Qualitative evaluation of the 'Super Agers' project: the impact of community physical activity engagement on empowerment and social identity in Welsh older adults throughout the COVID-19 pandemic.

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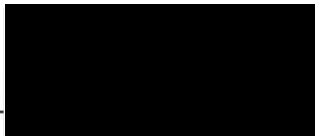*Swansea University*

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Abstract

Most older adults are physically inactive, with limited success in achieving sustainable physical activity behaviours, despite established benefits (World Health Organisation (WHO), 2009; Maula et al., 2019). By empowering older adults collectively, maintenance of physical activity is possible (Sak et al., 2017). Developing a strong social identity in relation to physical activity can also encourage group physical activity participation (Stets & Burke, 2000; Stevens et al., 2017). This study used qualitative methods to understand empowerment and social identity in relation to physical activity behaviours of older adults, exploring different levels of engagement in the Super Agers project, during the COVID-19 pandemic. **Method.** A qualitative descriptive approach underpinned by a social constructivist philosophy led to the development of a narrative open-ended diary for 4 weeks, individual semi-structured interviews, and 2 focus group discussions with 14 Welsh older adults aged 54-80 years (8 engaged in Super Agers and 6 not engaged). Inductive and deductive thematic analysis was used, underpinned by empowerment and social identity frameworks. **Results.** Two first order themes were revealed: (1) Positive features, development, or impact, and (2) negative features, development, or impact. From these two first order themes, three higher order themes were identified: (1) For those engaged in Super Agers activities (group physical activity), (2) For those not-engaged in Super Agers/taking part in individual physical activity, and (3) Shared by both those engaged and not-engaged in Super Agers activities (group physical activity). These higher order themes were sub-divided into (1) whether they were related to COVID-19 or (2) not related to COVID-19. Sub-themes were produced and include, but not limited to intrapersonal features, motivation, interpersonal features, social-environmental features, and societal/shared views, and walking. These sub-themes encompassed a variety of categories and are supported by quotes from the raw data transcripts. Key categories include, but are not limited to competence, confidence, and branding of Super Agers. **Conclusion.** The Super Agers Project positively influenced physical activity levels, psychological empowerment, community empowerment, and social identity development. While not engaged participants were still individually active through regular walking, their responses did not show any features of community empowerment or social identity. An older adult should consider seeking opportunities for group physical activity in their community that is favourable to their needs and values, where social interactions can motivate them to be more physically active.

Declarations and statements

Statement 1   I, Kimberley Jade Farrugia, hereby declare that the work presented in this thesis has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Statement 2   I, Kimberley Jade Farrugia, hereby declare that the thesis is the result of my own investigations, except where otherwise stated and that other sources are acknowledged by footnotes giving explicit references and that a bibliography is appended.

Statement 3   I, Kimberley Jade Farrugia, hereby give consent for the thesis, if accepted, to be made available online in the University's Open Access Repository and for inter-library loan, and for the title and summary to be made available to outside organisations.

Statement 4   I, Kimberley Jade Farrugia, hereby declare that the University's ethical procedures have been followed and, where appropriate, that ethical approval has been granted.

Signed: _____ (candidate)

Date: _29/10/2021_

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Glossary

Community empowerment	'Process of enabling communities to increase control over their lives' (WHO, 2022) 'Involves individuals acting collectively to gain greater influence and control over the determinants of health in their community and is an important goal in community action for health' (Nutbeam & Muscat, 2021, p. 1586)
Competence	'Referred to as subjective judgements concerning ability to perform effectively in a certain area' (Ames and Ames 1984, p. N/A)
Engaged (Context of the study)	Participants enrolled and regularly taking part in Super Agers community physical activity sessions.
Exercise	'Exercise is a subcategory of physical activity that is planned, structured, repetitive, and purposeful in the sense that the improvement or maintenance of one or more components of physical fitness is the objective' (Caspersen et al.,1985, p. 126)
Hard to reach	Described as those sub-groups of the population that are difficult to reach or involve in research or public health programmes due to their physical and geographical location or their social and economic situation, as well as populations who are under observed or represented (Shaghaghi et al., 2011)
Individual differences	'Traits or other characteristics by which individuals may be distinguished from one another. A variation in characteristics of individual behaviour and cognition, including psychological features and physical location' (APA, 2022)
Not Engaged (Context of the study)	Participants eligible for Super Agers classes but are not enrolled or participate. This does NOT mean they do not engage in any form of activity, just specifically referring to engagement in Super Agers activities.
Older adult	WHO (2022) describe older adults as anyone over the age of 60. However, there is a lack of specific and universal category for 'older adult'.

Perceived control	'The perception that one can take action to get desired outcomes, consists of locus of control and self-efficacy' (Thompson, 1981, p. 2)
	People have a sense of perceived control when they believe that their own actions control outcomes (internal locus of control) and they personally have these skills to execute those actions (self-efficacy) (Thompson et al., 2008)
Physical Activity	"People moving, acting and performing within culturally specific spaces and contexts, and influenced by a unique array of interests, emotions, ideas, instructions and relationships." (Piggin, 2020, p. 5)
Physical Inactivity	'Represents non-achievement of physical activity guidelines' (Tremblay et al., 2017, p. 2)
Psychological Empowerment	Key description used in the research project: Empowerment is a process and an outcome, to enable individuals to achieve sustainable self-management through engaging in positive health behaviours, by learning how to set goals, problem solve and make decisions for themselves (Zimmerman & Rappaport, 1988)
Sedentary behaviour	'Any waking behaviours characterised by an energy expenditure ≤ 1.5 METs, while in a sitting, reclining, or lying posture' (Tremblay et al., 2017, p. 2)
Self-efficacy	A person's particular set of beliefs that determine how well one can execute a plan of action in prospective situations (Bandura, 1977)
Social Identity	Identified as a person's knowledge that they belong to a social group, seeing themselves as members (Stets & Burke, 2000)
Social Isolation	Defined by the level and frequency of one's social interactions, it describes an objective state of individuals' social environments and interactional patterns (Hwang et al., 2020, p. 1) (Not to be confused with loneliness)

Introduction

The Super Agers project

Timeline

The Super Agers project required a £400k investment via the Healthy and Active fund, of the Welsh government, and commenced action after approval of funding in 2019. The project provides free group physical activity sessions and phone support for older adults in the Cwm Taf Morgannwg area, specifically over the age of 50. Table 1 highlights a list of sporting and community facilities providing the sessions. Their primary aim is to enhance the physical wellbeing of older adults through engagement in physical activity community sessions. The project is underpinned by the ethos of the empowerment of older adults to enable them to lead sessions and activities within their community, both during and after termination of the project and its funding. Super Agers aims to do this through providing exercise classes, as well as training older adults to be mentors and volunteers to organise and deliver community physical activity. The current study falls from July 2020 to June 2021, meaning the Super Agers Project was already running for one year prior. Please note, COVID-19 full lockdown started in early March 2020 until August 2020, followed by changing restrictions throughout the whole course of the data collection and research process, up to April 2021.

