

# The UNDERPIN Study

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UNDERstanding  
the experiences of  
Physically INactive  
people in mid-life: a  
review of qualitative  
literature

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in partnership with:

# About us

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## **Centre for Ageing Better**

The UK's population is undergoing a massive age shift. In less than 20 years, one in four people will be over 65.

The fact that many of us are living longer is a great achievement. But unless radical action is taken by government, business and others in society, millions of us risk missing out on enjoying those extra years.

At the Centre for Ageing Better we want everyone to enjoy later life. We create change in policy and practice informed by evidence and work with partners across England to improve employment, housing, health and communities.

We are a charitable foundation, funded by The National Lottery Community Fund, and part of the government's What Works Network.

# Acknowledgements

This review was commissioned by the Centre for Ageing Better, as part of a programme of work on physical activity in mid-life.

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# Executive summary

This report sets out to explore the published literature on attitudes to physical activity among people aged 50-70. It was followed by a piece of primary qualitative research to explore this further. Together, these were designed to highlight areas of focus for a new programme of work for the Centre for Ageing Better.

The review explored studies conducted in the UK since 1990 that used qualitative methods to identify or describe the thoughts, feelings and experiences of UK adults (aged 50-70) and their experiences of non-participation in physical activity.

Following extensive searching and selection, 16 research papers were included. These included publications from peer-reviewed and grey literature.

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## Findings are grouped into a number of meta-themes:

- Health as a motivator and a barrier to physical activity
- The importance of support from partners, family, peers and health professionals
- Practicalities including time, cost, access and opportunities
- Retirement as a significant life-event with wide-ranging implications for physical activity habits

A number of findings which are relevant across the life-course were identified. But there were also a set of findings which were particularly pertinent to the 50-70 age group, including the following:

### Health

- Reported feeling of being **“young at heart but old of body”**, reporting pre-existing health problems as a rationale for non-participation in physical activity<sup>13</sup>
- Saw falls as a negative consequence of old age and poor health, despite thinking them low risk<sup>7</sup>
- Saw physical activity as helping to maintain both good physical and mental health and independence<sup>5</sup>
- Recognised that physical activity might be helpful in improving health and managing the effects of existing conditions<sup>9</sup>

## Support

- Saw social networks as particularly important in influencing physical activity<sup>11</sup>
- Reported that spouses could encourage regular physical activity (although without necessarily being active together)<sup>14</sup>

## Retirement

- Anticipated (or were experiencing) an increase in physical activity levels after retirement<sup>11</sup>
- Saw retirement as a key lifestage that will not make much difference to physical activity levels<sup>12</sup>
- Recognizing the influence of lifelong physical activity habits<sup>15</sup>
- Saw retirement as bringing a lack of structure to the day, offering freedom from routines, and an opportunity to do what they want, when they want 18, or found the lack of structure led to procrastination, and the need for needing more motivation and self-discipline be active<sup>11</sup>
- Adapted to learning to spend more time with partner and/or building in space from a retired partner<sup>13</sup>
- Finding that a physically active routine can a sense of daily purpose.<sup>15</sup>  
But this sense of purpose could also be achieved through voluntary work

These themes will be explored in the subsequent qualitative research project and may also help to focus ideas for the Centre for Ageing Better's future work to promote physical activity to people in mid-life.

# Introduction

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## Context and background to research

Physical inactivity is one of the top risk factors for developing conditions that lead to preventable disability in later life<sup>1</sup>. Being regularly active can help to prevent and delay many age-related conditions and diseases, and can help people to maintain their functional ability, independence and quality of life as they grow older. However, the proportion of people who are physically inactive generally increases with age, so that older people are at increased risk of poor health outcomes connected to sedentary lifestyles in later life.

The Centre for Ageing Better's vision is a society where everyone enjoys their later life. The Centre has developed a programme of work that focuses on people in mid-life (approximately 50-70 years old). They are exploring actions that could be taken to improve the health, social connections, homes and financial circumstances of people in mid- life, in order to effect real change for people in their later lives.

This report sets out to explore the published qualitative literature on attitudes to physical activity among people aged 50-70, to feed into this emerging programme of work, by reviewing primary qualitative research among 50-70 year-olds in England.

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## Study aims

To explore the lived experience of people who are physically inactive in mid-life (50-70).

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## Study research questions

- 1 What can we learn from published and grey qualitative literature about 50-70 year-old UK adults' lived experience of physical activity?
- 2 What are the implications of the findings of this review for the sampling frame and interview guide for the subsequent phases of qualitative research?

# Method

We set out to explore the qualitative research literature on attitudes to physical activity among people aged 50-70 in the UK. Details of the approach taken are set out below.

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## Sources of evidence

Our brief for the literature search specified:

- Data from the UK
- Primary studies published from 1990 onwards in English language
- Published in peer reviewed journals or grey literature that used qualitative methods to identify or describe the thoughts, feelings and experiences of UK adults (aged 50-70) and their experiences of non-participation/ participation in physical activity

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## Inclusion and exclusion criteria

Inclusion criteria were applied in two stages, first, to locate all relevant studies and, second, to highlight studies that would be subjected to in-depth analysis. Table 1 shows the stages and inclusion criteria.

**Table 1. Inclusion criteria for review stages**

	Study included if:
<b>Stage 1 Criteria</b>	1 Published in English between 1990– Sept 2020, in the public domain 2 Classified as a qualitative paper (or qualitative component of a mixed methods paper) 3 Explored adults experiences of physical activity, encompassing sport, exercise, occupational activity, household activity, and active transport 4 Related specifically to research carried out on adults (aged between 50 to 70 years old) 5 Research conducted in the United Kingdom
<b>Stage 2 Criteria (In-depth analysis)</b>	1 Reported methods and results clearly



In order to ensure that the most reliable sources of evidence were included in this review, only studies that included details of methods and reported results clearly were included for in-depth analysis. A particular focus was on the age of the research participants: ages of all the participants had to be clearly stated, and to be included, the study had to include some analysis specifically of the participants aged 50-70. All possible included studies were assessed independently by two reviewers and any differences resolved by a third reviewer (CF).

