appears it is more than this, in that this study found that older people that have had a fall just do not see the point of reporting falls to a health professional, particularly if there is no injury and they continue to manage at home, as nothing changes for them.

This study supports the ongoing need for a standard definition of falls to provide clarity within research settings, but goes further to add weight to the argument that older people should be included in the development of any definitions of falls used within a clinical setting.

What this study adds to the literature on people’s experiences of falling is the importance of clinicians’ understanding the complexity of a fall event for older people, and possible reasons why older people may not report falls events. The results from this study support the idea that older people should be routinely asked about any fall events that they have experienced, and suggests further that more in-depth discussions about falls, and prompting, is needed to uncover falls events, especially non-injurious ones.
References


Rolfe, G. (2002). 'A lie that helps us see the truth': Research, truth and fiction in the helping professions. *Reflective Practice, 3*(1), 89-102. doi:[https://doi.org/10.1080/14623940220129898](https://doi.org/10.1080/14623940220129898)


Shandro, J. R., Spain, D. A., & Dicker, R. A. (2007). Recruitment strategies for a fall prevention program: If we build it, will they really come? *Journal of Trauma - Injury, Infection and Critical Care, 63*(1), 142-146. doi:[https://doi.org/10.1097/TA.0b013e318068428a](https://doi.org/10.1097/TA.0b013e318068428a)


Todd, C., & Skelton, D. (2004). *What are the main risk factors for falls among older people and what are the most effective interventions to prevent these falls? Health Evidence Network Report.* Copenhagen: WHO Regional Office for Europe.


List of Appendices

Appendix A: Cue Card – Community Nurse Recruiters

Appendix B: Letter of Invitation

Appendix C: Consent Form

Appendix D: Participant Information Sheet

Appendix E: Interview Schedule

Appendix F: Human Ethic Committee Ethics Approval

Appendix G: Ngai Tahu Ethics Approval

Appendix H: West Coast DHB Locality Approval
Appendix A: Cue Card

Cue Card

My colleague is doing some research wanting to talk to people that live on their own, and have had a trip or a fall in the past. She particularly wants to find out about what you feel keeps you independent, and reasons why you might or might not choose to tell someone about a trip or fall.

You would be an ideal person for her to talk to.

Is this something you might be interested in?

If yes,

Thank you. This pack is about the research and Amber’s contact details. This sheet (Participant information Sheet) describes the research in more detail.

You don’t need to make a decision now if you wish to take part. Read through the information pack and decide if you would like to take part.

If shows interest

You can contact Amber directly or I can ask her to contact you. / Which would you prefer?

If contact directly, then – Amber’s contact details are here (show on Participant information sheet).

If Amber to contact potential participant then – Do I have your permission to give Amber your name and phone number so she can call you?
Appendix B: Letter of Invitation

Tena koe / Greetings

Thank you for your interest in this study. The study is about managing independently at home, and your thoughts on trips or falls.

In this envelope, you will find an information sheet about the study. Please read this to find out more about the study. After that, if you are interested in taking part in the study, please contact the researcher Amber Salanoa Haar.

You can contact Amber by:

Phone: Amber Salanoa Haar (03 7889244/ 0274667420 )
Email: salam704@student.otago.ac.nz
Post: A stamped addressed envelope, and reply slip, are included with this letter.

Again, thank you for your interest in this study

With regards,

Amber Salanoa Haar
Master of Health Science (Rehabilitation) candidate
University of Otago, Wellington
Managing independently at home, and your thoughts on trips or falls.

PLEASE TICK ONE BOX

☐ I am not interested in taking part in the study
☐ I am interested in taking part in the study. Please contact me (see below).

If you would like the researcher to contact you about the study please give your:
Name:

Address:

Phone:

Mobile phone:

Email (if you would like the researcher to email you rather than phone you):

Please return in the stamped addressed envelope

Thank you

Amber Salanoa Haar
Master of Health Science (Rehabilitation) candidate
University of Otago, Wellington
Appendix C: Consent Form

Study Title
What factors influence whether older community-dwelling people, living alone, report a fall?

Principal Investigator
Jean Hay-Smith
Associate Professor
Rehabilitation Teaching and Research Unit,
University of Otago, Wellington

Contact details:
jean.hay-smith@otago.ac.nz
021 02963623

CONSENT FORM FOR PARTICIPANTS
Following signature and return to the research team this form will be stored in a secure place for ten years.