Table. 1

List of facilities offering community sessions for the Super Agers Project

Facilities providing Super Agers sessions
Halo Leisure
Merthyr Leisure Trust
Awen Cultural Trust
Cwm Taf Morgannwg Health Board – Primary Care Team
Co-Production Network Wales
Later Life Training
Create Development
Regional Carers Network

Prior to the COVID-19 pandemic (pre-March 2020), Super Agers sessions were provided in-person by trained paid and volunteer instructors included: gardening, tai chi, 'keep fit', yoga, and seated

chair-based exercise. As a result of being engaged in these sessions, older adults volunteered and organised their own walking groups around the area. However, in early pandemic (March 2020-July 2020) all in-person sessions were terminated. As a result, the rollout of a 12-week telephone support programme for older adults who required physical activity guidance, was introduced for those socially isolated. This research project commenced early July 2020, when government restrictions were becoming more relaxed, and outdoor in-person sessions with a limited capacity were initiated. In late 2020, pre-recorded exercise DVDs were created and posted to already engaged members, whilst other members who had access to Zoom conferencing software took part in live sessions of the classes previously conducted in-person, including tai chi, keep fit and seated chair exercises. A pedometer challenge was also introduced/offered to all engaged members, where each member was provided with a pedometer to track their steps. However, those who did not have access to technology, particularly during the start of the pandemic, were left unable to participate in live and remote sessions, as links and general access to information about the sessions were not made publicly available. (See Table 2).

Table. 2

Timeline of events relating to the Super Agers Project and the current study.

Year	Event
2019	**Commencement of Super Agers**
	Activities in village halls and sports facilities:
	Tai Chi 'Keep Fit' Chair based exercises Yoga
	Walking groups
March 2020	**Full lockdown.**
	Social isolation and termination of ALL community physical activity sessions.
	12-week telephone support programme for older adults who required physical activity guidance
July 2020	**Commencement of current study**

(No Super Agers activities were taking place, despite project title provided by Super Agers community partner wanting to investigate the impact of community sessions on older adult).

Re-adapting project to align with government restrictions. All data collection delayed at this point.

August 2020	**Relaxation of full lockdown.**

Community activities able to continue in an outdoor setting with limited capacity, with social distancing still in place:

'Keep fit'
Walking groups
Tai Chi in the park

October 2020 – April 2021	**Series of full lockdowns/circuit breakers**

Too cold to continue outdoor sessions

Activities moved to indoors with limited capacity and social distancing:

Tai Chi
'Keep Fit'

Introduction of remote activity sessions via ZOOM and pre-recorded videos:

Tai Chi
'Keep Fit'
Chair based exercises
Pedometer challenge

Outdoor activities:

Walking groups
Gardening

Aim and initial proposal of company partners

Inputs	Activities	Outputs	Short-term Outcomes	Long-term Outcomes
Strategic planning group for overall project	Community development support and outreach work by strategic partners and suppliers	15 Community hubs developed in partnership with local communities	More older adults adopting active and healthy lifestyles and pro-actively managing their health and well-being	More older adults will have more than 2 healthy lifestyle behaviours (WBFG 3)
Community groups and volunteers to be identified as project supporters	Recruitment, development and deployment of volunteers to sustain activities	100 older adults mentored to operate community sport and activity in hubs	More older people playing a full part in their local community as active citizens	Older adults feel able to influence decisions affecting their local area (WBFG 23)
Co-production training for all identified partners and networks	Knowledge and learning/skills courses and programmes linked to adult physical activity and older people	120 older adults trained as activity leaders and community champions	Older people have the information and access they need to services that promote active ageing	Older adults are satisfied with their ability to get to/access the services they need (WBFG 24)
In kind contributions of strategic partners via workforce, facilities, resources	Development of training and mentoring schemes with partners that can link to sessional/part time employment	20 people with disabilities or limiting long term illness to be included in activity workforce	Older adults have improved postural stability and fear of falling is reduced as a barrier to engaging in physical activity	More older adults are volunteering related to physical activity (WBFG 28)
Physical activity training and mentoring programmes to be delivered locally and regionally	Investment into equipment and resources to support community activity programmes	Up to 2000 older adults to engage with activity programmes developed	Older adults describe an increase in their regular amount of leisure minutes (IPAQ/SPAQ)	Fewer older adults are lonely (WBFG 30)
Purchase of equipment and resources to support community and partner activity	Development of sessions and group activities linked to Community hub and hub and spoke facility models e.g. community centres, leisure facilities, libraries	Progress made towards 1000-1500 volunteer hours per annum	Older adults reporting improved mental wellbeing (Warwick Edinburgh Scale)	More older adults are participating in sporting activities three or more times a week (WBFG 38)
Monitoring and evaluation resource designed into project plan and support commissioned	Marketing and promotional activity including social media training to involve older adult and community groups		More older adults engaged in volunteering and the organisation/delivery of community activities	Older adults have good mean mental wellbeing scores (WBFG 29)
Investment into marketing and promotional resources for the project	Locality and regional events programmes to build networks between volunteers, groups and participants		Older adults are connected to community activities and express a reduction in loneliness or isolation	

Figure. 1

Super Agers logic model

The company partners (Super Ager's leads) who funded this current study were interested in several avenues, including male engagement, exploring community dynamics, reviewing their empowerment approach, and the re-development of their 'logic model' (See Figure 1).

They wanted to ensure the 'Super-Agers' Project was delivering both physical and mental well-being outcomes for older adults, through an empowering approach of making sure that older adults are engaged in project design, delivery, and review, so that community ownership continues to be the shared long-term goal.

Research project brief and initial aim from company partners over the course of the project

To achieve the expectations of the company partners as well as that of theoretically driven and evidence-based research, the current study reflected the company partner's original aim to review the project from an empowerment perspective, looking at social dynamics and their interests in specific older adult sub-segments of the community, such as male engagement, those socially isolated, and the potential to understand reasons for older adults who do not take part in the classes.

It was also important that the study followed government guidelines regarding COVID-19, so the brief, title and data collection measures were constantly adapting and improving, to be able to still collect relevant and worthwhile data.

Branding of 'Super Agers' throughout the study (from 'Super Agers' to 'community physical activity sessions')

The main premise of the project from the company partner was specifically centred on the concept and branding, 'Super Agers'. It was only after the data collection procedure began that the company partner showed preference for not using 'Super Agers' but rather 'community physical activity'. It was important that as the study commenced prior to this change to continue with reference to 'Super Agers' as this is what the participants were aware of. Even though some elements of stereotyping and branding of 'Super Agers' were discussed in some interviews with participants, it was not a focal point of this study, and should be investigated in a future research project that includes a dedicated literature search, theoretical support, and in-depth findings in relation to this topic.

Introduction to the research and summary of the literature

The physiological, social, and psychological benefits of appropriate and regular physical activity for older adults are well established (e.g., Levinger et al., 2020). Moderate physical activity is associated with improved psychological wellbeing, reduced loneliness when engaged in group activity, reduced anxiety, and increased self-efficacy of specific exercises, such as tai chi movements (Bauman et al., 2016), which have positive associations with increased physical functioning (Katsumata et al., 2011). Despite health inevitably declining with age, weakness and illnesses could be reduced with physical activity. Being physically active is important for older adults to experience healthy and active aging, which facilitates independent living and on a wider level (Bauman et al., 2016).

