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A Thematic Analysis of Lived Experiences of Falls in Middle-Aged and Older Adults

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Abstract

Objectives: Fall-related injuries occur at a similar prevalence rate in middle-aged and older adults and may increase concerns about falling and future falls. No research to date has examined how experiences of falls and related concerns, differ between middle-aged and older fallers. This study aimed to address this using qualitative interviews. **Methods**: Ten middle-aged (55-64 years) and ten older adults (68-83 years) were interviewed about their experiences of falls and concerns about falling. Guided by a social constructivist epistemology, reflexive thematic analysis was used to categorise themes within the data. **Results**: Five overarching themes were identified. Four themes showed distinctions between groups (i) perceptions of age-related decline; (ii) ageism: stigma associated with 'fallers'; (iii) concerns about loss of independence; and (iv) unravelling perceived control. The fifth theme (v) perceptions of falls risk: concerns and awareness, demonstrated the most similarities. **Conclusions**: Whilst middle-aged and older fallers showed similar ratings of concern about falling, the behaviours underlying these were qualitatively different. For older adults, concerns led to protective adaptations to reduce their fall risk. Contrastingly, middle-aged adults showed a lack of personal responsibility over their fall risk. The findings highlight the importance of early educational intervention to reduce future falls and frailty.

Keywords: Concerns about falling, Falls, Middle-aged, Older adults, Thematic Analysis

Introduction

The high prevalence of falls in older adults has been widely reported globally[1], with up to 30% of adults aged 65+ years experiencing one or more falls per year[2]. Research has shown that falls are the leading cause of injury-related mortality and disability in older adults[3]. Consequently, falls are a recognised global health burden in our rapidly growing ageing populations. More recent research (since 2020)[4] advocates for a lifespan approach to the study of falls, as fall-related injuries occur at a similar prevalence rate in older (>65 yrs.) (15.1%) and middle-aged adults (45-64 yrs.) (11.5%)[5,6], yet greater fatality rates in older adults has resulted in a predominant focus on this age group. Earlier identification of fall risk in middle-aged adults may provide the opportunity for early intervention and prevention of falls in later life. In addition, there is limited research to suggest how experiences of falls compare between middle-aged and older fallers.

Falls are also associated with significant psychological and financial burdens. For example, falls are the main cause of loss of independence and institutionalisation in older people[7]. In addition, it has been well-documented that many older adults develop concerns about falling after experiencing a fall[8] and for some time these concerns have been known to intensify as individuals age[9]. Findings from Fletcher and colleagues[10], suggest that older individuals tend to avoid activities in which they perceive themselves to be at risk of falling. This activity

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avoidance can cause individuals to limit their daily activities which can lead to them becoming physically deconditioned and placing them in a cycle of increased risk of falling.

While a concern about falling can significantly limit daily activities in older adults and may be as impactful as experiencing multiple previous falls[11], it is important to understand the mechanism behind this concern. Recent qualitative research has provided a novel insight into the potential consequences and protective adaptations to displaying this behaviour[12]. The authors found that an individual's perceived level of control plays a vital role in determining whether an individual engages in adaptive fall prevention behaviours, such as consciously engaging in strategies to prevent a fall (i.e., high perceived control), or less helpful, maladaptive changes in behaviour such as excessive avoidance (i.e., low perceived control)[8]. Currently, these concepts have only been investigated in adults over 65 years of age and it remains unknown whether middle-aged fallers also possess concerns about falling and, if they do, whether they are similar to those of older adults.

To date, only two qualitative studies have explored middle-aged adults' experiences of falls[13,14]. Both studies, however, were focused on specific clinical populations, namely those with multiple sclerosis[14] and those with functional impairment[13]. No qualitative research, that the authors know of, has compared experiences of falls and concerns about falling in middle-aged and older adults. To address the gap in the literature, this study aimed to explore the similarities and differences in how middle-aged and older adults experienced falls and concerns about falling.

Methods

Design

This study was guided by a social constructivist epistemology, which suggests knowledge is constructed and given meaning by people based on their perceptions and social interactions[15]. Considering the vast heterogeneity of fall accidents, an initial online screening survey was utilised to enable maximum variation sampling for the interviews[16] to provide the broadest range of experiences possible[17]. While the application of a screening phase in qualitative studies has not been widely applied in falls research, it has been shown to be advantageous in more clinical settings[18]. This novel approach promoted experimental rigour to capture the complexity of this phenomena.

Due to the timing of data collection (April-August 2021), the authors recognised that recent COVID-19 pandemic restrictions could have impacted people's current perceptions of their fall experiences and concerns about falling. Our maximum variation sampling approach enabled screening for falls both during and pre-pandemic and explicit questioning of whether interviewees perceived any change in their fall risk or concerns about falling due to pandemic restrictions.

Recruitment screening phase

The screening survey was administered online through Qualtrics and included a falls history questionnaire, which involved asking participants to recall any falls that they had experienced both during the pandemic (March 2020 to July 2021) and prior to the pandemic (before March 2020) (see S1 Table: Falls Questionnaire). Individuals who reported falls both prior to and during the pandemic were identified as recurrent fallers. The Falls Efficacy Scale International (FES-I)[19] was conducted as a quantitative measure of concern about falling, and a five-item short form of the State-Trait Anxiety Inventory[20].

Participants were recruited to the online survey via opportunity sampling using electronic advertisements through a local volunteer list and social media pages related to ageing and falls research. Participants then volunteered for follow-up interviews. Inclusion criteria for the survey included individuals aged 45 years and older who had experienced a fall between March 2020 and July 2021, during the pandemic restrictions, and lived in the UK during this time. Exclusion criteria included an inability to understand written/spoken English and any diagnosis of a cognitive deficit which could impair ability to give written informed consent. Participants consented to be contacted regarding a follow-up interview within the survey and were aware that this was fully optional and not everyone who volunteered for interview would be selected. Recruitment started on the 21/04/2021 and ended on the 28/08/2021.

Interview Participants

Thirty-eight participants (15 middle-aged, 23 older adults) completed the initial survey and of these, ten middle-aged (age range: 55-64 years) and ten older adults (age range: 68-83 years) were selected for interview. The age cut offs for middle-aged (45-64) and older adults (65+years) were chosen in line with other studies that had compared both age groups directly[5,6]. A purposive recruitment strategy utilising maximum variation sampling[16] was adopted to include an even split of middle-aged and older adults across a spread of genders and new versus recurrent fallers. Falls due to sporting activity were not included.

Participants were contacted via their preferred contact method (email/telephone) to arrange the video/telephone interviews. All interviewees provided both written and oral informed consent prior to participation in the survey and interview, respectively. This included consent for publication of direct quotations. Interviewees were given pseudonyms to protect their confidentiality and anonymity.

Interviews

Semi-structured interviews were conducted by authors JV and TH for the middle-aged and older groups, respectively. After both JV and TH had conducted two interviews, CC reviewed the recordings to identify and address any inconsistencies in the interview style and semi-structured

question phrasing. Following this, a team meeting was held to adjust the wording of a few of the questions based on discussions with these initial participants. Participants were interviewed via Microsoft Teams® (n = 18) or by telephone (n = 2). Each participant completed one interview and the interview durations lasted between 40 and 60 minutes. All interviews took place with both the interviewer and the interviewee alone in their respective private room to ensure confidentiality. A help guide was created to support usability of Microsoft Teams® to reduce digital exclusion. A semi-structured interview guide (see S2 Table: Interview guide) was developed by authors TH, JV and CC to probe participants' experiences of falls, concerns about falling and whether this was perceived to be influenced by the COVID-19 restrictions. This also included questions that elaborated on the survey answers, such as participants' scoring FES-I. The interview guide was reviewed by a colleague who specialises in qualitative research but was unbiased on the topic of ageing or falls.