Studies were excluded if they had participants with health conditions that did not allow them to take part in any physical activity, or interventions where physical activity was a treatment for an existing condition, or studies in care settings.

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### **Search strategy**

We developed a pilot electronic search strategy to identify relevant published research, based upon a previous systematic review<sup>2</sup>. Final searching was undertaken by Bristol University. Searches were limited to articles published in the English language from Jan 1990 to November 2020. We adopted a broad search method (as used in our previous reviews) as these types of searches are more inclusive<sup>3</sup>.

Searches were conducted using the following databases: Medline & PubMed, Embase, CINAHL, Proquest Thesis, OPEN GREY, Web of Science, SPORTS-DISCUSS.

Search terms included, but were not limited to: 'physical activity', 'exercise', 'sedentary behaviour', 'sport', 'walk', 'bicycle', 'bike', 'active travel', 'adult', 'older adult', 'findings', 'interview', qualitative, 'data reduction', 'comparative analysis', 'interpretative method', 'UK'.

All search strategies were tailored for each database. Sample search terms are presented in Appendix 1.

In addition to electronic searching, and as a check, we also conducted searches of 'grey' literature that would not necessarily be identified through database searches. We contacted by email, or visited the websites of, organisations involved in the commissioning, undertaking or cataloguing of research on physical activity and adults. This included: Sport England, Centre for Ageing Better; Age UK; Public Health England; NICE.

We also examined reference lists of selected primary research articles, reviews or book chapters, as well as files of members of the research team and advisory group, to identify further papers of interest.

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## Results

We found **8 studies** from 11 articles<sup>a</sup> that meet our inclusion criteria (with a specific focus on people aged 50-70).

We also reviewed **81 studies** that contained some 50-70 year olds. These were generally either studies among 50+ (that contained some people aged 70+) or 65+ (so containing some people aged 65-70). We identified 5 studies that had conducted some separate analysis on the 50-70 year group.

**16 articles** (from 13 separate studies) were thus put forward for data extraction.

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## Data extraction

Two reviewers (GC and NC) read all the articles. They then documented the key elements of each study on a custom data extraction form. As well as all the basic characteristics of the studies (title; author; year; methodology; sampling; etc) this set out the key findings presented by the study authors. Key themes, detailed findings and individual illustrative quotations were then extracted. This enabled the reviewers to explore themes that occurred across all of the reviewed studies.

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## Quality assessment criteria

The quality of each study was assessed, using a custom quality assessment matrix. This explored issues such as:

- clarity of the research question
- theoretical or ideological perspective of the author
- study design
- context or setting
- sample type and sampling approach
- data collection
- data analysis
- limitations of the methods or data
- claims to generalisability
- ethical issues

It was noted that the studies were generally of a low to medium quality when this framework was applied. Few studies met the basic qualitative research quality criteria of reporting a theoretical framework<sup>4</sup>.

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<sup>a</sup> One author had conducted a single, large PhD study and used this to write four separate articles

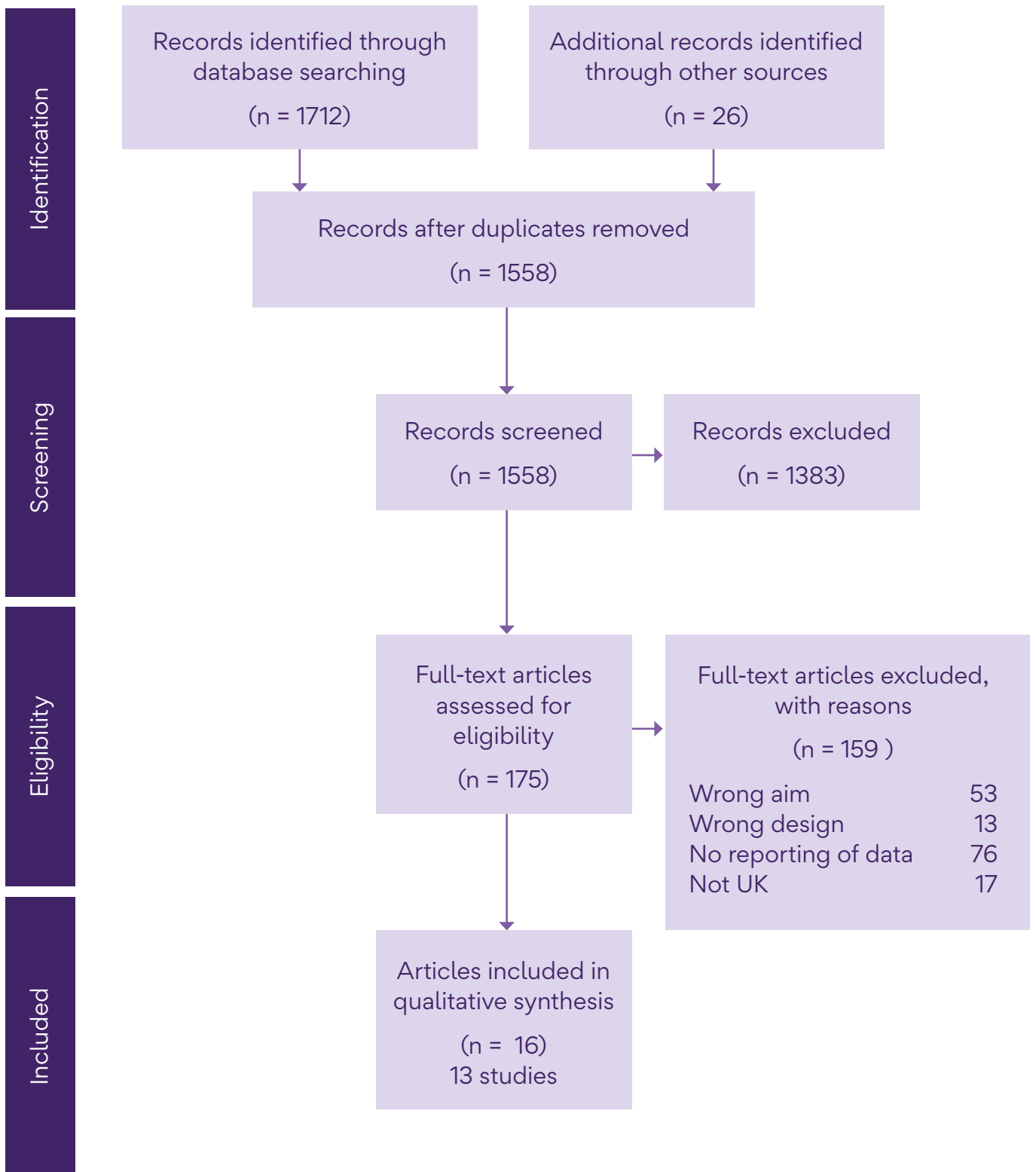
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### **Data analysis**