However, physical inactivity remains one of the largest leading risk factors for morbidity and mortality across the global population, with more than 1.4 billion adults being insufficiently active in 2021 (WHO, 2021). In an older study, findings showed approximately 60% of older adults over 70 in a UK sample did not reach the recommended government guidelines for physical activity, and this figure was associated with negative impacts on quality of life (Liffiton et al., 2012). This is not surprising, considering there is a growing body of literature highlighting barriers to engagement in physical activity for older adults (Cordier & Wilson, 2013; Kalfoss, 2016; Curran et al., 2016; Bredland et al., 2018).

A barrier for older adult engagement in physical activity includes access and ability to use technology for online streaming platforms, home exercise DVDs, or external feedback devices such as smart watches. Previous findings show that older adults without access to technology or who felt unable to use devices to monitor their own progress, withdrew from carrying out further physical activity, due to a lack of feedback for guidance to enable improvements, suggesting a lack of competence and a lack of motivation to continue trying (Maula et al., 2019).

Additionally, there are challenges and barriers for older men contributing to a lack of engagement in physical activity, more so when described in some literature as one of the 'hard-to-reach sectors' of the older adult population for engaging in physical activity (Cordier & Wilson, 2013; Kalfoss, 2016; Curran et al., 2016; Bredland et al., 2018). A main challenge for older males is how to overcome stereotypes associated with ageism, the types of activities men should be seen to take part in, i.e., the usefulness of physical activity for outcomes of power and strength, which have been found to be associated with reduced engagement (Bredland et al., 2018). Older adult men may not incorporate active tasks into daily living because of deeply ingrained negative societal views about vulnerability, mobility, or independence concerns, or from personal beliefs, leading to a lack of perceived physical competence and apprehensiveness to try (Liffiton et al., 2012).

 However, research still suggests that there are facilitators to engage in physical activity, such as in a study comparing home-based and community-based physical activity of older adults (Maula et al., 2019). Findings showed both environments to be effective in increasing autonomy over regular physical activity participation through daily tasks and group-based exercise classes, and increased competence as a result of receiving positive internal and external feedback (Maula et al., 2019). Interventions that aim to increase engagement and maintenance of physical activity in older adults have been attempted, but rarely effective over the long term despite adopting a variety of theoretical frameworks at individual and community levels (e.g., Deci & Ryan, 2000; Hudson et al., 2015; Ajzen, 1991; McMellon & Schiffman, 2002; Pibernik-Okanovic et al., 2004; Adolfsson et al.,

2007). Furthermore, Hartley and Yeowell (2015) explored the views and experiences of physical activity engagement in different subsets of older adults within a community, such as ethnic minorities and males. Response from participants showed that communities with social and low-cost activities in universal locations, positively influenced their engagement in regular physical activity and provided the facilities for long-term maintenance. However, whilst the findings are tangible in applying to other communities, there is still limited research into the actual effectiveness measured over time, as well as exploring the reasons why hard to reach individuals do not engage when provided with support and provision of services.

Other literature attempting to increase engagement in physical activity have used empowerment frameworks which involve outcomes of self-regulation and self-management (Zimmerman & Rappaport, 1988; Houlihan, 2019). Both outcomes relate to being able to function independently and make positive decisions to benefit health (e.g., Sak et al., 2017). A handful of studies used empowerment frameworks as a foundation for physical activity interventions (e.g., Shearer et al., 2012). Findings showed levels of psychological empowerment to play a significant role in determining whether older adults actively make appropriate decisions for their health, such as the decision to take part in physical activity and developing self-management skills (Shearer et al., 2012). Zimmerman and Rappaport (1988) suggested that empowerment can be described as both a process and outcome, enabling individuals to achieve sustainable self-management, through engagement in positive health behaviours, problem-solving and decision-making. Key features shared across empowerment theories include motivation, competence, self-efficacy, self-esteem, and autonomy.

Two theoretical frameworks, frequently used in the literature, can be used to explain the development of psychological empowerment. Firstly, Conger and Kanungo (1988) describe four core cognitions needed for psychological empowerment to occur. These include competence, meaning, self-determination, and impact. An individual is not fully empowered if they haven't mastered physical activity related skills, do not value engagement in physical activity or their community, do not possess the autonomy and intrinsic drive to carry out behaviours which improve their health, and do not have the skills to influence individual and shared decisions.

Secondly, Zimmerman (1995) proposed empowerment as a network of intrapersonal and interpersonal components which eventually interact, once developed, and influence behavioural outcomes. Explaining the theoretical framework in more detail, the first component, the intrapersonal component, is based around personal development, including increased self-efficacy, motivation, competence, and autonomy, which are core components highlighted in descriptions of

psychological empowerment (e.g., Rissel, 1994; Sak et al., 2017). The second element, interpersonal components, involve drawing on intrapersonal features to engage in social interactions and build relationships, taking part in shared decision making, again another core component in the development of psychological empowerment and physical activity maintenance. The result of these interactions with the social environment produces behavioural outcomes in the form of community engagement and physical activity. A focus on psychological empowerment development could contribute to long-term positive health behaviour change, through active involvement and participation in relevant activities (Sak et al., 2017), however it is still uncertain whether these behaviours persist post-termination of studies (Shearer et al., 2012).

There is also an explanation for community empowerment (Laverack & Wallerstein, 2001). An empowered community is said to be reliant on the empowerment level of its members. This suggests that psychological empowerment at the individual level contributes to collective empowerment by preparing an individual with the necessary skills to successfully engage in a group setting and participate in shared decision making, for having a positive influence on health (Kasmel & Andersen, 2011). Torre (1986) highlights a three-stage framework of community empowerment. The first stage, micro factors, involves the development of psychological empowerment, like the intrapersonal components in Zimmerman's (1995) nomological network. Stage 2, mediating structures, highlights the importance of social-environment interactions, socialising, and developing skills including shared decision making or problem-solving. Stage 3, macro factors, includes the influence over decisions at a community level relating to physical activity and health. However, research looking at community empowerment in UK older adults' physical activity is limited. A challenge with investigating sustainability of physical activity, empowerment and community engagement currently is the COVID-19 pandemic. Government restrictions enforcing social isolation reduced opportunities for socialising and building relationships, leading to dependence on technology to continue communicating with others. Restrictions on group meeting limited opportunities for physical community engagement, leaving many older adults with reduced psychological, physical, and social wellbeing (e.g., Faria et al., 2020; Mattioli et al., 2020). Therefore, it is important that older adults are provided with support for physical activity engagement, especially during uncertain times of socialising and communication.

Moreover, as a community becomes empowered, the process of making shared decisions and is likely to bring this group of people together and become more cohesive. This is supported by social identity theory (Stets & Burke, 2000), which is a person's knowledge that they belong to a social group, seeing themselves as members (Stets & Burke, 2000). Therefore, a group of older adults who share collective views around being active can use this as motivation for self-enhancement and may

be more likely to participate in community activities on a regular basis (Whaley & Ebbeck, 2002). Additionally, individuals who identify strongly with a group's values and norms, for example, valuing community engagement or physical activity, tend to report greater intentions to engage in their community or exercises compared to others who have a weaker identity within the group membership (Terry & Hogg, 1996).