Participants were given the choice of whether recordings would include both video and audio or audio only and recording was conducted via Microsoft Teams®. All interviews were transcribed verbatim by the interviewer using Microsoft Word and identifying information such as the names of people/places were redacted.

Researcher characteristics and reflexivity

At the time of the interviews, both JV and TH were postgraduate students, who had received training in interview techniques and qualitative methods as part of their studies. JV used the middle-aged fall data as one of the final studies in her PhD thesis and TH used the older group data in her MSc dissertation. CC was a supervisor for both students and PH was a supervisor for JV. Participants were aware that both JV and TH were postgraduate students, and a stage of rapport-building was included at the beginning of the interview.

JV analysed the older-aged data and CC analysed the middle-aged data to remove bias and provide greater objectivity in the analysis, as neither was familiar with the transcripts before commencing analysis. Following creation of initial codes, JV and CC collated the data and triangulated the themes together. Both JV and CC have expertise in falls research and have worked extensively with participants who have experienced falls. As TH was relativity inexperienced in the field of falls research prior to this project, we believed that she would make the best moderator, as she had less subjective bias. PH was a senior faculty academic and the University representative member of the regional NHS Trusts Falls Collaborative for Research and Innovation.

Data Analysis

A thematic analysis was utilised with a social constructivist epistemological approach[15], acknowledging that each participant's experience of falls could vary according to perceptions and social interactions during this time. Reflexive thematic analysis was used to categorise patterns of meaning across interview data[21]. A phased approach to thematic analysis was also adopted; data familiarisation and engagement with the data to allow for the generation of initial codes across the data set. Codes were developed according to short descriptors that reflected the content of participant responses. An inductive approach was then employed to identify broader themes from these initial codes. These steps were initially conducted for the middle-aged and older fallers separately by authors CC and JV, respectively. This approach was decided as it permitted clearer differentiation of themes between groups.

Following this initial stage of code and theme development, CC and JV undertook a combined analysis, where themes from both groups were collated, reviewed, and revised based on the combined narrative of how these themes appeared (or did not appear) throughout each group's transcripts. In line with social constructivism[22], the inclusion of specific themes was not dependent on recurrence alone, but rather, the meaningfulness prescribed by the participants and relevance to their experience of falls. For example, throughout the interviews, it was common for participants to discuss their negative experiences of pandemic restrictions. As a team, we predicted initially that participants would relate these experiences to their fall-related accidents. In reality, however, they did not. Therefore, only themes pertinent to the participants' lived experience of falls and concerns about falling were included. After a satisfactory thematic map was created for the data set as a whole, the themes were named and defined according to whether they were similar or distinct between groups. A moderation of the themes was conducted by TH to ensure the rigor and reliability of final themes and codes. This included review of themes and supporting quotes to ensure relevancy and identify coder bias. Following moderation, the study team met collectively to agree final theme names, which best represented the participants' data. This collaborative approach also avoided any unintentional biases due to the potential power dynamics of student/supervisor relationships.

Discussion

Aggregated participant demographics, taken from their pre-screening survey responses, are reported for each group in Table 1. Individual fall histories are reported in Table 2. Both age groups reported similar concerns about falling and similar trait and state anxiety scores. Independent t-tests and Mann Whitney U tests showed no significant differences for FES-I, state and trait anxiety scores. Similarly, Chi square tests indicated no significant age differences in those classified as 'moderate' or 'high' concern about falling, according to previously defined cut-points[23]. In addition, fall severity was comparable between groups, with a similar

	Middle-aged fallers	Older fallers	Statistics
Age (yrs)	59 ± 3.20	73.1 ± 4.72	-
No. of males/females	2 males, 8 females	2 males, 7 females, 1 undisclosed	-
No. of recurrent/new fallers	4 recurrent, 6 new	4 recurrent, 6 new	-
FES-I score	25.9 ± 6.82	29.2 ± 9.24	$t(18) = -.91, p = .38$
Frequency of low/moderate/high FES-I scores	2 low, 4 moderate, 4 high	1 low, 4 moderate, 5 high	$\chi^2 (2) = .44, p = .80$
Trait Anxiety score	8.9 ± 4.46	7.8 ± 2.62	$t(14.54) = .67, p = .51$
State Anxiety score	6.5 ± 3.57	6.2 ± 1.93	$U = 50.50, p = .97$

Notes. SD = standard deviation; FES-I = Falls Efficacy Scale – International.

Table 1. Demographic summary for each group (mean scores ± SD).

Pseudonym	Falls during pandemic	Falls pre-pandemic	Memorable fall location	Time of day	Type of fall	Type of injury	Medical care
Nigel	2	1	Outdoors	Evening	Slip	NA	A&E
Adele	2	1+/UN	Indoors	Morning	Loss of balance	Bruised back cracked ribs.	A&E
Caroline	1	1	Indoors	Afternoon	Slip	NA	Pharmacist
Jennifer	1	NA	Outdoors	Afternoon	Trip/stumble	Bruising	Pharmacist
Louise	1	NA	Outdoors	Afternoon	Trip/stumble	Bruising	A&E
Kevin	1	NA	Outdoors	Early morning	Slip	Sprained right ankle	GP
Carol	1	NA	Outdoors	Afternoon	Trip/stumble	Fractured ankle	A&E
Sarah	1	NA	Outdoors	Afternoon	Trip/stumble	Bruised ribs	No
Helen	2	1	Outdoors	Afternoon	Trip/stumble	Bruising	NA
Sally	1	NA	Outdoors	Morning	Trip/stumble	Soft tissue damage	A&E
Susan	4	NA	Indoors	Afternoon	Loss of balance	Bruising, cuts, grazes.	GP
Jane	6	6	Outdoors	Morning	Loss of balance	Hurt shoulder	Visited GP
Fiona	10	5	Outdoors	Afternoon	Trip/stumble	Bruising, cuts, grazes.	GP
Liz	1	NA	Outdoors	Afternoon	Trip/stumble	Broken shoulder	A&E
Claire	1	1+/UN	Outdoors	Morning	Trip/stumble	Grazing	NA
Wendy	1	1+/UN	Indoors	Evening	Slip	Bruising	NA
Harold	1	NA	Outdoors	Evening	Trip/stumble	Bruising, cuts, grazes.	Minor injury unit
Ruth	1	2	Indoors	Evening	Loss of balance	Bruised ribs and shoulder	NA
Elaine	1	1+/UN	Outdoors	Morning	Trip/stumble	Broken arm	A&E
Arthur	2	NA	Outdoors	Afternoon	Trip/stumble	Broke hip	Hospitalised

Notes: 1+/UN = multiple falls of an unknown quantity, NA = not applicable, A&E = accident and emergency, GP = general practitioner

Table 2. Participant fall history data.

prevalence of medical care required (A&E or hospital admissions = 5 middle-aged and 4 older), however, the older group showed a greater propensity to fall, as shown by the higher number of falls (see Table 2).

Most interviewees (N= 7 middle-aged, 8 older) when asked directly if the pandemic influenced how they felt about falling said no, it had not. As such, the current analysis will focus exclusively on themes related to the experience of falls in general, rather than pandemic-specific falls.

Thematic similarities and differences in middle-aged and older adults

Five distinct themes were identified across both middle and older age groups: (i) perceptions of age-related decline; (ii) ageism: stigma associated with 'fallers'; (iii) concerns about loss of independence; (iv) unravelling perceived control and (v) perception of falls risk: concerns and awareness. The fifth theme shared some similarities with the two age groups, with themes one to four demonstrating distinct differences. Each theme is discussed further below and additional quotations for each theme can be found in the supplementary information (see S3 Table: supporting quotations) to provide a summary of the occurrence of each theme.

Theme 1: Perceptions of age-related decline

Half of the middle-aged sample demonstrated a clear theme of how their experience of falls and imbalance had made them more aware of their age.