We conducted a thematic analysis on the data using a framework approach, drawing out the key themes that recurred through the included studies. In order to convey their intended meaning, we used the words and interpretation of the original researchers to inform our findings and used verbatim quotes from the original papers where they were helpful to illustrate a theme.

# Results

Figure 1: Flow diagram of study selection



# Included studies

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## Studies among people aged 50-70 years

Barnes and Lakey (2002)<sup>5</sup> conducted a study into the experiences and expectations of people leaving paid work over 50. They interviewed 48 people aged 50-65, asking about their attitudes, hope and expectations, including physical activity.

Gray et al (2018)<sup>6</sup> conducted a qualitative investigation of physical activity compensation among nine older adults. They interviewed people who had taken part in a physical activity intervention and then reduced their non-exercise physical activity. The study aimed to explore possible reasons/ mechanisms for this compensation.

Horne et al (2009)<sup>7</sup> conducted an ethnographic study to explore 60-70 year old Caucasian and South Asian people's views on falls prevention and exercise, conducting 15 focus groups (87 people) and 40 semi-structured interviews.

Horne et al (2010)<sup>8</sup> explored the influence of primary health care professionals in encouraging exercise and physical activity uptake among White and South Asian older adults. They interviewed adults with very different experiences in terms of health and of participation or non-participation in physical activity (same sample as Horne et al (2010) above).

Horne et al (2012)<sup>9</sup> explored the attitudes and beliefs to the uptake and maintenance of physical activity among 46 community-dwelling South Asians aged 60-70 years, through focus groups and interviews.

Horne et al (2013)<sup>10</sup> explored perceived barriers to initiating and maintaining physical activity among South Asian and White British adults in their 60s living in the United Kingdom, in an exploratory study (same sample as Horne et al (2010) above).

McDonald et al (2015)<sup>11</sup> conducted a theory-based qualitative interview study to explore changes in physical activity during the retirement transition, interviewing 28 adults within 24 months pre- and post-retirement.

Smeaton et al (2016)<sup>12</sup> interviewed 55 English workers on the cusp of retirement to explore whether retirement offers a "window of opportunity" for lifestyle change, including physical activity.

Sport England/ Arkenfold Ltd. (2006)<sup>13</sup> conducted 21 focus groups (6-8 people in each) amongst older people who have recently retired to explore the influences on sport and physical activity participation among recently retired people.

Barnett et al (2013)<sup>14</sup> looked into how seven couples influenced each other's physical activity behaviours in retirement, recruiting couples from an existing study.

Beck et al (2010)<sup>15</sup> conducted a theoretical investigation of the development of physical activity habits in retirement, interviewing 11 active and inactive retired people.

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### **Studies among broader age groups, including some analysis of people aged 50-70**

Cavill and Watkins (2007)<sup>16</sup> conducted a study into cycling and health, interviewing a wide range of participants, including some aged 50-70.

Er et al (2017)<sup>17</sup> looked into barriers and facilitators to healthy lifestyle and acceptability of a dietary and physical activity intervention among African Caribbean prostate cancer survivors in the UK.

Finch (1997)<sup>18</sup> conducted a study for the Health Education Authority, looking into physical activity among people over the age of 50.

Filbay et al (2017)<sup>19</sup> looked into physical activity in former elite cricketers and strategies for promoting physical activity after retirement from cricket.

Hardcastle & Taylor (2001)<sup>20</sup> interviewed older women in a primary care exercise referral programme.

# Findings

In this section we explore the major themes that emerge from this body of qualitative research studies, derived using the analysis method outlined above.

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## Health

Five of the studies included in the review discussed issues around health as an important factor in influencing physical activity behaviour amongst mid-life adults (in 8 papers<sup>5 7-10 12 13 18</sup>). Participants in these studies were found to have some understanding of the concept of the role of physical activity in promoting good physical and mental health and the maintenance of independence but commonly reported reasons for non-engagement including pre-existing health conditions, fear of exacerbating symptoms or pain and concerns around falls.

Finch et al (1997)<sup>18</sup> found that their participants were aware of the importance of physical activity in improving health. Similarly, participants in the Sport England (2006) study understood the links between physical activity and good health but some were found to feel **“young at heart but old of body”**, reporting pre-existing health problems as a rationale for non-participation<sup>13</sup>. In their study of retirees, Barnes et al (2002) found that their participants discussed the importance of keeping busy to maintain good physical and mental health. One participant:

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**"Enjoyed the peace and quiet she gained from gardening, and had recently taken up exercise classes in a conscious effort to maintain her physical health, but which also had a sociable function"**<sup>5</sup>

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Although participants with existing health problems were aware of the need to keep active after retirement, some were less able than they would have liked to remain active, fearful of exacerbating pain and other symptoms. One participant had previously suffered from a stroke and had limited movement:

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**"Physically he found it extremely difficult to perform relatively simple tasks, he tired easily, and had to forgo many of his previous interests like swimming and line dancing" and "he was frustrated that he tired so easily and his life had been reduced to a spectator role"**<sup>5</sup>