Social identity theory (Stets & Burke, 2000) involves a 2-stage process of self-categorisation and social comparison, leading to social identity formation. The first stage, self-categorisation, involves seeking out qualities, similarities, or differences of the individual to a potential group membership, based on their motives for self-enhancement. Through the behaviours and interactions between others in the group, people engage in social comparison, which involves the behavioural outcomes, such as increased physical activity, if this is a behaviour frequently performed within the group. It is the behaviours and values that have a positive impact on self-esteem, and when individuals feel good about themselves because of the behaviours carried out by the group, this is likely to increase the strength of identification with the group, as the individual supports the values and norms. Additionally, self-esteem is also improved as an outcome of psychological empowerment (Sak et al., 2017). It has previously been suggested that developing intrapersonal features (such as competence and autonomy), and interpersonal features (such as meaningful social connections or shared decision making), it is likely that perceived self-enhancement will occur as a result (Zimmerman & Rappaport, 1988). In a physical activity context, individuals are taking part in activities which can improve their health, whilst also increasing their physical competence, they feel better about themselves.

Despite the plethora of research exploring the contributing factors and barriers for older adults to engage in community physical activity (e.g., Bae 2020; Levinger et al., 2020; Hudson et al., 2015; Blondell et al., 2014), studies concerning the initiation and maintenance of older adults to community physical activity have showed limited effectiveness over time and provided very few follow-up studies. Additionally, predominantly quantitative studies lead to a lack of accountability for and explanation of individual differences with regards to physical activity motivations (Rasmussen et al. (2018), as well as little attention towards the contribution of empowerment and social identity development for self-regulation towards health improvement (e.g., Sak, et al., 2017).

Accordingly, the aim of the research project is to use qualitative methods to explore and understand how different levels of engagement in Super Agers community physical activity sessions influenced empowerment, social identity development, and maintenance of physical activity during the COVID-19 pandemic. This is a valuable approach to explore how the programme contributes

towards enhanced empowerment and social identity, and whether the two constructs in turn, lead to initiation or maintenance of engagement in physical activity over the longer term.

Literature review

Introduction

A PubMed and Google scholar search (with advanced settings allowing papers to be made accessible to Swansea University students) was performed for relevant articles initially using the keywords and phrases: older adults, physical activity, community, empowerment, social identity, and engagement, and other keywords that snowballed from this search. Additionally, a consultation of the retrieved articles' abstracts to extract evidence and discussion around recruiting hard-to-reach older adult populations in group physical activity, was also used. The primary researcher scanned titles and abstracts to select studies for consideration for review. Further assessment of the full text was then carried out.

A Google search was used to find the WHO and CDC information on the scope of the problem regarding lack of exercise, physical activity benefits, and the risks associated with physical inactivity in older adults. The search was limited to the years 1980 through 2021 and to the English language and yielded relevant literature around physical activity interventions for older adults, benefits of community engagement and theoretical frameworks surrounding empowerment and social identity literature. Important terminology used in the study has been interchangeable in the literature and could have different meanings. To alleviate this problem, please refer to the glossary of standard terms used in this thesis. Although not an exhaustive review of all relevant literature, the sections below will present the findings of available and relevant previous physical activity interventions, moderating factors to engagement, social isolation studies, COVID-19 studies, and the use of empowerment and social identity frameworks with older adults will be presented where retrieved, otherwise, findings focusing on other populations will be discussed with their potential for extrapolation.

Sections within this chapter relate to overriding debates, issues and findings that frequently arose from the initial literature search with the key words highlighted above: 'older adults', 'physical activity', 'community', 'empowerment', 'social identity', and 'engagement', as well as the initial interests of the company partner and Super Agers' Project Lead. These sections (or 'themes') in the literature review have been identified by the author because of gathering the findings of each of the papers analysed, leading to a rationale for the development of the main aim of the thesis: To use qualitative methods to understand how different levels of engagement in Super Agers community physical activity influenced empowerment, social identity, and sustainable physical activity levels, during COVID-19.

Group and individual physical activity engagement

Psychosocial and physiological benefits of active engagement in group physical activity

Active engagement in group physical activity has a variety of psychosocial and physiological benefits. Findings from separate studies collectively found that active social engagement positively influenced physical activity behaviours as well as improved cognitive functioning, increased enjoyment in being part of a group and opportunities for building social support networks (Bae, 2020; Levinger et al., 2020; Rasmussen et al., 2018; Liffiton et al., 2012). This suggests meaningful social interaction contributes to sustaining engagement in physical activity in older adults. In support, Levinger et al. (2020), unintentionally during the COVID-19 pandemic, recruited 95 Australian older adults aged 60 years and over, and investigated an outdoor group exercise intervention with outdoor exercise park equipment for 3-months, followed by a 6-month unstructured physical activity program, including ongoing unsupervised access to the exercise park. Each exercise session was followed by a social gathering. Findings showed that 84% of the sample completed the full-intervention, as well as 61% completing the assessment at 9-months, however this was impacted by COVID-19 restrictions. Nevertheless, there were significant increase in physical activity levels post-intervention, as well as physical functioning. This study shows the importance of periods of social interactions to be successful in increasing physical activity levels and continuing to be active after the intervention has finished.

Moderating factors for engagement in either individual or group physical activity in a community setting

Despite the positive psychosocial and physiological outcomes of community engagement and physical activity, there are complex and individual moderating factors for an individual's preference over whether they take part in individual or community exercise (Rasmussen et al., 2018; Bauman et al., 2016). For example, Rasmussen et al. (2018) conducted a qualitative investigation on the mechanisms underpinning community engagement with 10 adults from Denmark. 5 participants were members of a fitness centre aged 40-70, and the further 5 participants were instructors. The data collected from semi-structured interviews from the 5 members showed that the outcome of social interactions was moderated by 3 things. The first, demographic factors, included variables such as age, gender, living status, health status or occupation. For example, other individuals the same age as others who participated in community physical activity were more likely to relate to these individuals as role models, vicariously reinforcing the beneficial effects of physical activity and social interaction. Secondly, participants considered social interaction as both a mechanism and outcome in making healthier lifestyle choices, when making meaningful

connections with others, and being exposed to different views towards exercise. The third moderating factor was participant's perception of the exercise environment as safe and facilitative, which was shown to increase motivation to keep attending.

However, upon discussion of previous physical activity interventions delivered from community or population settings, a systematic review of over 60 studies and other systematic reviews (Bauman et al., 2016) including older adults ranging from 50 and above, found that some older adults also preferred to remain in their own homes or within their immediate physical and social environment for them to take part in physical activity. Despite the preference to do physical activity individually, the findings still showed benefits, although different to the benefits achieved from group physical activity. These include beneficial effects on independent living, reduced health care costs and active ageing, which shows that both individual and community physical activity have their benefits, and either should not be forced upon the individuals if it's not what they are interested in.