Name of participant: ________________________________

1. I have read the Information Sheet about this study and understand the aims of the research.
2. I have had enough time to talk with other people of my choice about participating in this research.
3. I do meet the criteria for participation which are explained in the information sheet.
4. All my questions about the research have been answered to my satisfaction, and I understand that I am free to request more information at any stage.
5. I know that my participation in the project is entirely voluntary, and that I am free to withdraw from the project at any time without disadvantage.
6. I know that as a participant I will be asked to attend an interview of approximately 1 hour with a researcher.
7. I understand that the interview will be audio recorded.
8. I know that the interview will cover my thoughts about staying independent at home and my feelings about trips or falls. If the line of questioning develops in such a way that I feel hesitant or uncomfortable I may decline to answer any particular question(s) and/or may withdraw from the research without disadvantage of any kind.
9. I understand the nature and size of the risks of discomfort or harm which are explained in the Information Sheet.

10. I know that when the project is completed all personal identifying information will be removed from the paper records and electronic files which represent the data from the research, and that these will be placed in secure storage and kept for at least ten years.

11. I understand that the results of the research may be published and be available in the University of Otago Library. I agree that any personal identifying information will remain confidential between myself and the researchers during the study, and will not appear in any spoken or written report of the study.

12. I know that there is no remuneration offered for this study, and that no commercial use will be made of the data.

Signature of participant: ____________________________

Date: ____________________________
Appendix D: Participant Information Sheet

Participant Information Sheet

<table>
<thead>
<tr>
<th>Study Title</th>
<th>What factors influence whether older community-dwelling people, living alone, report a fall?</th>
</tr>
</thead>
</table>
| Principal Investigator | Jean Hay-Smith  
Associate Professor  
Rehabilitation Teaching and Research Unit, University of Otago, Wellington |
| Contact details: | jean.hay-smith@otago.ac.nz  
021 02963623 |

Introduction

Thank you for taking an interest in this study. Please read this information sheet carefully. Take time to consider and, if you wish, talk with relatives or friends, before deciding whether or not to participate. If you decide to participate we thank you. If you decide not to take part there will be no disadvantage to you and we thank you for considering our request.

What is the aim of this research project?

This project wishes to find out from people who live alone, what they think helps keep them independent at home. We would particularly like to find out what people over 65 years of age think about trips and falls, and whether this might change their ability to live independently at home.

This study aims to find out what factors influences people to report any trips or falls they have. The researcher hopes that the information will help us tailor our services on the West Coast to meet the needs of people who are ageing and living alone.

Who is funding this project?

The researcher is a Master’s of Health Science student, supported by the University of Otago.

Who are we seeking to participate in the project?

We are seeking people over the age of 65, living at home alone, that have experienced a trip or fall. Participants must be able to communicate easily in English as we are using an interview to gather information.

If you participate what will you be asked to do?

You will take part in a face to face interview to talk about what you feel contributes to your independence in your home and your experience of trips or falls. The interview can take place in your own home or another place agreeable to you and the researcher. If you choose to be interviewed in another place we can arrange transport. You may have a support person present with you if you wish. The interview will take approximately 1 hour of your time. You will be offered a grocery voucher to acknowledge your participation.
Is there any risk of discomfort or harm from participation?

It is not likely that you will experience any harm. You might experience some emotional discomfort talking about a trip or fall. The researcher will have a list available of support people in the community, that will be offered to all participants.

How will specimens, data or information be collected and how will they be used?

The interview will be audio recorded to allow the researcher to accurately recall your experiences and thoughts. The audio recordings will be kept by the researcher for the length of the project (2 years) and thereafter destroyed. The paper copy (transcript) will be kept for 10 years.

What about anonymity and confidentiality?

The only person who will hear the audio recording is the researcher. When the written copy of the recording is made any identifying characteristics will be removed, eg names of people, street or dog etc. This written copy will be seen by other members of the research team. Their names are listed at the bottom of this information sheet.

If you agree to participate, can you withdraw later?

Yes, you can withdraw consent to participate at any time from the time you agree to the interview until what you have said is combined with what other people have said, to produce the findings of the study. If you decide to withdraw from the study there will be no disadvantage of any kind.

Any questions?

Please contact Amber Salanoa Haar, MHealSc research candidate, on 037889244 or 0274667420

Or, you can contact Amber’s research supervisors:

Jean Hay-Smith (contact details at the top of the information sheet), or

Dr Mark Weatherall (mark.weatherall@otago.ac.nz)

This study has been approved by the University of Otago Human Ethics Committee (Health). If you have any concerns about the ethical conduct of the research you may contact the Committee through the Human Ethics Committee Administrator (phone +64 3 479 8256 or email gary.witte@otago.c.nz). Any issues you raise will be treated in confidence and investigated, and you will be informed of the outcome.
Appendix E: Interview Schedule

Interview Schedule

1. What do you think are the most important things that help you stay independent at home? (as you live on your own)
   
   Topics for prompts (some of the other things that other people talk about are…….)
   