It's kind of… a bit scary because it makes you realise your age… you know, I might look 70 but I feel about 17 inside. (Jennifer, 57, NF)

Carol discussed the theme of age-related decline at length, expressing her concerns that she previously played a lot of sport and currently felt that she needed to reduce her engagement in some activities due to her age and risk of injury.

I am getting older; I am getting frailer…I worry about the damage that I can do as my body is getting older…it takes me much longer [to recover] from falls and injuries… whilst I consider myself fit and able to continue [my] activities that I have always done. I do think maybe I am not. (Carol, 60, NF)

Carol suffered from a fractured ankle due to her fall, which impacted her concern about future injuries. The language used throughout her interview demonstrated some level of anxiety towards ageing and a sense of frustration towards her ageing body. Furthermore, Carol also attributed pandemic restrictions as a cause for accelerating her experience of age-related decline.

I felt as if I was ageing gradually but now, I feel I have additional concerns due to COVID which have added to the normal progression (Carol, 60, NF)

Another participant, who experienced a sprained ankle due to his fall, described how he was conscious of age-related decline but demonstrated more proactive behaviour towards his health and wellbeing.

I'll be 60 in six months… So you're getting older all the time…you're always thinking…what can I do to improve things like balance… so you don't… start falling regularly? (Kevin, 59, NF)

Surprisingly, only two older adults mentioned age-related decline when asked about their perception of future falls risk. Both older adults were highly active and discussed how physical decline would not deter their activities.

As I get older and in a very short time… in the last 12 months, I've had two cataracts operations… and injections in my eyes for macular degeneration and treatments for glaucoma… My eyesight is deteriorating and that does concern me… having said that, yesterday, we walked about 2.5 miles. (Harold, 74, NF)

I think it's part of the ageing process. So, I've just got to be more careful because I'm getting older. People might say, "Well just, you know, why are you doing the things you're doing?" … but I enjoy exercise. Perhaps if I fall too often, then I can no longer enjoy it. (Fiona, 70, RF)

These responses highlight differences in self-perceptions of ageing (SPA), which are known to impact various health outcomes and longevity[24]. Participants such as Carol discussed loss-related self-perceptions of ageing, which resulted in self-limiting beliefs and could lead to avoidance of physical activities due to her perceived fall risk. In contrast, other participants, like Kevin, showed a more proactive approach to ageing, which could lead to a better quality of life and reduce risk of accidents and injuries associated with falls. For example, in older fallers, positive self-perceptions of ageing has been associated with physical 'resilience', which, in turn, predicted social re-engagement after a fall[25]. Mounting evidence from behaviour change literature suggests that self-perceptions of ageing are modifiable and physical activity interventions may be more efficacious when combined with self-perceptions of ageing intervention[24]. No study that we are aware of has measured the longitudinal impacts of combined self-perceptions of ageing and physical activity interventions as they relate to falls.

Theme 2: Ageism: stigma associated with 'fallers'

While many of the middle-aged participants acknowledged their age-related decline, it was also evident that there was a discomfort in being labelled as 'someone who falls', as they associated this with 'old people'. This stigmatisation of 'fallers' was particularly prevalent in the younger middle-aged participants. For example, despite having recurrent falls, Adele stated;

I know that older people tend to fall more easily but I don't consider myself an older person (Adele, 55, RF)

Jennifer also discusses ageism but directed towards herself.

I never really felt that I was of an age where I would be worrying about falling… in the past, I've probably thought, "These silly old people who fall" … and I now am that silly old fool (Jennifer, 57, NF)

These comments support the SPA literature where research has shown that societal ageing stereotypes can become internalised into negative SPA and consequential self-fulfilling prophecies[26].

One older adult, Elaine, discussed how ageist behaviour from others had impacted her concerns about falling. When asked what concerns about falling felt like to her, Elaine said;

Feeling old. People don't have time for you. They shove past you and stand in front of you. That's an age thing. And I'm a bit more wary (Elaine, 79, RF)

Together, Themes 1 and 2 highlight the complex interplay between both societal and self-perceptions of ageing and falls. Previous research has demonstrated that falls are stigmatising for older people[27] and many older adults reject the label of 'at risk of falling', as it threatens identity as an independent and self-competent adult[28]. This is a known barrier to engagement in falls prevention interventions and may be a key contributor to the high prevalence (up to 75%) of unreported falls[29]. This threat to identity and independence is discussed directly in Theme 3.

Theme 3: Concerns about loss of independence

Loss of independence was a theme only mentioned by participants in the older adult group. As independence in older age often denotes the ability to be self-reliant, both Liz and Arthur developed concerns about losing control and becoming a burden to other people in their lives after experiencing their first injurious fall.

It makes me feel that I might be dependent on other people. I don't want that, I've always been very much in control (Liz, 70, NF)

I was pretty helpless. When I came home from the hospital, I couldn't do an awful lot for myself. My wife had to do an awful lot (Arthur, 83, NF)

For Fiona and Jane, who had experienced falling previously, it was clear that they understood the impact that falls could have on their autonomy to engage in activities and their wider sense of freedom.

I don't want to get injured because then you can't do what you want to do… The fear of falling… it's the consequences of the fall, not the fall itself. So, it's whether [it] impinges on my way of life (Fiona, 70, RF)

I'm thinking, "I'm not going to be able to ride my bike for a while" … and that was annoying… losing my independence. I need to get out for me (Jane, 70, RF)

In general, older adults' concerns were not just related to the fall itself, instead they focussed on the consequences of falling and how they may impact their ability to partake in everyday activities. Further consequences of falling were presented as an inability to engage in physical activity and the associated physical and mental consequences this may pose. These findings compliment previous research in respect to the feared consequences of falling[30], with the loss of independence being associated with a decline in both physical and emotional well-being[31]. This is important to note as the promotion of 'ageing well' often includes the idea that independence is essential to good physical, emotional and cognitive health[32]. Health practitioners cite this link between falls and loss of autonomy as a key contributor to the underreporting of falls, as patients fear institutionalisation if they tell their family or GP[29].

Theme 4: Unravelling perceived control

Perceived control was discussed by both age groups but from different approaches. Middle-aged adults demonstrated low perceived control over their fall risk. Participants provided accounts which formed a repeated pattern that falls were 'just one of those things that happen'.

I had two falls in the last two months, and both were not really my fault. I don't want to fall again but accidents happen (Louise, 58, NF)

This fall is just a one off… just get on with stuff and if you fall, you fall (Kevin, 59, NF)

I think it's just an age thing really (Caroline, 57, RF)

This suggests that, despite being aware of age-related decline, middle-aged adults attributed the main cause of falling to external and uncontrollable factors, reporting falls as accidents and 'one of those things that happen'. Health practitioners have documented that this perception of falls as a normal occurrence in ageing is another key factor that contributes to the underreporting of falls and lack of engagement with falls prevention interventions[29].

In contrast, most older adults demonstrated high perceived control, taking more direct responsibility for their falls. They showed an awareness of their own physical abilities, subsequently adopting a controllable and adaptive approach to modifying their behaviour to prevent falls. For many older adults, these discussions around perceived control also provided evidence of more conscious movement processing.

I have to be quite careful. I've noticed I'm slowing down. I used to go a lot faster around the garden (Wendy, 71, RF)

My eyesight is deteriorating… I've detected that it leads me to A) walk more slowly because I'm taking care and B) that sometimes I find I'm sort of slightly drifting off line. But having said that yesterday, we walked about 2.5 miles climbing… it's coming down that I have to be careful about. (Harold, 74, NF)

I walk much, much slower deliberately and make sure I go heel and toe, heel and toe… I'm very careful now coming downstairs. I hold on to at least one side (Arthur, 83, NF)

Interestingly, similar conscious movement processing was only reported in middle-aged adults who had more serious falls, resulting in visits to A&E. Nigel experienced a life-threatening fall, which included a head injury. He explained:

It's not that I'm consciously preoccupied. Or consciously fearful. But I'm much more cautious in my day-to-day life about things like coming downstairs or even walking outdoors. (Nigel, 55, RF)

In the literature, conscious movement processing is often associated with concern about falling[12], which can be conflated with fear of falling. However, Nigel's quote above demonstrates that awareness of falls risk can exist without 'conscious fear', which will be discussed more in the next section.