For the older adults with a preference to engage in community activity, social interaction in physical activity setting also fulfils different needs for different individuals, guided by initial motivations and drives to take part in physical activity with others (Levinger et al., 2020; Rasmussen et al., 2018; Bauman et al., 2016; Blondell et al., 2014). Common motivations for older adults to engage in physical activity in a social setting most often included the need to improve physical health and wellbeing, rather than to develop interpersonal relations and social interactions. However, other studies did find socialising and being amongst others to be a key initial motive to engage in physical activity (Bae, 2020; Levinger et al., 2020; Liffiton et al., 2012). Differences in motives for engaging in physical activity suggest an opportunity for further investigation into these through the personal experiences of older adults in different cultures and communities.

Providing support for the positive influence of both individual and group physical activity, Maula et al. (2019) conducted a study with 30 older adults aged 65 and older. Upon qualitative investigation comparing home-based exercise to a community programme on the effectiveness in encouraging regular physical activity, the findings showed that both home-based physical activity and community-based physical activity were effective in increasing autonomy for carrying out regular physical activity post-termination of the intervention. However, this was only the case when positive external and internal feedback were present. This could suggest that the participants were more likely to engage in physical activity after showing noticeable progress, increasing their competence in the tasks, and therefore positively reinforced to repeat the physical activity by themselves. However, when technology was the main source of provision for external feedback for these older adults, participants who either did not have access to technology or were unable to use

it, were not provided with the same level of feedback and decided to discontinue their engagement, due to a lack of recognition of improvements. Like previous findings on the need for social interaction, participants developed friendships and shared experience whilst taking part in community physical activity, important for increasing external motivation through being active with other like-minded individuals of a similar age (Maula et al., 2019). However, a key distinction in this study was that physical activity maintenance was mainly seen in the participants who were already habitually physically active before the study, suggesting high habitual motivation is a moderating factor for engagement and maintenance of physical activity, rather than a 'one size fits all' approach for all older adults.

Despite findings shedding light on the benefits of both home-based and community physical activity for older adults, the study was conducted approximately five years after the physical activity intervention was carried out, which could involve retrospective bias due to memory decay in relaying experiences based on the intervention. Additionally, there could also be a selection bias within the sample, as those more physically active and already engaged within their community could be more likely to participate, rather than recruiting and investigating older adults who were not already engaged.

Moreover, in the context of clinical population, studies have used Ryan and Deci's (2000) Self-determination theory (SDT) as a basis for exploring physical activity motivations and continued engagement through longitudinal group physical activity interventions with education workshops (Rahman et al., 2015; Milne et al., 2008). Findings showed that an autonomy-supportive framework was important for participants and was positively associated with meeting physical activity guidelines (Milne et al., 2008). Additionally, there was decreased external regulation, leading to less reliance on others to engage in physical activity), increasing autonomy satisfaction both during and after the intervention. As a result, participants also discussed the development of intrinsic motivation (Rahman et al., 2015; Milne et al., 2008), which predicted increases in habitual physical activity levels of participants 6-months after the programme ended. Motivation to continue using the facilities regularly after the study was positively influenced by increased knowledge around their specific condition, and education on appropriate exercises, increased competence, and self-awareness, showing progress as a result (Rahman et al., 2015). More specifically, participants' relatedness satisfaction in Rahman et al.'s (2015) study decreased post-termination of the programme. This was likely due to the reduction in social interaction which was present throughout the study. It also suggests that the social environment at the time of the study did have a positive impact on regular engagement. As there were still significant increases in habitual physical activity, maintained after the intervention, it suggests that a social environment that encourages relatedness

can contribute to physical activity maintenance, but will not be a detriment if the other basic needs are satisfied.

Critical analysis of literature in this section

Despite the similar and supportive findings across the literature in this area, there are differences in their methodological approaches. Most of the literature conducted quantitative and cross-sectional studies (Bae 2020; Levinger et al., 2020; Rahman et al., 2015; Blondell et al., 2014), using scales, experimental conditions, and descriptive statistics. However, where Rasmussen et al. (2018), for example, used a triangulation of qualitative methods, the study used these elements to focus on more personal experiences in relation to physical activity motivations and engagement of older adults. Research involving longitudinal elements and follow up intervals, whether qualitative or quantitative in nature, managed to better answer research questions around engagement and motivation over time, compared to stand alone studies (Levinger et al., 2020; Blondell et al., 2014; Rahman et al., 2015). More research is needed in presenting an understanding of individual preferences and motivations for physical activity engagement, particularly if these motives require social interactions or the need for improved health status.

Although sample populations varied throughout the studies, e.g., focusing on older adults with specific clinical conditions, or just on adults, there were consistencies. For example, Bae (2020) focused on both healthy older adults as well as those with dementia, comparing the impact of physical activity on cognitive decline. Additionally, Levinger et al.'s (2019) findings generalise to older adults who are habitually physically inactive rather than those who choose to be active. However, this could be interpreted as support for the different preferences for activity and moderating/motivating factors for initiating engagement in different types of physical activity for different reasons.

However, wide ranges of ages within studies may be a constraint when attempting to use findings for future interventions on specifically, older adults. For example, Rasmussen et al. (2018), Hudson et al. (2015) and Blondell et al. (2014) recruited participants with wide age ranges (20-70 years, 36-84 years, 40 years and above, respectively). In contrast, Bae (2020) and Levinger et al. (2019) recruited older adults aged 60 and over which is more focused on older adults but further investigation into specific age groups over 60 years would be ideal, to generalise findings more specifically to the older adult population. Thus, there remains a need to investigate physical activity motivations and engagement in different social environments, using triangulation of methods (Rahman et al., 2015), and with a focus on the older adult population age range.

Influencing factors negatively impacting engagement in physical activity

However, whilst there are moderating and contributing factors facilitating engagement in physical activity, there are also barriers. This section presents and discusses literature around barriers for participation in regular physical activity for older adults, including COVID-19, and social isolation. This section is not an exhaustive review of all the literature available due to time and labour constraints (Cordier & Wilson, 2013; Kalfoss, 2016; Bredland et al., 2018; Curran, et al., 2016; Office et al., 2020; Faria et al., 2020; Son et al., 2021; Mattioli et al., 2020). A further PubMed and google scholar search to the initial literature search was also carried with the key words: "barriers", "physical inactivity", "engagement", "older adults". The papers gathered were the most relevant in relation to the physical inactivity concerns across the older adult population highlighted by WHO.

Constraints due to social isolation and COVID-19 as an older adult

Social isolation negatively impacts older adults' community engagement and ability to be physically active in a safe and facilitative environment (National Institute of Aging, 2019). Those experiencing periods of isolation may live in a home with limited space or have limited access and knowledge about technology (Office et al., 2020; Faria et al., 2020; Son et al., 2021). Findings have showed that reintroducing older adults into new ways of communicating and engaging in the community, for example, learning how to use online platforms, empowers them and can help to counteract the negative impacts of social isolation: increased risk of falls, all-cause mortality, hospitalisations, physical inactivity, and loneliness (Office et al., 2020; Faria et al., 2020; Mattioli et al., 2020; Son et al., 2021).