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In their paper about falls prevention, Horne et al (2009) found that falls were viewed as a negative consequence of old age and poor health. They reported that falls risk perception was low, except amongst participants who had previously fallen, and found that beliefs and fears, especially in participants

with existing health issues and limited mobility, could prevent engagement with exercise and physical activity:

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**“I can’t [exercise] because of my arthritis, you know, I think I might fall”<sup>7</sup>**

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Although participants in Horne et al (2010) felt that advice and support from health care practitioners could help to provide motivation for engaging with physical activity, some felt that primary healthcare practitioners were most concerned when health problems were identified and provided less focus on promoting physical activity to maintain physical health and wellbeing:

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**“There is encouragement if you have had a problem to get over it, but there is no encouragement if you haven’t got a problem to not get a problem”<sup>8</sup>**

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Horne et al (2010) concluded that less active and older adults would benefit from GP advice to exercise along with information about safe, appropriate activities, especially for people with pre-existing conditions.

Horne et al (2012) found that some participants linked physical activity to maintaining both good physical and mental health and independence and other participants recognised that physical activity might be helpful in improving their health and in managing the effects of existing conditions:

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**“I like to be fit. I don’t want to need anybody’s help. I like to do everything myself if I can, to stay independent.”<sup>9</sup>**

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**“It’s just that I hope to feel better physically after I start to exercise.”<sup>9</sup>**

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Horne et al (2013) found a range of pre-existing medical conditions amongst their sedentary and less-active participants. While some participants believed they were too old to benefit from being active, others limited activity because they were fearful of increasing their symptoms, concerned about pain or a loss of confidence:

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**“I know that I should keep myself fit by walking, brisk walking and everything but I can’t do it. If I tried to walk with my blood pressure I get dizzy”<sup>10</sup>**

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**“I do feel uncomfortable. I feel like I might fall with my aches and pains. I have to stop and walk slowly ... If I try to walk fast or anything I feel that I might fall down. I might lose my balance...”<sup>10</sup>**

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Although Smeaton et al (2016) excluded people from their study who were retiring as a direct result of a major health concern, they reported that some participants interest in improving their lifestyle choices (including physical



activity) as part of their retirement plans had already been impacted by pre-existing health issues<sup>12</sup>.

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### Support

The importance of support from partners, family, peers and health professionals in encouraging physical activity was a theme discussed in five of the research studies in this review (in 8 papers<sup>7-9-15</sup>).

Horne et al (2010) found that advice and support from primary care professionals could help initiate physical activity amongst some of their participants, particularly if the information was seen to be presented in a non-ageist manner, but that this information provision was frequently insufficient to lead to an increase in activity levels. Receiving practical and encouraging support from instructors helped participants to continue with group-based activities, with some less active participants reporting a need for both intensive and structured support to ensure that they were doing exercise activities correctly, whereas others wanted someone to encourage and support them through the activity:

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**“If somebody would work with me I would work out for 30 minutes”<sup>8</sup>**

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**“Not necessarily an instructor but somebody there, you know, to say do this and that and that. You know, like you’re a five-year-old child. Saying “come on, come on”. . .I need a bit of encouragement, because I put myself back [doesn’t push himself]”<sup>8</sup>.**

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Horne et al (2012) reported that family, peer and culturally sensitive and appropriate support helped to build confidence to both initiate and maintain physical activity in their South Asian participants.

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**“We meet regularly as a group. It’s the social thing as well as the exercise”<sup>9</sup>**

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**“They’re very supportive [wife and family]. It gets me out. my wife has not got any tension about me because I’m fit but my wife is not well so I help her out in the house. She is very supportive.”<sup>9</sup>**

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**“I would not go on my own [exercise classes]. My friends come to pick me up and then I will go.”<sup>9</sup>**

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Horne et al (2013) also found that a lack of support could act as a barrier to initiating and maintaining physical activity, with absence from group activities for a short period of time resulting in a loss of engagement:

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**“I would never go on my own . . . I would never set off and say I’m going to do an exercise class. I would always need somebody to go with.”<sup>10</sup>**

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Similarly, McDonald (2015), Smeaton (2016) and Sport England (2006) found that social networks were important in influencing physical activity efforts amongst their participants:

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**“A lot of my friends are coming up to retirement now and, you know, we’ll be able to meet up and go for walks because most of my friends are the kind of outdoor types”<sup>11</sup>**

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**“People I played football with don’t play anymore because we’re all getting a bit older now, yeah, most people stop.”<sup>12</sup>**

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**“You need your family’s support. It can be difficult for older people if they don’t have the support of their family”<sup>13</sup>**

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Participants in Barnett et al’s (2013) study of retired couples reported that spousal support could encourage regular physical activity although experience of shared physical activity was found to be rare:

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**“Yeah, and I suppose the constant bombardment for me to do something motivated me to do it...”<sup>14</sup>**

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**“Yes, I’ve got nothing against. I mean, if we both like something, then we’ll probably do it together, like going on a walk, but that’s probably the only thing because you don’t play any sports as such, do you? ”<sup>14</sup>**

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Beck et al (2010) found that, for some female participants, feeling valued as part of a social group was an important element in activity adherence, with concerns about being accepted as a group member or ‘not fitting in’ acting as barriers for engagement.

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**“People will notice and it makes you feel nice ... but it makes you feel ... a bit special if people notice that you are not there ”<sup>15</sup>**

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**“I did do yoga. That only lasted three weeks because I went with my next door neighbour ... she wanted some company but we were both terrible at it and everybody else took it so seriously, so we felt like we was holding back everybody ”<sup>15</sup>**

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The authors noted a gendered response amongst their participants in relation to group membership, with their male participants appearing to be less concerned about being active as part of a structured group:

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**“I like a mixture; I like to go on my own sometimes or just one to one with a friend – we’re the same age. But also I like the ones [group walks] from here where we sort of we just move around between people, walk with them for a bit and that’s really good. I wouldn’t join something like the ramblers club though I think they’re too big and a bit regimented. You couldn’t just shoot off up a little lane that you fancy”<sup>15</sup>**

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### Practicalities

Several practical issues that had an impact on physical activity behaviour were identified in seven of the research studies included in this review (8 papers <sup>9-11 13-15 18 20</sup>). These were time, cost, access and opportunities.