   - Safety/Risks to self
   - Concerned family
   - Supports
   - Level of mobility
   - Environment
   - Staying active / Personal attributes/ ability
   - Planning ahead –thought about own risks to independence

2. Generally what do you feel the risks are to older people’s independence? Worry about
   
   - Decreased function / increased dependence
   - Mobility
   - Trips and falls
   - Limited supports
   - Environment
   - Socially isolated
   - Poor health
   - Finances

3. For yourself what do you think are the main risks to your independence?
   
   - Decreased function / increased dependence
   - Mobility
   - Trips and falls
   - Limited supports
   - Environment
   - Socially isolated
   - Poor health
   - Finances

One of the things I am particularly interested in is trips and falls and whether that has any influence on people staying independent at home. The reason I want to know about this is that health professionals want people to be able stay at home as long as they can. We also want to ensure services for older people help them stay in dependent at home.
4. As you are taking part in the study I believe you have had a trip or a fall in the past

Tell me about the most recent trip or fall you had?

- Where were you?
- What happened?
- What contributed to the trip or fall?
- Was anyone else there at the time?
- Outcome of fall eg bruises, cuts,

- What happened next?
  - Involvement of others?
  - Treating themselves / Rest
  - Getting up
  - Use of alarm
  - Did you seek help? Tell anyone?
  - How long before you were back on your feet?
  - Hospital / doctor/ nurse

5. What have you done or thought about to try and prevent another trip or fall?

- Change to environment
  - Removed mats
  - Equipment in situ / installed rails

- Changed activity
  - Attend exercise classes eg Tai chi, older / bolder
  - Less active / stopped walking outside
  - Reduced participation in tasks

- Aids
  - Get alarm
  - Walking aid

- Other
  - Checking sight, footwear etc

6. Explore reasons for telling / not telling anyone (dependent on answers)

- Who did you tell
- Why did you tell them / why didn’t you tell anyone
- If fell when someone else there – would you tell anyone if fell while on your own

7. You have told me about your most recent experience of a trip or fall. What has your experience of trips or falls been prior to that.

- No other falls
- Where were you?
- What happened? /What contributed to the fall?
- Outcome of fall eg bruises, cuts,
- What happened next?
  - Self treatment
8. What is your experience of reporting a fall to someone?
   - Helpful / get help
   - Feel relief
   - Embarrassed / didn't want to tell anyone
   - Loss of control of what happens next
   - Fuss made

9. Please, tell me some the reasons you don’t like to talk about trips or falls to other people?
   (What are things that would influence you to tell to anyone about a fall?)
   - Stigma about falls/embarrassed / concerned what others may think
   - Family concern
   - May have to go into a home
   - Decrease in function/ independence/ confidence
   - Only tripped / explainable / rationalize
   - What might help you to talk to others / or help you to talk a particular person
   - Don’t know what would happen next
   - Way information presented

10. What advice have you seen or received about falls and preventing falls?
    - Where did information come from?
    - Was the advice useful?
    - What would make it more useful?
    - What would help you understand your own risks for falling?

11. I think we have mostly covered this information. I just want to check this is right. My understanding is your age is …….. You have been living on your own for …….years. You have talked to me about 2 trips or falls you have had – would that be all of them or are there more? ……. Check have gathered all participant demographic info –

    Age / Number of falls / How long living alone / Level of social supports

    Ethnicity (standard census question)
Appendix F: Human Ethics Committee Ethics Approval

Professor J Hay-Smith
Department of Rehabilitation Teaching and Research Unit (Wtn)
School of Medicine
University of Otago, Wellington

16 June 2015

Dear Professor Hay-Smith,

I am again writing to you concerning your proposal entitled “What factors influence whether older community-dwelling people, living alone, report a fall?”, Ethics Committee reference number H15/047.

Thank you for your letter and revised information Sheet of 15th June 2015 addressing the issues raised by the Committee.

On the basis of this response, I am pleased to confirm that the proposal now has full ethical approval to proceed.

The standard conditions of approval for all human research projects reviewed and approved by the Committee are the following:

Conduct the research project strictly in accordance with the research proposal submitted and granted ethics approval, including any amendments required to be made to the proposal by the Human Research Ethics Committee.