Older adults socially isolating due to living alone may already be at a high rate. But it is whether older adults perceive a lack of external support for accessing resources that is a concern. Some older adults may have been unintentionally forced into social isolation away from the support of family members and the community because of COVID-19 socialising restrictions. Studies conducted during the COVID-19 pandemic (e.g., Faria et al., 2020; Office et al., 2020), identified that those who live in an isolated manner perceive a lack of support, due to limited contact with others such as family or friends. This limited social contact and interaction may then have a debilitative effect on engaging in regular physical activity, since previous findings show the importance of social relationships for engagement in physical activity (Faria et al., 2020; Office et al., 2020; Rasmussen et al., 2018). They suggested that preventing social isolation in older adults could improve overall quality of life and continuity of full participation in society.

Whilst studies highlighted negative impacts social isolation on physical engagement and socialisation, opportunities to use technology such as computers or telephones to stay connected and engaged, means older adults felt considerably more empowered and supported, even if not in a physical sense. For example, Faria et al. (2020) reviewed a database (exact sample unknown) of Portuguese older adults aged 65 and over, from disadvantaged backgrounds and were considered 'hard-to-reach'. However, individuals who were able to use the internet and online resources during the COVID-19 pandemic, were effectively empowering themselves as they could still participate with others in a community and gain increased control over their lives, whilst not necessarily being able to achieve in-person contact. Adding to the importance of identifying pathways for support during the pandemic, Office et al. (2020) targeted Chicago-based older adults who were socially isolated because of the COVID-19, pandemic. The qualitative study investigated the impact of regular phone calls to these socially isolated older adults on engagement in the community, despite not being able to be involved in-person. Findings indicated that the volunteers taking the phone calls, and the older adults receiving them, felt empowered and enjoyed building a social relationship during the uncertainty of the pandemic. However, the only concern with the study is that it doesn't mention the age ranges of older adults targeted, limiting the specificity of findings to a particular age within the 'older adult' population.

There is further support from studies investigating the impact of quarantining during Covid-19. It was identified that it would be useful to educate older adults so that they become more aware of how to use the internet and online technology, to have modern capabilities to engage with others and combat social isolation (Son et al., 2021; Mattioli et al., 2020). Relating to a physical activity setting, community exercise classes could be transitioned to an online format to continue with existing social connections (Son et al., 2021). This continued social interaction using technology empowers older adults' by learning new skills, as well as promoting increased competence (Son et al., 2021; Mattioli et al., 2020).

Cultural narrative of aging in western society

Across western cultures, ageing is typically perceived as a medical and social 'problem' as older people and the meaning of ageing are associated with ill health, frailty, disability, disengagement, and dependency on the health care system (Blaikie 1999). Particularly in Western societies, the perception of the ageing process has been dominated by the narrative of decline (Gullette, 1997). This narrative may be a concern for older adults and their view of engagement in new exercises or learning new skills, because of the idea that ageing is a process of passively getting rather than actively growing old (Phoenix & Tulle, 2017). Older adults within the heath care

setting are therefore likely to be subjected to socially constructed expectations of age 'appropriate' behaviour, restricting their perceived freedom and control due to the emphasis on declining physical and cognitive properties (Phoenix & Tulle, 2017). However, as engagement in regular physical activity in aging adults and older adults is still consistently promoted within health policies (e.g., Active Ageing Policy Framework, WHO, 2002), this presents a conflict in what older adults should be doing with regards to being active.

Theories explaining physical activity engagement and maintenance within a group setting

Psychological empowerment

Several researchers have presented definitions of psychological empowerment explained as both a process and an outcome on an intrapersonal level (e.g., Rissel, 1994; Spreitzer, 1995)

Psychological Empowerment as a process. Researchers who describe psychological empowerment as a process explain that it is the development of core psychological components which empowers an individual, i.e., an 'empowering process'. However, there are many definitions used within the literature which makes understanding psychological empowerment difficult in different contexts.

The descriptions and definitions presented in Table 3 bring together a variety of psychological empowerment definitions found in the literature search. Within these, there are different psychological concepts which are presented individually, or overlap and are shared with other key concepts in psychology literature: self-efficacy, perceived control over health decisions, self-determination, and autonomy over behaviours.

Table 3.
Chronologically ordered table of psychological empowerment descriptions as a process, specifically relevant to the context of this study.

Author and reference	Description
*McClelland (1975)	• Process of belief in **self-efficacy** enhancement • Self-efficacy stems from internal need-states such as an intrinsic desire for **self-determination**, **competence** motive and need for **power**

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WHO (1986)	• Encompasses the process of **enabling** people to increase **control** and improve their health
Zimmerman and Rappaport (1988)	• Connection between perception of **competence**, a desire for, and a **willingness** to actively participate in public domain
Conger and Kanungo (1988)	• Process of enhancing perception of **self-efficacy** among organisational members
Cornell Empowerment Group (1989)	• Identification of conditions that foster powerlessness and removing them by both formal organisational practices and informal techniques of providing efficacy information
	• Process allowing individuals to create opportunities to **control** their life and influence own decisions
*Sak et al. (2017)	• Process involving psychological feelings of **power, control,** and **self-esteem**, leading the patient to value **autonomy** and desire to participate in **decision making**

Discussing the definitions. McClelland (1975) describes psychological empowerment as a process of belief in self-efficacy enhancement, which stems from internal need-states such as an intrinsic desire for self-determination, competence motive and need for power. It focuses on empowerment as a motivational construct developing self-efficacy through enablement, within an organisational context. Supported by Conger and Kanungo (1988), in previous empowerment definitions which talk about power and relate to an organisation culture, those who have more power are more likely to achieve their desired outcomes, compared to those who lack power. When this definition is applied to an older adult physical activity engagement context, there is no driving incentive relating to power or money, rather health improvement, therefore the desire for power in an empowerment sense may not be appropriate for the context of the study. Nevertheless, this definition remains useful, being one of the earlier definitions of empowerment, and describes empowerment as a developmental process, with a particular focus on motivation and self-efficacy for developing internal desires and motives for either positive or negative behaviours.

Similarly, WHO's (1986) description of psychological empowerment encompasses the process of enabling people to increase control and improve their health. This description of empowerment also highlights the *enablement* of individuals, but this time directly relating to a health improvement context. Despite focusing on a specific component of perceived control, which is part of self-determination, it might be seen as a surface level definition without consideration of previous concepts mentioned in previous definitions, such as self-efficacy (McClelland, 1975; Zimmerman & Rappaport, 1988).

Zimmerman and Rappaport (1988) describe psychological empowerment as a connection between perception of competence, a desire for, and a willingness to actively participate in a public domain. The description includes more specific and deeper levels of self-efficacy, such as perceived competence relating to an individual and their functioning. Additionally, there is mention of participation in the social environment, an element not previously considered before. This suggests that the development of competence and self-determination contributes to, and enables, active participation in a community setting, by having the appropriate tools for an individual to be successfully empowered. This definition supports earlier definitions of psychological empowerment being a motivational construct (Ryan & Deci, 2000), and by developing, creating, and seeking appropriate resources to engage with others on an interpersonal level, an individual can be empowered.