Theme 5: Perceptions of falls risk: Concerns and Awareness

Middle-aged and older adults provided accounts to suggest the presence of concerns about falling. For some individuals, this concern was a direct response to experiencing a fall and was present for both new and recurrent fallers. These concerns about falling were further supported by responses to the FES-I questionnaire, with most participants presenting with either a moderate (score of 20-27) or high (score of 28+) concern about falling.

When asked directly about whether they were concerned about falling again in the future, many participants used terms such as 'scared', 'anxious' or 'worried' and for many, these feelings were associated with 'reliving' their previous fall.

Afterwards I do believe that you still relive that moment of falling down and I have found myself really scared over the last few weeks to walk again. So, it has created some fear for me... I now only walk with somebody. I am aware of how I walk now. (Louise, 58, NF, FES-I = 29)

I'm anxious now, for example, about ten months ago, I was crossing the road in [location] with my trolley and one of my wheels got stuck in a pothole in the road... I fell over and I had two big bruises where my legs caught the frame of the trolley. But I could have been flat on my face in front of the traffic. (Ruth, 75, RF, FES-I = 32)

For some this was described as a constant concern, which resulted in conscious movement processing and/or preventative strategies to reduce falls risk.

The biggest problem with it is that I have absolutely no warning when it's gonna happen which mentally means I'm terrified of it happening again... it's constant. It's that anxious feeling. Even now, if I get up to go into the kitchen I might go, so I'm thinking, "you might, you might, you might go" ... Physically, I can do things, but I'm scared it's gonna happen... I'm walking with the stick now because I feel more secure. I don't actually physically need a stick yet, but it's like a comfort blanket in some ways. (Susan, 68, FES-I = 37)

Well, at the moment I'm quite concerned because it was such a shock to do it for no apparent reason. And therefore, I'm now careful with what I'm doing.... I'm being very cautious, whereas before I wasn't. It makes you initially more reluctant to go out on your own, which is, you know, horrendous... The first time I went out on my own... I was walking very deliberately. And very conscious of my foot movements and also conscious of my balance. (Jennifer, 57, FES-I = 22)

Susan's constant concerns are also captured by her FES-I score, however, this was not true of the middle-aged participant, Jennifer. This could indicate age-related discrepancies in how concerns about falling are experienced. Relatedly, several participants described their concern about falling as circumstantial, which only impacted their behaviour in specific scenarios.

I don't have a fear of falling during normal everyday activities. Yeah, I do still have that fear of falling if I'm going downhill. So, it's always on my mind and I want to walk faster but I can't because I think my knees ache and I can't walk fast because I am fearful and I think, "go slow, go slow". (Sally, 64, FES-I = 21)

For some new middle-aged fallers, these concerns resulted in a reluctance to complete certain activities alone.

I am sufficiently concerned. Yeah, that it might happen again so well, I'm going walking tomorrow and I'm back walking quite a long way. So, 15 miles tomorrow. But I wouldn't do that without my husband (Sarah, 62, NF, FES-I = 28)

In anticipation of falling again, a hesitancy to perform activities alone may present as a protective mechanism to participants. Over time, however, this increased concern may reduce the person's independence and lead to other maladaptive behavioural modifications from middle-age into later life years. For example, Carol, described how she gave up a physical activity she loved due to concerns about falling;

I like swimming. I was going to go off and go swimming. [My husband] went, "Just a minute, can you get a swimming costume off by yourself?" and I said, "oh God I didn't realise how difficult this is". He said, "I'm not being difficult, but if you fall in this room but there's nothing, I can do about it" ... (Carol, 60, NF, FES-I = 23)

Our findings support research to suggest that worries about falling develop in response to individuals recognising their vulnerability to a fall[12]. Themes 4 and 5 demonstrate similar evidence that concerns about falling may be associated with conscious movement processing, and this may be related to participants perceived control over their fall risk. Older adults appeared to reconfigure their identity to being responsible and vigilant to take more control over their personal fall risk, demonstrated through more conscious control of movements when mobilising and leading to protective adaptations to behaviour. In this respect, 'concerns' could also demonstrate useful awareness of ways to reduce their falls. On the other hand, middle-aged adults typically presented as having little or no control over fall risk, which was associated with acceptance that 'falls will happen' and/or a strategy of avoidance of doing certain physical activities on one's own. This may be particularly risky as they progress into later life stages, especially when combined with loss-related self-perceptions of ageing, which can predict physical activity and longevity[24]. Recent research also demonstrates that loss-related self-perceptions of ageing can predict dysfunctional gait[33].

Key Findings

This study sought to examine the lived experience of falling as a middle-aged or older adult. We found that, whilst middle-aged and older adults scored similarly on scales of concern about falling (FES-I), the underlying concerns based

on the findings here, may be qualitatively different. Whilst, the current study supports the finding[34] that the FES-I is a sensitive tool in detecting concerns about falling in both older and younger populations, the qualitative findings suggest that the FES-I may not capture some of the contextual and circumstantial concerns about falling that participants experience, especially those in middle age. Future refined scales targeting younger and older demographics should include qualitative items relating to concern about falling, for example middle-aged scales may include reference to physical activities performed alone and activities associated with previous or near falls.

The FES-I scale has been validated in healthy older populations or populations with conditions that impact balance, with an acknowledged floor effect for more functionally-able adults[34]. As such, the moderate-to-high FES-I scores witnessed in our middle-aged group are somewhat surprising. The authors predict that this may be due to the similarity in number of recurrent fallers and injurious falls in the middle-aged and older groups. Given the independent link between concerns about falling and various negative outcomes, including overall mortality, quality of life and functional decline[35,36], the current findings suggest that all adults aged 45+ who seek treatment for fall-related injuries should be asked about their concerns about falling.

The interviews took place during the COVID-19 pandemic restrictions. Quantitative evidence demonstrates that reduced physical activity during the pandemic was associated with deconditioning, which subsequently predicted falls and concerns about falling[37]. The authors initially expected that concerns about falling may be heightened during this time, however, in contrast, nearly all participants reported no perceived change in their fall risk or concern about falling. In light of this, we would argue that the current themes translate beyond the period of pandemic restrictions.

We report the psychological impact that experiencing an injurious fall can have on the lives of both middle-aged and older adults. For older adults, concerns about falling were focused on worries about fall-related injury and loss of independence. Despite this, most older adults demonstrated high perceived control over their fall risk, which translated into protective adaptations to behaviour and heightened awareness during risky activities. In contrast, concerns about falling for middle-aged adults were accompanied by an increased awareness of age-related decline and a perception of falls as a normal part of the ageing process, which often translated into a lack of personal responsibility or avoidance of certain activities, which may be harmful and increase fall risk in the long-term.

Limitations

A limitation of the study is that participants were asked to recall a history of fall incidents both before and during the pandemic. It is known that self-reported retrospective recall methods can lead to the underreporting of falls and that older adults often perceive a fall differently compared to health professionals[38]. To combat this, the World Health Organisation's definition of a fall was provided to participants when asking them to recall fall incidents: "a fall is an event which results in a person coming to rest inadvertently on the ground or floor or other lower level"[39]. It is important to note that a large majority of participants recalled, and focussed on, injurious falls, increasing the likelihood of recalling these fall events accurately[40]. For the two middle-aged participants who did not report experiencing an injurious fall during the pandemic, both reported experiencing at least one fall prior to the pandemic, thus demonstrating the ability of middle-aged adults to retrospectively recall non-injurious fall incidents. Future studies should examine both middle-aged and older fallers and non-fallers using prospective data collection methods to improve fall reporting accuracy. Using these methods will allow both fall incidents and concerns about falling to be examined earlier in the life-course to enable effective preventative methods to be implemented.