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### Time

In their study of a primary care exercise referral programme for older women, Hardcastle & Taylor (2001) reported that, for some of their participants, traditional domestic and caring roles alongside low priority given for self-care resulted in limited time available for engaging in physical activity<sup>20</sup>. Similarly, the only participant in Beck et al (2010) who reported that their physical activity had not increased in retirement was a woman who had replaced her former working hours with a caring responsibility for her grandchild<sup>15</sup>. Finding time to integrate regular, structured physical activity into their daily lives alongside caring commitments was perceived to be difficult for some of the first generation British Indian and Pakistani women participants in Horne et al’s study of attitudes, beliefs and barriers to the uptake and maintenance of physical activity in South Asian and White British participants:

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**“... this is the only day that I get to do something for myself. I always really try, but I have missed [exercise class]. I did miss because mum was sick... I had to go live with her so like I couldn’t come here.”<sup>21</sup>**

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**“It’s our Indian culture as well, you know. I mean, just look at my situation, if I go and do something, people say, ‘You’re too old to be doing this now, you’re 60 years old, why are you behaving like this?’ .../ “Men think women shouldn’t do anything except look after the house, look after them and not go anywhere. That’s why they think exercise is surplus to requirements”.../ “I go round and cook and clean for my mother-in-law every day, I also help her to have a bath ... then I come back at 4 o’clock and start cooking our own evening meal, so for me the problem is lack of time”<sup>13</sup>**

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Although others reported finding time for themselves to be an important motivator to being active<sup>9,10</sup>. Barnett et al (2013) reported that the sharing of household chores with her partner helped one woman fit activity into her schedule:

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**“Yeah. Unfortunately the [dog] agility classes have actually coincided with Sunday mornings, so I have to, I get up, and then between us we rush round sort of doing vegetables and so on, then we go for a couple of hours to the agility, come back and then finish it all off and then we get it all done don’t we (laughs).”<sup>14</sup>**

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Finch (1998) found that lack of time was cited as a barrier for participating in physical activity in pre-retired people<sup>18</sup> and for those with family commitments in Horne (2013). Having a busy schedule was seen as a barrier for some Indian and Pakistani male participants in Sport England’s [2006] study of participation in sport and physical activity amongst recently retired people<sup>13</sup>. However, retirement may also provide an opportunity for increasing levels of activity for some people (see later retirement section).

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## **Cost**

The perceived and actual cost of participation in physical activity was specifically mentioned in two studies<sup>11,13</sup>. For some participants in Sport England’s research, cost for equipment or membership fees acted as a barrier to participation, as demonstrated by this participant:

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**“I belonged to a gym ... but not been for a couple of years ... I went so seldom, the annual fee wasn’t worth it ”<sup>13</sup>**

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McDonald et al (2015) also reported that the cost of physical activity participation was perceived to influence the behaviour of their participants. Some participants expressed concern that less money was available for participation in retirement, although this was balanced by other participants who were either less concerned about resource limitations or viewed access to ‘retirement’ concessions for use of facilities and transport as an opportunity to increase their physical activity:

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**“You are more acutely aware of managing a limited resource, I think, when you’re not actually earning anything”**

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**“I haven’t really looked into it (concession price at local PA facility) yet but it means that you can go at a cheaper rate... so it will give me a bit more encouragement”<sup>11</sup>**

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## Access and Opportunities

Three studies raised access and opportunity issues as important influencers of physical activity (4 papers:<sup>9 10 13 14</sup>). Barnett et al (2013) reported that male partners in their study provided practical support (like transport) so that their female partners could access exercise<sup>14</sup> and lack of transport was raised as a barrier to participation for participants in Horne et al (2013). ‘Inactive’ participants were more likely to be unaware of opportunities to be active compared to more ‘active’ participants in the Sport England (2006) research, with inactive participants reported as requiring ‘very local opportunities’ to encourage them to become physically active<sup>13</sup>. A consideration of the availability, location and cultural sensitivity of facilities and activities (including addressing language barriers) and offering a range and choice of activities were reported as key issues to encourage participation amongst South Asian women.<sup>9 10 13</sup>

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**“I was given “Fitness for Life” by the Doctor...I asked a friend...She said it was a mixed session and told me about X [Ageing Well Coordinator] because I didn’t want to exercise in mixed sessions.”<sup>10</sup>**

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**“I had to ask about the walking group and mobility because I had heard about it from friends. I don’t speak English well and therefore the language was a barrier until the Cultural Community Centre was developed.”<sup>21</sup>**

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## Retirement

Retirement is a key theme in this review, and was the specific focus of five of the studies in this review. Smeaton et al talked to people approaching retirement age, to explore whether retirement offered a ‘window of opportunity’ for lifestyle change<sup>12</sup>. Similarly, McDonald et al (2015) explored the factors that influence physical activity change during the transition from employment to retirement among individuals approaching retirement and recently retired<sup>11</sup>. Sport England’s report focused on recently retired people and explored the influences on their sport and physical activity participation<sup>13</sup>. Beck et al (2010) also interviewed recently retired people and focused specifically on the impact of retirement on physical activity patterns, and the initiation and maintenance of behaviour change<sup>15</sup>. Finally, Barnett et al (2013) talked to retired couples to explore how they influence each other’s physical activity in retirement<sup>14</sup>.

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## Retirement: a radical change in life

Retirement was seen to be a significant life-event by many of the research participants, with radical changes in lifestyle that might take some time to adapt

to. Participants were generally aware that retirement offered a great deal more time for leisure pursuits – which might or might not include physical activity. Most of the studies found two distinct groupings: those who intended to be more active in retirement, and those who saw it as a time to slow down.