Conger and Kanungo (1988) describe psychological empowerment as the process of enhancing perception of self-efficacy among organisational members. This supports previous definitions which include self-efficacy and power as key features in organisational literature on empowerment. This definition may be valuable in the context of engagement in physical activity as an older adult, as it highlights the importance of an environment that enables individual control, power, and self-efficacy.

Like Zimmerman and Rappaport (1988), Cornell Empowerment Group (1989) describe empowerment as the identification of conditions that foster powerlessness and removing them by both formal organisational practices and informal techniques of providing efficacy information. It is also a process allowing individuals to create opportunities to control their life and influence their own decisions. It highlights the development of perceived control to make appropriate decisions for health improvement. It could be argued that power at an organisational level is related to perceived control at an individual level, where the individual has control and essentially power, over the actions they take depending on information and support received from health stakeholders

(McClelland, 1975). As this definition only highlights perceived control in the process to achieving psychological empowerment, it is largely suitable for the view of empowerment as enabling individuals to make decisions to benefit individual health. However, it appears that empowerment is more than just one component, so perhaps a singular definition does not capture empowerment in different contexts.

Sak et al. (2017) provide the most recent description: a process involving psychological feelings of power, control, and self-esteem, leading an individual to value autonomy and desire to participate in decision making. It is the most suitable definition as most of the components mentioned in previous definitions are considered here.

Psychological empowerment as an outcome. Researchers who describe psychological empowerment as an outcome suggest intrinsic desire to take part in self-sustaining behaviours is a main outcome of being psychologically empowered (Table 4). Whereas researchers describing the phenomenon as a process suggest an intrinsic desire is needed to be present within individuals to facilitate the development of empowerment. There is a lack of clarity in the research around the most appropriate explanation of psychological empowerment, meaning a need for further attention and research in different contexts, to understand whether there is precedent for psychological empowerment to be both a process and an outcome in certain contexts and circumstances.

Table 4.

Chronically ordered table of psychological empowerment descriptions as an outcome, specifically relevant to the context of this study.

Author and reference	Description
*Zimmerman & Rappaport (1988)	• Considers empowerment as a process and outcome • Enablement of individuals to achieve **sustainable self-management** through engaging in positive health behaviours, by learning how to **problem solve** and **make decisions** for themselves.
*Rissel (1994, p. 41)	"Feeling of greater control over their own lives which individuals experience following active membership in groups, and may occur without participation in collective political action"

Definition of psychological empowerment in the context of the current study.
Considering the critical analysis of previous psychological empowerment definitions, I have
provided my own definition in the context of this current study: A motivational process enhanced
by enablement through social-environmental interactions, where individuals develop self-efficacy,
all features of self-determination and feel greater control so that they can make appropriate
decisions for their health, with the outcome of becoming self-sustainable and self-regulated
individuals within their community. Psychological empowerment was explained to older adult
participants as feeling better at their physical activity and feeling like they can make their own
decisions about engaging in the community.

Theoretical frameworks and measurement of psychological empowerment. Previous
research lacks a standardised measurement of psychological empowerment (Zimmerman et al.,
1992; Rissel, 1994). However, Zimmerman (1995) suggested that measuring empowerment requires
uniqueness and tailoring to different contexts, which would require a qualitative measurement.

Two theoretical frameworks are relevant to this current study for the explanation of psychological
empowerment (Conger & Kanungo, 1988; Spreitzer, 1995; Zimmerman, 1995). Each theory is
complex and multi-dimensional and build on the definitions provided in Tables 1 and 2. Multiple
theoretical concepts and components from different fields of research were borrowed and merged to
form the theoretical underpinnings of psychological empowerment (Rissel, 1994). A concern faced
by future researchers could thus be a lack of clarity regarding the focus of the theory in terms of its
main features and components.

Conger and Kanungo (1988) four cognitions of empowerment. Conger and Kanungo's
(1988) framework, later expanded by Spreitzer (1995), adopts a process approach towards
psychological empowerment, with having self-determined motivation to develop self-efficacy and
power. The framework identifies four central cognitions needed to be considered for empowerment
to be developed (Table 5).

Table 5.
*Conger and Kanungo (1988) Theoretical Framework involving four core cognitions of
empowerment.*

Core cognitions	Definition
Competence	Belief in capability to perform activities with skill and mastery (Gist, 1987; 2014)

Meaning	The importance of health behaviours to the individual, measured through active engagement and participation (Hackman & Oldham, 1975).
Self-determination	A sense of having choice in initiating and regulating actions (Spreitzer, 1995).
Impact	The ability of an individual to significantly influence strategic, administrative, or operational outcomes (Spreitzer, 1995).

Physical and general competence is likely to become challenged with age, therefore being an ideal component to focus on with an older adult population for attempting to develop empowerment (e.g., Bauman et al., 2016). The second cognition, meaning, has been found to be an important facilitator for active involvement in the community through the development of social relationships in a health context (Sak et al., 2017). The third cognition, self-determination, supported by Deci et al. (1989), involves the development of autonomy, competence, and relatedness which when enhanced, contributes towards the development of self-regulatory behaviours towards exercising and being physically active (Conger & Kanungo, 1988). The last cognition, impact, adds an intrapersonal element of empowerment, explaining the importance of being able to make decisions and be actively involved in a community setting. This framework suggests that once empowerment is developed in a facilitative environment with the presence of all four components, it is an opportune moment to optimise and develop their own sustainable behaviour (Conger & Kanungo, 1988).

Spreitzer et al. (1997) later argued whether three of the components should be more appropriately conceptualised as antecedents (i.e., competence) or outcomes (i.e., impact or meaning), rather than four main facets which describe empowerment. However, it could instead be said that each of the cognitions reinforce one another, such as having a greater sense of self-determination leading to greater meaning. Nevertheless, the four cognitions add unique elements to an individual's experience of empowerment, which is the main argument in psychological empowerment literature (the individual and unique element).

Furthermore, self-efficacy has been accepted as a unidimensional component of empowerment, as well as self-determination (Conger & Kanungo, 1988; Sparrowe & Bradway, 1993 as cited in Spreitzer et al., 1997). Self-efficacy and personal competence do have a direct effect on performance, particularly in a work performance context. Even though the context of the original framework is related to the organisational domain and not a physical activity perspective, Bandura's (1977) initial work on self-efficacy as a general concept, highlights that high self-efficacy is positively related to initiating behaviours and persistence, which are aspects of motivation that

influence performance in a sport setting. This can be related to older adults in a group physical activity context, where improved physical activity behaviours have been found in empowerment intervention studies aiming to enhance competence and self-efficacy, discussed in later sections in this chapter (e.g., Rassmussen et al., 2018).