Another limitation of the current study is that we only interviewed participants who lived in the UK. This was done to ensure that all participants experienced similar COVID-19 pandemic restrictions in terms of reduced civic movement and closure of public spaces, such as gyms and community centres. It's likely, however, that perceptions of how pandemic restrictions impacted physical activity and fall risk would be quite different in populations who experienced stricter restrictions or groups who perceived greater deconditioning during this period. The clinical challenge will be to find methods to engage both middle-aged and older adults who are at risk of falling in fall prevention activities, particularly when an individual does not perceive themselves being at risk of falls. This challenge is already evident in the clinical literature[29].

A final limitation of the study was that, due to the expedited ethics for studies related to the pandemic, no patient and public involvement and engagement (PPIE) opportunity informed the interview guide. We attempted to remedy this by reviewing the question wording following comments from the initial participants. Future research on this topic should, however, be guided by PPIE, in order to address some of the recommendations made above.

Application and Recommendations

In our study, middle-aged adults required access to healthcare services at a similar rate to older adults due to fall-related injuries. This is an important finding as it further highlights the need for a lifespan approach to falls prevention, requiring early education on falls prevention strategies to prevent repeated access to medical services due to reoccurring injurious falls. Such early intervention should reduce the fall-related healthcare burden and is pertinent given the ever-present demand on healthcare systems post-pandemic.

In support of recent World Falls Guidelines[41], we recommend that clinicians should adopt a holistic approach that examines concerns about falling as part of a comprehensive multifactorial fall risk assessment. This study identified that although both middle-aged and older adults scored similar on the FES-I, they displayed qualitatively different underlying concerns about falling. This finding could be used to help design age-specific targeted interventions to reduce both concerns about falling and fall risk. The identification of these different factors may also be useful to healthcare providers for patient communications; if qualitative concerns about falling are different between age groups, communication materials should reflect these differences to be more meaningful to the different audiences. For example, the current findings suggest that middle-aged adults could be unwilling to engage with 'falls prevention' materials/activities, as they may not recognise the relevance to themselves, due to their perception that 'falls are just one of those things that happen with age'. Considering this, patient communications regarding the benefits of physical activity or other factors related to falls, should perhaps be presented in relation to injury prevention, rather than falls reduction. Future PPIE work with middle-aged adults is required to inform future implementations of this research.

In addition, future preventative research should also consider including the identification of perceived control surrounding fall risk[12]. Concerns about falling in earlier life years may help to educate and inform individuals about their own fall risk across the life course and, potentially, reduce the fall-related burden on healthcare services. Future interventions may also benefit from a behavioural change approach to target self-perceptions of ageing alongside falls prevention training[24], thus challenging the stereotype that falls are a natural part of the ageing process.

Conclusion

These findings demonstrate nuances in the experience of concerns about falling and how this can impact falls-related behaviour in both middle-aged and older adults. For older adults, concerns about falling were associated with protective behavioural adaptations and greater awareness of factors that impacted their personal falls risk. In contrast, concerns about falling for middle-aged adults were accompanied by a lack of personal responsibility, a perception that falls were 'just one of those things that happen' with age and/or avoidance of certain physical activities. This may contribute to negative self-perceptions of ageing and heightened future fall risk. The novel findings highlight the importance of examining concerns about falling in earlier life years to provide intervention strategies to reduce negative consequences and subsequent burden on healthcare services. In addition, these strategies must avoid stigmatisation of falls and could integrate behavioural change approaches promoting positive self-perceptions of ageing and autonomy.

Ethics approval

Ethical approval for the study was obtained from the corresponding author's University Faculty Ethics Committee (EthOS ID: 29119) and the research was carried out in accordance with the declaration of Helsinki.

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Authors' Contributions

Jodi Ventre: Conceptualization (equal), data curation (equal), formal analysis (equal), investigation (equal), methodology (equal), resources (supporting), writing – original draft preparation (equal), writing – review and editing (equal). Toni Hall: Conceptualization (supporting), data curation (equal), formal analysis (supporting), investigation (equal), methodology (equal), resources (lead), writing – original draft preparation (supporting), writing – review and editing (equal). Paul Holmes: Funding acquisition (equal), supervision (supporting), writing – original draft preparation (supporting), writing – review and editing (equal). Chesney Craig: Conceptualization (equal), formal analysis (equal), funding acquisition (equal), methodology (equal), supervision (lead), project administration (lead), writing – original draft preparation (equal), writing – review and editing (equal).

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S1 Table. Falls questionnaire.

1. We would like to know about any fall accidents that you have experienced **since the beginning of the Covid-19 pandemic restrictions in March 2020 until now**. A fall is defined as "an event which resulted in you coming to rest inadvertently on the ground or another lower level".

Q. How many falls have you experienced since the beginning of the COVID-19 pandemic?

_____

Q. When did your most memorable fall occur?
☐ In the past few weeks (1)
☐ In the past month (2)
☐ In the past 2-3 months (3)
☐ In the past 3-6 months (4)
☐ Over 6 months ago (5)

Q. Where did your most memorable fall occur?
☐ Indoors (1)
☐ Outdoors (2)

Q. At what time of day did your most memorable fall occur?
☐ Early morning (5am - 7:30am) (1)
☐ Morning (7:30am - 12pm) (2)
☐ Afternoon (12pm - 5pm) (3)
☐ Evening (5pm - 8pm) (4)
☐ Night time (8pm - 12am) (5)
☐ Late night/early morning (12am - 5am) (6)

Q. Which of the following best describes your most memorable fall?
☐ Trip/stumble (1)
☐ Slip (2)
☐ Bumped into something/someone (3)
☐ Pushed/pulled over (4)
☐ General loss of balance (5)
☐ Loss of support (6)
☐ Fainting (7)
☐ Other. Please specify: (8) _____

Q. Please provide further details of the circumstances of your most memorable fall (incl. activities being performed at the time and any possible causes):

_____

Q. Thinking of your fall(s) since the beginning of the Covid-19 pandemic restrictions, did you experience any injuries from your fall(s), including bruising?
☐ No (1)
☐ Yes. Please provide details: (2) _____

Q. Did you seek medical attention for your fall(s)?
☐ No (1)
☐ Yes, I spoke to a pharmacist (2)
☐ Yes, I went to my GP/family practitioner (3)
☐ Yes, I went to Accident and Emergency (A&E/ER) (4)
☐ Yes, I was hospitalised (5)
☐ Yes, other. Please specify: (6) _____

Q. Have you had a near fall within the last 6 months, a slip or trip that would have resulted in you coming into contact with the ground, if the fall was not broken by an object or person preventing you from falling?
☐ No (1)
☐ Yes (2)

Display This Question:
If Have you had a near fall within the last 6 months, a slip or trip that would have resulted in you ... = Yes

Q. Please provide further details of the circumstances of your most recent near fall (incl. location, time of day, activities being performed at the time and any possible causes):

_____

Q. Did you experience any falls in the year before the pandemic?
☐ No falls (1)
☐ Yes. Please specify approximately how many: (2) _____

S2 Table. Interview guide.

Introduction

Build rapport with the interviewee through casual introductions. Make them aware notes may be taken to ensure nothing is missed. Give a brief overview of the interview and what the research hopes to gain (Age differences in experiences of falls, fear of falling and anxiety). Allow the interviewee the chance to ask any questions before the interview begins.