Inform the Human Research Ethics Committee immediately of anything which may warrant review of ethics approval of the research project, including: serious or unexpected adverse effects on participants; unforeseen events that might affect continued ethical acceptability of the project; and a written report about these matters must be submitted to the Academic Committees Office by no later than the next working day after recognition of an adverse occurrence/event. Please note that in cases of adverse events an incident report should also be made to the Health and Safety Office:

http://www.otago.ac.nz/healthandsafety/index.html

Advise the Committee in writing as soon as practicable if the research project is discontinued.

Make no change to the project as approved in its entirety by the Committee, including any wording in any document approved as part of the project, without prior written approval of the Committee for any change. If you are applying for an amendment to your approved research, please email your request to the Academic Committees Office:
gary.witte@otago.ac.nz

jo.farrondiarias@otago.ac.nz

Approval is for up to three years from the date of this letter. If this project has not been completed within three years from the date of this letter, re-approval or an extension of approval must be requested. If the nature, consent, location, procedures or personnel of your approved application change, please advise me in writing.

Yours sincerely,

[Signature]

Mr Gary Witte
Manager, Academic Committees
Tel: 479 8256
Email: gary.witte@otago.ac.nz

c.c. Assoc. Prof. W Taylor Department of Rehabilitation Teaching and Research Unit (Wm)
Appendix G: Ngai Tahu Ethics Approval

Tuesday, 21 April 2015.

Associate Professor Elizabeth Hay-Smith,
University of Otago, Wellington - Medicine,
WSM&HS.

Tēnā Koe Associate Professor Elizabeth Hay-Smith,

What factors influence whether older community-dwelling people, living alone, report a fall?

The Ngāi Tahu Research Consultation Committee (the committee) met on Tuesday, 21 April 2015 to discuss your research proposition.

By way of introduction, this response from The Committee is provided as part of the Memorandum of Understanding between Te Rūnanga o Ngāi Tahu and the University. In the statement of principles of the memorandum it states “Ngai Tahu acknowledges that the consultation process outline in this policy provides no power of veto by Ngāi Tahu to research undertaken at the University of Otago”. As such, this response is not “approval” or “mandate” for the research, rather it is a mandated response from a Ngāi Tahu appointed committee. This process is part of a number of requirements for researchers to undertake and does not cover other issues relating to ethics, including methodology; they are separate requirements with other committees, for example the Human Ethics Committee, etc.

Within the context of the Policy for Research Consultation with Māori, the Committee base consultation on that defined by Justice McGechan:

“Consultation does not mean negotiation or agreement. It means: setting out a proposal not fully decided upon; adequately informing a party about relevant information upon which the proposal is based; listening to what the others have to say with an open mind (in that there is room to be persuaded against the proposal); undertaking that task in a genuine and not cosmetic manner. Reaching a decision that may or may not alter the original proposal.”

The Committee considers the research to be of importance to Māori health.

The Committee notes and commends that ethnicity data is to be collected using the questions on self-identified ethnicity and descent contained in the latest census.

The Committee suggests dissemination of the research findings to Māori health organisations regarding this study.

We wish you every success in your research and the committee also requests a copy of the research findings.
This letter of suggestion, recommendation and advice is current for an 18 month period from Tuesday, 21 April 2015 to 21 October 2016.

Nāhaku noa, nā

Mark Brunton
Kaiwhakahaere Rangahau Māori
Research Manager Māori
Research Division
Te Whare Wānanga o Otago
Ph: +64 3 479 8738
Email: mark.brunton@otago.ac.nz
Web: www.otago.ac.nz
Appendix H: West Coast DHB Locality Approval

West Coast District Health Board
Te Poari Hauora a Rohe o Tai Poutini

Amber Salamon Haar
Occupational Therapist
Buller Health

6 August 2015

Dear Amber

Thank you for advising us that your Master’s research project “What factors influence whether older community-dwelling people, living alone, report a fall?” has received full ethical approval from the Human Research Ethics Committee, as per their letter dated 16 June 2015.

I am aware that Tom Fiddes, from the Rural Learning Centre previously provided locality approval, conditional on gaining ethics approval for your research. I have discussed your research with the Associate Director of Allied Health, Lara Bakes-Dennan, and I am pleased to advise you that locality approval to proceed with your health research within the West Coast District Health Board has been granted.

We look forward to hearing about the results of your research, and I wish you well in your studies.

Yours sincerely,

Mark Newsome
General Manager
Grey / Westland

P.O Box 387, Greymouth 7840