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### **Retirement: a chance to be more active**

This appears to be the more prevalent feeling about retirement from the included studies: that most participants anticipated or experienced an increase in physical activity levels after retirement, with the minority reporting a decrease, no change or uncertainty about changes in activity levels after retirement<sup>11</sup>. Participants had generally strong views about the value and importance of physical activity, especially at an older age (see section on health) and so for many people, the increase in available time means they planned to be more active when retired:

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**“Being at work you’ve got to squeeze physical activity in whereas when I will be retired it will be ‘ah I got time to do that’”<sup>11</sup>**

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These plans seem to be generally vague however, with few accounts of new hobbies or sports. Instead, most participants seemed to refer to being more active in general, with many mentions of walking more often, including for transport. Beck et al (2010) found that some less active retired people had made lifestyle changes such as walking for leisure in attempts to become active but failed to maintain these, due to lack of enjoyment, or lack of perceived benefits. They also reported that others in their study intended to become more active, but made no concrete attempts to do so.<sup>15</sup>

Along with time, many participants anticipated that retirement – or more specifically the lack of having to go to work – will lead to an increase in energy levels, that will spur them on to greater physical activity:

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**“When you come in from work after you’ve been working all day you’re too tired to go out”<sup>11</sup>**

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### **Retirement will not make much difference**

The other group of participants – probably a minority in most of the reviewed studies – see retirement as a key life stage, but do not think it will make much difference to their physical activity levels. There are a number of complex, overlapping reasons for this:

- Pre-retirement change. Some participants had already made substantive changes to their health behaviors prior to retiring, often in response to a specific health issue, so saw no need for further change. As well as physical activity, these included changes to diet and alcohol consumption.<sup>12</sup>

- Lifelong habits (see below). Some participants had established patterns of activity (or indeed, inactivity) and did not see the need to change them<sup>15</sup>
- Those who think they do enough. For example Barnett et al<sup>14</sup> found the majority of participants perceived themselves to be sufficiently active with daily chores such as gardening, housework and minding grandchildren. However, it also found some people who defined an active lifestyle as ‘not watching television during the day’

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### **Time and structure to the day when retired**

A major concern for many participants in the included studies is the lack of structure to the day that retirement brings. Finch et al (1998) found that some participants said this can represent freedom from routines, and an opportunity to do what they want, when they want<sup>18</sup>. But the loss of daily structure after leaving work had negative consequences for physical activity behaviour among some participants. McDonald et al (2015) reported that lack of structure led to procrastination and some participants emphasised the need for a higher level of motivation and self-discipline to ensure that preferences for other, more sedentary pursuits did not distract them from physical activity<sup>11</sup>, while Smeaton et al (2016) described how one participant talked of the ‘danger’ of ‘vegetating’:

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**There’s such a danger, when people retire they do nothing, they just vegetate. That’s a big concern to me, that’s the last thing on earth I’d want to do.**<sup>12</sup>

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Finding structure to the day also overlapped with an overall search for routine and purpose. One participant in Sport England (2006) noticed that tasks and activities took longer than they used to, and wondered ‘**how did I ever fit work in?**’<sup>13</sup>. This was echoed by a participant in Barnett et al’s (2013) study:

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**Well I think you have to do something, don’t you, when you work sort of five days a week and you’re active and you’re doing all that, and then nothing, you’ve got to do something.**<sup>14</sup>

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Filbay et al (2017) looked into strategies that participants had for planning for an active retirement and suggested ‘establishing a physical activity plan prior to retirement’<sup>19</sup>.

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### **Personal relationships and the influence of partners in retirement**

Relationships were clearly influenced by retirement for many of the participants. Sport England reported that retired participants found they had to adapt to learning to spend more time with partner (more likely from the



male perspective) and/or building in space from a retired partner (more likely from a female perspective)<sup>13</sup>. Partners were also found to be an extremely important influence on physical activity levels. Barnett et al (2013) focused specifically on the influence of ‘spouses’ (term used by the authors) and found three key themes<sup>14</sup>

- **spousal attitude towards physical activity:** whether or not one or both spouses viewed physical activity as an important part of their lives. While spouses generally seemed to agree on the importance of an active lifestyle in retirement, opinions regarding regular exercise diverged and were often in opposition, with one partner being less interested or uninterested in regular activity.
- **spouses’ physical activity behaviour:** in accordance with their diverse attitudes and interests, spouses engaged in different (if any) forms of regular physical activity. Women tended to be more engaged in regular exercise than their husbands, mainly because they continued their established exercise routines after retirement. A few participants felt encouraged by the physical activity behaviour of their spouses to become more active themselves. Joint physical activity was rare owing to diverse interests and different personal goals and ambitions
- **spousal support:** several physically active women in the study verbally encouraged their partners to be more active after the transition to retirement. Providing support by understanding their spouses’ interest in exercise was commonly described by both active and less active partners. Men frequently provided practical support such as transport or help with household chores to allow their partners the necessary time to do exercise.

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## Lifelong habits before retirement

Lifelong physical activity habits were a theme in several of the studies but were explored in detail by Beck et al (2010)<sup>15</sup>. This study explored how lifelong physical activity habits were linked with the continuation of physical activity in retirement. Most of the study participants reported that they had increased their activity levels since leaving work, or increased physical activity by increasing the time spent in activities they had engaged in throughout their lives, or by using retirement as a launch pad to take up the activities they had enjoyed in childhood:

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**Swimming, I always enjoyed when I was younger. I think I then went for a spell without doing any swimming and, you know, I’d worked part-time and I found I had... you know, my boys were sort of growing up and I had a bit more time. I just enrolled with this leisure club, and that was many years ago now, and, you know, I’ve been ever since.**<sup>14</sup>

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Previous performance of physical activity did not always equate to its continuation in retirement. Some inactive participants had been active previously, blaming injury for the reduction of physical activity in later life. Physical inactivity also appeared to persist following retirement. For some, this reflected a lack of motivation to be active.