Notes on questions

This is a semi structured interview so depending on the interviewee's answers, questions may not be asked in this order and the questions are not exhaustive. This interview agenda will be tailored slightly to each participant depending on their previous survey answers and will not ask demographics as they have already been collected. A final point to mention is the prompts given are the planned prompts, informal prompts will not be noted here.

1. Could you please describe what having a fall means to you?
Prompt - How do they make you feel?

2. Thinking back to your most memorable fall, what was your biggest concern?
Prompt - What do you think made you feel that way?
Sub-prompt - For example, to what extent were any of the following [pick as appropriate]; your injuries; need for hospitalisation; psychological consequences; effects on your family; the impact on your lifestyle and living circumstances; a concern for you?
Prompt - How concerned are you about falling again?
Prompt - Are these concerns different to before the lockdown restrictions? How?

3. [a. For previous fallers, b. for new fallers]
a. From looking at your survey answers, I can see that you did report having a fall before the pandemic restrictions. Do you think you fall less or more now and what about lockdown (if anything) may have contributed to this?
Prompt - To what extent has this varied throughout the pandemic?
Prompt -What about the lockdown restrictions do you think had the biggest impact on your falls? Why might this be?
b. From looking at your survey answers, I can see that you did not report having a fall before the pandemic restrictions. What do you think has changed since then that may have contributed to your fall(s)?
Prompt - How do you think restrictions contributed to your fall(s)?
Prompt - To what extent has this varied throughout the pandemic?
Prompt - What about the restrictions do you think had the biggest impact on you fall(s)? Why might this be?

4. From looking at your survey answers, I can see that you did/did not report significant fear of falling. May I ask what you think a fear of falling feels like?
Prompt - For example, do you think this feels like a general constant fear/worry about falling or is it more feelings/physical sensations associated with certain activities or maybe both?
Prompt - What has caused this/helped you avoid this?

5. From looking at your survey answers, I can see that you reported feeling anxious. What makes you feel like this? [This will only be asked if relevant to the participant]

6. Is there anything in particular that you feel would help reduce your risk of future falls?

7. Do you have any questions for me or anything else you may like to add?

S3 Table. Supporting quotations for each theme within each age group.

Theme	Supporting quotations	
	Middle-aged	Older
Age-related decline	**Kevin** I'll be 60 in six months time. So you're getting older all the time. So you're always thinking about what. What can I do to keep my fitness stuff? What can I do to improve things like balance to you know so you don't come to us looking time since we start falling regularly? **Helen** I've gotten older my balance isn't as good as I get older so I probably will go back to something like Tai chi again later on you know when it everything is up and running **Carol** Reference 1: I am getting older, I am getting frailer. I possibly ought to think twice about doing the things that I have always done. Erm, I worry about the damage that I can do as my body is getting older. Reference 2: I used to play a lot of sport and I used to recover very quickly. Now that I'm getting older it takes me much longer from falls and injuries. Reference 3: Whilst I consider myself fit and able to continue to do the activities that I have always done. I do think maybe I am not. Reference 4: Whereas when you're at home you just think that you can do stuff and clearly you can't as you get older. Reference 5: I think it's a psychological fear. I think it's the fact that you don't bounce like you used to come. And, Um, yes, it's definitely psychological that you have to be. You know, I'm definitely very aware of it now that I ought to be more careful, because if I do fall the implications are much greater than they used to be. **Caroline** Interviewer: So do you think that it is just the fall that you have had and the shock that it was on you as you are not used to it, falling exactly, that has caused that awareness then? Caroline: Erm. No. I think it's just an age thing really. **Jennifer** It's kind of. A bit scary because it makes you realize. Your age, I mean, I'm like most people of my age. I thought, you know, I, you know I might look 70 but I look I feel about 17 and side.	**Harold** Interviewer: How concerned are you about falling again? Harold: As I get older and in a very short time, I shall be 75 and in the last 12 months, I've had two cataract operations in both eyes, also have injections in my eyes for macular degeneration and treatments for glaucoma. And of course, they all signal that my eyesight is deteriorating. Okay. And that does concern me. And in fact, I've detected it leads me to A, walk more slowly because I'm taking care and B, that sometimes I find I'm sort of slightly drifting off line. But having said that yesterday, we walked about 2.5 miles climbing one of the major headlands near where we live. And that's a steep uphill on a rocky surface. And it's coming down that I have to be careful about. **Fiona** Interviewer: Do you think that there's anything that would help to reduce any future falls? Fiona: I think is part of the ageing process on. So I've just got to be more careful because I'm getting older. People might say, "Well just, just, you know why are you doing the things you're doing at 70? Well, enjoy sewing or play the piano". But I enjoy exercise. Perhaps if I fall too often, then I can no longer enjoy it, then maybe I'll pick up piano again.
Ageism	**Jennifer** When this when this happens, in the past I've probably thought all these silly old people who fall. I mean, at one point I was a volunteer at [redacted] and I used to help people who have mobility problems filling, you know, benefit claim forms and one of the questions was always have you had any falls and you know people who are also, "Well yes, I fell here" and I was also thinking silly old fool. And I now am that silly old fool. **Adele** Interviewer: What do you think that your biggest concern was about falling? Adele: Oh definitely the impact on my lifestyle. I mean I had never even given it a thought. I know that older people tend to fall more easily but I don't consider myself an older person you know.	**Elaine** Interviewer: We noted that you reported a fear of falling. Can you tell me what that fear of falling feels like for you? Elaine: Feeling old. People don't have time for you. They shoved passed you and stand in front of you. That's an age thing. And I'm bit more wary, bit shy. I don't know.

S3 Table. *(Cont. from previous page).*

Theme	Supporting quotations	
	Middle-aged	Older
Loss of independence		**Jane** Interviewer: So with the injury, was your main concern around the injury, as you mentioned before, being able to care for your husband? Jane: Yes definitely but also selfishly myself because I'm thinking I'm not going to be able to ride my bike for a while because yeah. And that was annoying. Interviewer: Yeah. Okay. So I see in the from your survey that you are quite active and stuff. So is that a concern for you as well? Jane: Yes, losing my independence. I need to get out for me. **Fiona** I don't want to get injured because then you can't do what you want to do, so I cant enjoy it as much because of that. Reference 2: I suppose the fear, the fear of falling, in the way I think about it is, it's the consequences of the fall, not the fall itself. So it's whether the consequence of that fall impinges on my way of life. **Liz** It makes me feel that I might be dependent on other people. I don't want that I've always been a very much "just in case" person. If you're not totally in control, you can be just in case. **Arthur** Interviewer: Could you please describe for me what having a of having a fall means to you? Arthur: A bloody nuisance. Yeah. I mean, it stopped me. Although it happened in the middle of a pandemic and certain things had stopped, it meant that for the next two or three months... well first month, I was pretty helpless. When I came home from hospital. I couldn't do an awful lot for myself. My wife had to do an awful lot. Then gradually, I went from two crutches to one crutch, from one crutch then two sticks to one. At the hospital they said it will be three or four months before I could walk properly but after about three months I was walking with a stick.
Unravelling perceived control	**Louise** I had two falls in the last two months and both were not really my fault Reference 2: I don't want to fall again but accidents happen. I feel that I ought to be more vigilant about how I move around. And make sure that I don't do things and take too many chances basically. **Kevin** I mean this this fall is just a one off. You know my own fault, I guess. Clumsiness or ineptness that I slipped and hurt myself and fell. Reference 2: Just get on with stuff and if you fall you fall so **Helen** Interviewer: So how concerned would you say you would be about falling over again that since you've had your last fall? Helen: Um I don't bother too much about it actually. Interviewer: Yeah and you think that that's changed over time or do you think you've always tried not to think about it once it's sort of happened? Helen: It's not changed. You just get up and get on with it. Reference 2: Interviewer: Do you think that you fall less or more now when you think about the lockdown? Helen: Um, I think about the same really. I have fallen off a stool and off a Segway. I just, I have fallen outside so I think it is just one of those things. I just fall sometimes. Reference 3: Interviewer: What do you think has helps you avoid this fear or just think it's sort of how you are in general, what makes you not worry about that?	**Elaine** Interviewer: But now that we're moving out of lockdown, is there anything in particular that you feel would help reduce your risk of future falls? Elaine: my mindset, being aware of where I'm walking and what shoes I'm wearing. **Harold** Interviewer: How concerned are you about falling again? Harold: As I get older and in a very short time, I shall be 75 and in the last 12 months, I've had two cataract operations in both eyes, also have injections in my eyes for macular degeneration and treatments for glaucoma. And of course, they all signal that my eyesight is deteriorating. Okay. And that does concern me. And in fact, I've detected it leads me to A, walk more slowly because I'm taking care and B, that sometimes I find I'm sort of slightly drifting off line. But having said that yesterday, we walked about 2.5 miles climbing one of the major headlands near where we live. And that's a steep uphill on a rocky surface. And it's coming down that I have to be careful about. **Wendy** Interviewer: So do you think it's fair to say that you are still quite concerned about falling again? Wendy: I think have been getting more concerned over the last year. And I don't whether it's my age because I'm coming up to 72 or whether it's the pandemic. I don't know what it is, but I am more cautious and I do seem to be more unsteady. And I don't know whether that's it because I'm being more cautious, or if I am becoming more unsteady.