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### Phases of retirement

Some studies noted that participants were aware that retirement went in 'phases' McDonald et al (2015) reported how some participants argued that there was a transition period between retirement beginning and settling into a post-retirement routine:

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**“We’ve been so busy, we’ve been away on holidays, we’ve been up and down and we haven’t really settled into our retirement pattern as it were”.<sup>11</sup>**

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### Sense of purpose/ vision

Having a regular physical activity routine also appeared to provide physically active participants with a sense of daily purpose. Beck et al (2010) reported that while most participants stated that they wanted to lead a less regimented life post-retirement, those who exercised regularly seemed to follow a fairly fixed routine.<sup>15</sup>

Not all active participants used physical activity to create purpose in their lives: for some this could be achieved through other hobbies or voluntary or part-time work. But for many, planning a schedule was necessary to keep regularly physically active:

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**‘I’m not one of these who [says] on Monday I’ve got to do cleaning, [on] Tuesday I do so and so. No, I just take it take each day as it comes and when I feel like doing something then I’ll do it but I don’t have a fixed routine. You know, the only things that are fixed are like you know your hobbies, like you do ‘keep fit’, which is a fixed thing’.<sup>15</sup>**

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This was particularly the case among the small number of participants who had a clear vision of the sort of person they wanted to be, or the way they wanted their life to go during retirement.

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**‘I don’t believe that going into retirement you should start vegetating. You know, you have been busy during your working life, or most people have. You need to keep busy’.<sup>15</sup>**

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## Finding the time to be active

This is a well-documented barrier to physical activity and a topic that was often discussed by research participants. For those research participants at the younger end of the age group who had not yet retired, finding the time to exercise was a challenge.

Beck et al (2010) reported that participants had increased their levels of physical activity on retirement, typically by increasing the time spent in activities they had engaged in throughout their lives, or restarting activities they had previously enjoyed<sup>15</sup>. McDonald et al (2015) reported that some participants perceived that they would have more time and energy for physical activity after retirement:

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**“Being at work you’ve got to squeeze physical activity in whereas when I will be retired it will be ‘ah I got time to do that’”<sup>11</sup>**

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It is not just work: participants were reported as having to find the time away from parenting responsibilities, social activity and volunteering or hobbies.

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## Filling the time in retirement

Among the retired participants, there were quite varying attitudes to physical activity and time: some saw physical activity as a way to **‘fill the time.’** Physical activity offers a way of filling in an otherwise unstructured day, providing a goal for the day:

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**During the day, you’re naturally going to do more, you’re naturally going to get up more. I will take the dogs for a walk because they’re there to be taken and if you’re with them all day long you’ve got to get them out.”<sup>12</sup>**

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Although not all active participants used physical activity to create purpose in their lives, it appeared that planning a physical activity schedule was necessary to keep regularly physically active. Beck et al (2010) showed how the failure to formally plan activity into daily life could mean that it was a rare occurrence, resulting in the inactive group intending to exercise, but instead only taking physical activity of a light intensity, constituting transport or the activities of daily living (such as gardening)<sup>15</sup>

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**“I’m losing the structure of my day so I don’t fit as much in unfortunately... retirement is hard to get used to learn how to structure your days properly”<sup>11</sup>**

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### Spending time with partners

Some participants in the Sport England study talked about physical activity being a chance to **'spend time together'** while others said activity offered a chance to doing something away from one's partner and **'build in space'**.<sup>13</sup> Gender roles and physical activity were explored by Hardcastle and Taylor (2001), who found a divergence toward current levels in physical activity in the retirement years, with some women maintaining their commitment to their domestic and caring roles and not participating in physical activity. They reported that 'time for self' seems to be a low priority for some women and the gender role and notion of caring are continued in old age and constrain some women from engaging in physical activity.<sup>20</sup>

# Discussion

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## **Principal findings of the review**

This review has provided an insight into the attitudes of a number of people aged 50-70 who took part in thirteen studies in the UK. Findings were grouped into a number of meta-themes:

- Health as a motivator and a barrier to physical activity
- The importance of support from partners, family, peers and health professionals
- Practicalities including time, cost, access and opportunities.
- Retirement as a significant life-event with wide-ranging implications for physical activity habits

The main motivators and barriers are summarised in Table 2.

**Table 2. Motivators and barriers to physical activity reported by study participants**

	What do participants say motivates them to be active?	What do participants say is a barrier to being active?
<b>Participants aged 50-70</b>	<ul style="list-style-type: none"> <li>- Health benefits</li> <li>- Positive mental health</li> <li>- Feeling of independence</li> <li>- Sociability</li> <li>- Advice from health professionals</li> <li>- Support from spouse, family and friends</li> <li>- Support from exercise professionals</li> <li>- Finding time for yourself</li> <li>- Lifelong patterns of activity</li> </ul>	<ul style="list-style-type: none"> <li>- Pre-existing health problems</li> <li>- Becoming tired</li> <li>- Concerns about falls</li> <li>- Feeling too old to benefit</li> <li>- Feeling disengaged</li> <li>- Lack of time in general</li> <li>- Time needed for other activities notably domestic and caring roles</li> <li>- Cost of equipment or membership</li> <li>- Lack of transport</li> </ul>
<b>Specific to retired participants aged 50-70</b>	<ul style="list-style-type: none"> <li>- Time available</li> <li>- Retirement as motivating change in life stage</li> <li>- Concessions for retired people</li> <li>- Physical activity offers a way to structure the day and/or fill the time</li> <li>- Spouse encouragement and their own physical activity</li> <li>- Sense of purpose for physical activity</li> </ul>	<ul style="list-style-type: none"> <li>- No need to change as active already</li> <li>- Lack of structure to the day</li> <li>- Procrastination</li> </ul>
<b>Specific to South Asian participants</b>	<ul style="list-style-type: none"> <li>- Family, peer and culturally sensitive and appropriate support</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of facilities with appropriate availability, location and cultural sensitivity (including addressing language barriers)</li> </ul>

However, many of these are common barriers or motivators to physical activity that have been reported across all adult age groups. For example **lack of time** is consistently reported as a barrier to physical activity<sup>22-24</sup>. Table 3 attempts to draw out the findings that were reported by participants included in this review, that might be less likely to be reported by adults aged under 50.