S3 Table. *(Cont. from previous page).*

Theme	Supporting quotations	
	Middle-aged	**Older**
	Helen: Uh, no. I think because I have a condition that classes me as disabled from my early 20s and so I think that... erm, I mean I have worked full time and you know raised a family and done my studying whilst I have been working. So, I just think it is one of those things, so you get up and get on, you know. You just wake up in the morning and get on with it. It is the way it is, isn't it, so. **Sally** I view myself as somebody who is clumsy. And I trip and bump into things and I always have. Reference 2: I don't have a fear of falling during normal everyday activities. Yeah I do still have that fear of falling if I'm going downhill. So it's always on my mind and I want to walk faster but I cant because I think my knees ache and I cant walk fast because I am fearful and I think, "go slow, go slow". **Carol** When you're used to having been fit and active all your life, and suddenly you realize, "I'm actually aging... is going to limit what you can do in the future", and you can't do things that used to be able to do, and you don't bounce like you used to, and there's a worry about, "Can you look after yourself as you get older", you know? **Sarah** I'm somebody who in the past has just gone and done. But yeah, you have to recognize your kind of limitations. **Caroline** Interviewer: So do you think that it is just the fall that you have had and the shock that it was on you as you are not used to it, falling exactly, that has caused that awareness then? Caroline: Erm. No. I think it's just an age thing really. **Jennifer** I think the first time I went out on my own was... say three weeks after the fall, but when I was going to group which is only literally 10 minutes walk from here. But I was walking very deliberately. And very conscious of my foot movements and also conscious of my balance. Kind of walking along thinking to myself, "right? .. you know, are you OK? Are you OK? Are you OK?" Reference 2: I mean the only other thing is I tend to hold on a bit more. Going up and downstairs. Well, particularly downstairs, which I never used to. I used to run up and down stairs. Reference 3: The other thing I've noticed because I tend to because we live reasonably close to the town centre here, so a lot of the walking is along town streets. There's usually a wall or something at the side, and if I'm walking along a road where there is, there are railings, or there's a wall. I've actually found myself gravitating to that side of the pavement. Reference 4: I sense that my balance isn't as good as it used to be, and I'm sure there are things that can be done about that **Nigel** Interviewer: So may I ask you what you think of fear of falling feels like? Nigel: Yeah, it's not that I'm consciously preoccupied. Or consciously fearful. But I'm much more cautious in my day-to-day life about things coming downstairs or even walking outdoors.	Reference 2: Interviewer: Can I ask you what you think a fear of falling feels like? Say for example, is fear of falling, perhaps a general kind of constant fear or... Wendy: No, it's not a constant fear. No. Its more like thinking "oh no I've missed that step again". Interviewer: So you think you have a fear of falling when you're doing like say an activity and certain things trigger it? Wendy: Yes. When I'm walking around the garden, I have to be quite careful. And I've noticed I'm slowing down. I used to go a lot faster around the garden. Reference 3: Interviewer: Would you say those stumbles have increased since the pandemic began? Wendy: Possibly but I have been doing more walking. And I think it might be to do with my eyes or a balance when I'm turning round to look if there's any traffic coming or if there's other people around. And I turn my head back, sometimes it's then I might miss a curb or something. Reference 4: The last time I had a fall in the house was when I was standing on a chair to try and decorate the ceiling and it wasn't quite a steady chair. So it was my fault really. And I fell onto another chair and bashed my ribs. That was about two years ago. **Jane** Interviewer: So just thinking about that most memorable fall again. And are you concerned about falling again so has that fall made you more concerned about having another fall? Jane: Yes. I'm more cautious, and I go a bit slower, and I was going round a bend and I was just going too fast, right? I'll be more careful now. Need to slow down. Reference 2: You have to accept there's an element of risk in everything you do. And actually, the risk of falling from what I do is probably less risky than going out in the motor car. So you have to look at the whole picture. And what you gain from this sports activities that you do, for me far outweighs any slight risk of falls. **Fiona** Interviewer: Okay. Thinking more, I guess, more psychologically. What do you feel when you have a fall? Fiona: Cross at myself because I think I should have put my feet up. So like, "oh silly me". You feel, I'm kind of blaming myself for erm but not in a bad way I just think, "oh, don't do that again" Reference 2: But now I'm having to think. Pick your feet up and look where you're going. Reference 3: Usually it means when I'm running and I trip over stone or something which I'm looking ahead of the path or I'm looking around at the scenery and I don't pick my feet up as nimbly as I perhaps used to. And sometimes I'll catch a foot. Sometimes I'll just stumble and other times I fall. **Liz** I tend to be more careful. I watch where I'm putting my feet now Because these things happen and I'm not going to let that happen again, if it's within my remit it will not happen again.

S3 Table. *(Cont. from previous page).*

Theme	Supporting quotations	
	Middle-aged	Older
		Arthur But if im going on a long walk because I often go on very rough ground so I need to be careful. Reference 2: Interviewer: Okay so are you concerned about falling again? Arthur: Oh, yes. Yes, of course, I am . I walk much much slower than I used. Last November, I was walking rather too fast up the High Street. I tripped and fell. Fortunately, I've put my arms out to save myself. I just hurt my arms but I thought "Are you stupid? How stupid can you be?" Somebody had to help me get up. So ever since then I walk much, much slower deliberately and make sure I go heel and toe, heel and toe and that sort of thing. I'm very careful now coming downstairs. I hold on to at least one side. If not both sides. I'm just more careful. More careful. Interviewer: Can I ask, well, what is it that concerns you the most? Is it falling again? Is it the consequences of the fall? Arthur: Definitely the consequences of the fall. If I fall again, hopefully I put my hands and arms out to save myself. But walking slowly im much, much less likely. Once, twice in the last few weeks I have had trips But because I'm walking slowly, I can recover quite well. Well, that's that's sensible because you're not rushing along. So I just do not rush full stop especially crossing a road and we've got a pedestrian crossing which I will use now if I have to cross. Well, actually it is very handy having a stick I put on an act of being a little alone man and lean heavily on a stick. The cars stop then and I hobble across. It works, it works wonders. I can put on an act when I need to. **Claire** I have a sort of walking pack, with basic first aid in it. So I was able to clean myself up. Interviewer: Okay, brilliant. Do you think that that's something that you take because you fall quite regularly? Claire: Yes. I do fall more regularly than I used to. And I think because we walk in a group, we tend to look out for each other as well. So we do carry basic equipment. Reference 2: Interviewer: Do you think that the lockdown has contributed to that increase in falls? Claire: No, my falling hasn't really increased in lockdown. But I am, I have been more vigilant. Reference 3: Interviewer: You did report a fear of falling. This is a bit of an abstract question, I guess, but can I ask you, what do you think a fear of falling feels like? Claire: I think I'm far more careful. I think I used to move more quickly or slowed down my pace of doing things. And also I'm a little bit more careful over my footwear. Tend to wear more "sensible" footwear. Well just all the time. Interviewer: You're always kinda thinking about ways to prevent those falls? Claire: Yes. Yes, I can. I think it's in the back of my mind. Interviewer: Would you say that it's like a constant kind of fear so you're always thinking about or is it just more associated with particular activity? Claire: No. I think I think I've become much more careful generally all the time. No, I don't think there's any one occasion. Reference 4: Claire: Well, the other thing I'm doing is I realised that I used one walking pole and I got into the habit of taking it with me everywhere. And I thought, "wow, I'm actually using as a walking stick when I don't really need it". So I've stopped. If I know the walk I am going on is on reasonably flat ground, I have stopped using the walking pole to make my body balance. And so as not to lose the skill.