Table 3. Findings pertinent to 50-70 year old participants

### Health

- Reported feeling of being “**young at heart but old of body**”, reporting pre-existing health problems as a rationale for non-participation in physical activity<sup>13</sup>.
- Saw falls as a negative consequence of old age and poor health, despite thinking them low risk<sup>7</sup>
- Saw physical activity as helping to maintain both good physical and mental health and independence<sup>5</sup>
- Recognised that physical activity might be helpful in improving health and managing the effects of existing conditions<sup>9</sup>

### Support

- Saw social networks as particularly important in influencing physical activity<sup>11</sup>
- Reported that spouses could encourage regular physical activity (although without necessarily being active together)<sup>14</sup>

### Retirement

- Anticipated (or were experiencing) an increase in physical activity levels after retirement<sup>11</sup>
- Saw retirement as a key lifestage that will not make much difference to physical activity levels<sup>12</sup>
- Recognizing the influence of lifelong physical activity habits<sup>15</sup>
- Saw retirement as bringing a lack of structure to the day, offering freedom from routines, and an opportunity to do what they want, when they want<sup>18</sup>, or found the lack of structure led to procrastination, and the need for needing more motivation and self-discipline be active<sup>11</sup>
- Adapted to learning to spend more time with partner and/or building in space from a retired partner<sup>13</sup>
- Finding that a physically active routine can a sense of daily purpose.<sup>15</sup> But this sense of purpose could also be achieved through voluntary work

These themes will be explored in the subsequent qualitative research project (see below) and may also help to focus ideas for the Centre for Ageing Better's future work to promote physical activity to people in mid-life.

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### **Comparison with other reviews**

To our knowledge this is the first review of qualitative literature into the experiences of physically inactive people in mid-life. It complements a qualitative review of participation in sport and physical activity among children and adults conducted by Allender et al (2006)<sup>2</sup>. The Allender et al (2006) review has been cited 1486 times, has had 34,692 downloads and is in the top 5% of all research outputs scored by Altmetric. This underlines the demand for well-reviewed qualitative evidence.

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### **Review strengths & limitations**

This paper has reviewed qualitative research into the experiences of physically inactive people in mid-life in the UK between 1990 and 2020. This included peer-reviewed and grey literature; was based on clear inclusion criteria; and used a transparent analysis and reporting method. As well as including 8 studies that had a specific focus on people aged 50-70, we also included 5 studies carried out among a wider age group, but that had conducted some separate analysis on the 50-70 year group.

The quality of the included studies was generally low to medium quality. Few studies met the basic qualitative research quality criteria of reporting a theoretical framework<sup>4</sup>. This underlines the need for a high quality qualitative study in this population.

Most of the included studies are more than 5 years old, with the oldest study dating from 1997. In addition, it is not possible to report accurately on when the data informing this review were collected, as only four studies indicated this in their publications. Given that, for example, the official retirement age is now higher than in previous decades, the review's findings on retirement may not reflect a contemporary perspective. There is also a lack of evidence among black and minority ethnic communities, and people with a disability.

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### **Implications for the next phase of the UNDERPIN study**

One of the primary objectives of this review was to lay the foundations for the subsequent qualitative fieldwork among people aged 50-70 in England. It was intended that this review of the literature would highlight specific topics of interest to be explored in the research; may show 'gaps' in knowledge to be filled by the research; and may guide the creation of the project's sample frame.

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## Justification for the fieldwork

The first obvious outcome of this review is to underline the importance of the subsequent qualitative research. There is a paucity of research about physical activity among people in mid-life, as researchers tend to focus either on young people; adults; or older people. This latter group is nearly always defined as 65+, leaving people aged 50-70 overlooked. If strategies for maximising physical activity among people in mid-life are to be based on their existing views, then this research will fill an important gap. Given that the reviewed studies were relatively old, the proposed study will fill an important gap in the literature.

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## Topics for study

This review has highlighted some aspects of attitudes to physical activity among people aged 50-70 that will be explored in more detail in the qualitative fieldwork. These include:

- Health
- Time
- Retirement
- Support
- Practicalities

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## Implications for sampling

As the fieldwork is adopting a qualitative approach, our main priority is to recruit participants aged 50-70 years who can offer a wide range of experiences and views about physical activity. The UNDERPIN study will purposively sample a range of people based on some key factors, as set out in our original study proposal. Additional thoughts from the review include the following:

- Ensure we prioritise inactive people
- Include a small number of active people
- Recruit some people who have become active recently (e.g. on retirement)
- 60/40 female/male split as women are more likely to be inactive
- Include working and non-working including some retired people
- Prioritise lower socio-economic groups as these appear to be under-represented (although SES is often not reported)



## Discussion

- Over-sample people from minority ethnic communities, in particular, to try to recruit participants with Bangladeshi, Chinese, African, Caribbean or Arab heritage whose views are not typically featured in this type of research.
- Include some people with long term conditions

# Conclusions

To our knowledge this is the first review of qualitative literature into the experiences of physically inactive people in mid-life. It reports findings from thirteen studies among people aged 50-70 across the UK. As with all qualitative research, it is not appropriate to generalise these findings but they provide some useful insights into the views of the people who took part in these studies and their experiences of physical activity. Most importantly, it provides important input to, and justification for, the next phase of the UNDERPIN study.

# Appendix one

## Example search strategy

Database: Embase <1980 to 2020 Week 42>

Search Strategy:

- 
- 1 qualitative.af. (330828)
  - 2 limit 1 to (human and english language and yr="1990 -Current") (234917)
  - 3 physical activity.mp. and physical activity/ (161549)
  - 4 3 and 2 (3832)
  - 5 adult/ (7247902)
  - 6 4 and 5 (1994)
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