S3 Table. *(Cont. from previous page).*

Theme	Supporting quotations	
	Middle-aged	Older
		Susan There was no reason for it, I hadn't knocked into the door and fallen over, my knees hadn't given way. I just froze and fell sideways, made myself fall sideways.
Concerns about falling	**Sarah** I am sufficiently concerned. Yeah, that it might happen again so well, I'm going walking tomorrow and I'm back walking quite a long way. So, 15 miles tomorrow. But I wouldn't do that without my husband because I'm still not completely steady. **Louise** Well I had two falls in the last two months and both were not really my fault. Afterwards I do believe that you still relive that moment of falling down and I have found myself really scared over the last few weeks to walk again. So it has created some fear for me. I am now conscious wherever I go when I am walking not to get my foot stuck in the ground again. Reference 2: Interviewer: Would you say you are concerned about falling again? Louise: Yes. I am very scared. I now only walk with somebody. I am aware of how I walk now. My feet keep touching the table that I tripped on today and I have only thought that I must walk a wider path around the table, not to get your foot stuck and fall over. **Nigel** Oh, I'm quite apprehensive now about having a fall. I wasn't previously. Reference 2: Interviewer: So may I ask you what you think of fear of falling feels like? Nigel: Yeah, it's not that I'm consciously preoccupied. Or consciously fearful. But I'm much more cautious in my day-to-day life about things coming downstairs or even walking outdoors. **Sally** Reference 1: Yeah, so I'm always like that and since the fall initially, I was very, very conscious. Reference 2: Interviewer: How concerned would you say you are about falling again after that fall? Sally: I think not just after that fall. I think I am somebody, I, I view myself as somebody who is clumsy. And I trip and bump into things and I always have. So I'm always a bit concerned. I do go... in the past, and I have this year as well, been on a bigger walk, a hike, sort of up hills and down again. And the downs are very, very hard for me ... because my knees aren't as strong as they should be and I'm nervous about falling. So I am very slow compared to the people I'm walking with when we're coming down. Reference 3: I've no fear in the house at all. So it's when I go out walking and when I've gone for a walk rather than just walk into the shops or anything like that and the fear is this, I don't trust myself because I'm clumsy. I skid on scree and things like that sometimes. Reference 4: I don't have a fear of falling during normal everyday activities. Yeah I do still have that fear of falling if I'm going downhill. So it's always on my mind and I want to walk faster but I cant because I think my knees ache and I cant walk fast because I am fearful and I think, "go slow, go slow". **Carol** Interviewer: Okay, so how concerned are you about falling again in the future would you say?	**Ruth** Well because I'm alone. And I live alone. But I'm anxious now, for example, about ten months ago, I was crossing the road in [location] with my trolley and one of my wheels got stuck in a pothole in the road and I just held on. I fell over and I had two big bruises were my legs caught the frame of the trolley. But I could have been flat on my face in front of the traffic. **Wendy** It's thinking about what the consequences would be. I think if, if I'm going to fall, I'm thinking, oh my goodness, where am I going to land and what's going to happen to me? **Harold** It's a bit like a fear of stepping in, stepping into the unknown. Whether that's an unknown condition of balance or condition of light and dark, or an unknown condition of which way you're going. It's a combination of all three sensors. **Arthur** Definitely the consequences of the fall. If I fall again, hopefully I put my hands and arms out to save myself. But walking slowly I'm much, much less likely. Once, twice in the last few weeks I have had trips but because I'm walking slowly, I can recover quite well. Well, that's sensible because you're not rushing along. So I just do not rush full stop especially crossing a road and we've got a pedestrian crossing which I will use now if I have to cross... Well, actually it is very handy having a stick I put on an act of being a little alone man and lean heavily on a stick. The cars stop then and I I hobble across, it works, it works wonders. I can put on an act when I need to. **Susan** The biggest problem with it is that I have absolutely no warning when it's gonna happen which mentally means I'm terrified of it happening again because I just don't know when it's going to happen. Reference 2: I'm walking with the stick now because I feel more secure. And I don't I know on one level, I don't actually physically need a stick yet, but it's like a comfort blanket in some ways. Reference 3: Interviewer: Okay. So thinking about this fear of falling, what do you think it feels like, is it constant or more related to certain activities? Susan: I would say its constant. It's that anxious feeling. Even now, if I get up to go into the kitchen I might go, so I'm thinking, "you might, you might, you might go, you don't, but you might go". And even I was thinking the other day, I was walking back from aqua and ... I was thinking, "you are absolutely fine. Why are you so scared?" And I thought "Because I'm going to fall". That's the thought process. I know that physically, physically, I can walk. I'm okay. Physically, I can do things, but I'm scared it's gonna happen. **Elaine** Interviewer: We noted that you reported a fear of falling. Can you tell me what that fear of falling feels like for you? Elaine: Feeling old. People don't have time for you. They shoved passed you and stand in front of you. That's an age thing. And I'm bit more wary, bit shy. I don't know.

S3 Table. *(Cont. from previous page).*

Theme	Supporting quotations	
	Middle-aged	Older
	Carol: Erm, yes it shook me up a bit and erm, it has made me more wary definitely. I am 60 now and whilst I consider myself fit and able to continue to do the activities that I have always done. I do think maybe I am not. Reference 1: I think it's. I think it's a psychological fear. I think it's the fact that you don't bounce like you used to. And, um, yes, it's definitely psychological that you have to be. You know, I'm definitely very aware of it now that I ought to be more careful, because if I do fall the implications are much greater than they used to be. Reference 2: I like swimming. I was going to go off and go swimming. [My husband] went, "Just a minute, can you get a swimming costume off by yourself?" and I said, "oh God I didn't realise how difficult this is". He said, "I'm not being difficult, but if you fall in this room but there's nothing I can do about it". **Jennifer** Well, at the moment I'm quite concerned because it was such a shock to do it for no apparent reason. And therefore I'm now careful with what I'm doing. Finding myself doing things if I'm going out on my own and I'm walking somewhere, I'm I'm being very cautious, whereas before I wasn't. Reference 2: It makes you initially makes you more reluctant to go out on your own, which is you know, horrendous. For me, and ice. So, I suppose there was a temptation to take the car. I think the first time I went out on my own was… say three weeks after the fall, but when I was going to group which is only literally 10 minutes walk from here. But I was walking very deliberately. And very conscious of my foot movements and also conscious of my balance.	