Zimmerman (1995) Nomological network for psychological empowerment. Building on the theoretical framework provided by Conger and Kanungo (1988), Zimmerman (1995) provides a nomological network for psychological empowerment (Figure 2). Previous researchers had not yet provided a framework analysing empowerment at different levels of analysis (individual level as well as interactions between the individual and the environment). Zimmerman's (1995) framework integrates 3 complex perceptions; (1) Intrapersonal features based around personal control, (2) interactional features relating to relationship with others and the interaction with the social environment, and (3) the outcome of the interaction between intrapersonal features of the individual and the interactional element, which results in a behavioural outcome shown in the form of community engagement and active involvement in positive and sustainable health behaviours. The behavioural component is the outcome of the interaction between intrapersonal components and the social environment. It is hoped that empowerment is developed as an outcome.

Psychological Empowerment

Intrapersonal Component

Interpersonal Component

Behavioural Component

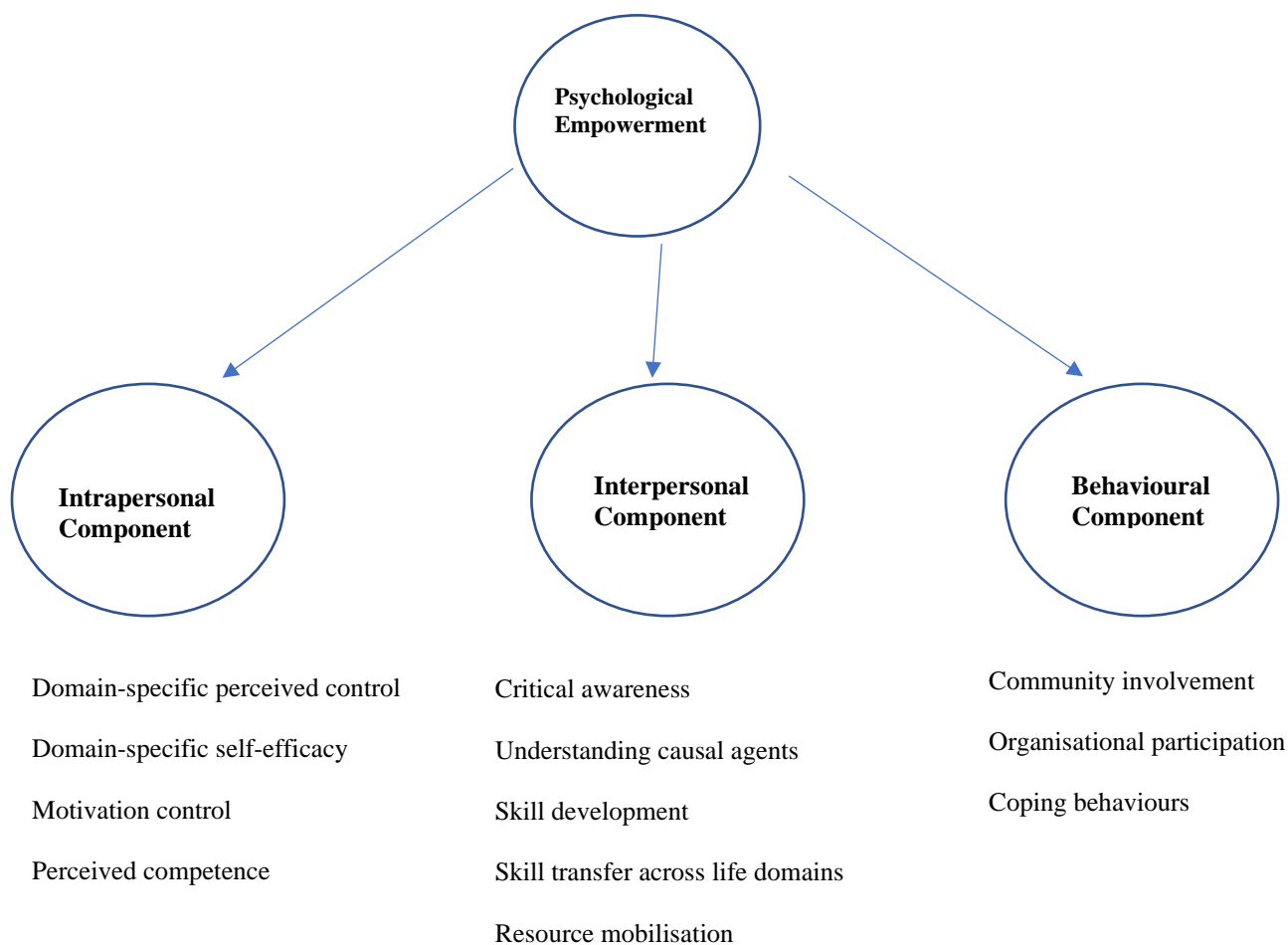| Intrapersonal Component	Interpersonal Component	Behavioural Component
Domain-specific perceived control	Critical awareness	Community involvement
Domain-specific self-efficacy	Understanding causal agents	Organisational participation
Motivation control	Skill development	Coping behaviours
Perceived competence	Skill transfer across life domains	
	Resource mobilisation	

Figure. 2

Nomological network for psychological empowerment (Zimmerman, 1995)

The first component, intrapersonal features, relates to how individuals perceive themselves and their actions. This is the individual and micro level of empowerment and is widely supported, as psychological empowerment has mostly been studied at the individual level (e.g., Conger & Kanungo, 1988; Spreitzer, 1995). The intrapersonal component includes the development of self-efficacy, motivation, perceived competence, control, and autonomy, also supported by the descriptions in Table 1. Zimmerman's (1995) nomological network provide support for Stretcher et al.'s (1986) study. The findings showed that when the features of the intrapersonal component (including self-efficacy, competence, control, and autonomy) were positively developed, individuals were provided with the initiative and intrinsic drive to engage in behaviours to influence desired outcomes. This explains why it could be unlikely for individuals who do not believe in their capabilities to achieve goals of increased self-awareness, learn about what is required to reach mastery, and become empowered at the individual level (Zimmerman et al., 1992).

The second component, at the interactional level, encompasses the influence and development of interpersonal relationships and social settings on intrapersonal features. The interactional component also involves the critical understanding individuals have about their community, as well as the resources, activities and opportunities needed to achieve their desired goals and sustainable health behaviours. Research supports individuals who engage with the specific environment where empowerment is being developed is an important facilitator (Zimmerman, 1995). It is therefore the influence of the person and environment that enables the individual to solve problems, develop competence through mastery of tasks in an individual or community social setting (Zimmerman et al., 1992).

This leads on to the behavioural component of psychological empowerment. Zimmerman (1995) explains that this involves the consequences of being able to manage stress or adapt to change, because of applying and utilising internal and external resources developed as part of intrapersonal or interactional components.

This framework has face validity. It supports the understanding that empowerment is multi-faceted and an individualised process. Zimmerman (2000, p. 46) suggested that the process is empowering if it "helps people develop skills so they can become independent problem-solvers and decision-makers", which supports the framework in saying that the development of intrapersonal and interpersonal components positively influence the outcome of being self-regulated and making

appropriate decisions for health. Putting the theoretical framework into context, an empowered individual is said to be persistent and efficient in an organisation setting, still considering that they might not always make a perfect decision but are aware of their options. However, a person who is not empowered might suffer from low self-esteem and a sense of external locus of control, as well as being likely to remain in a state of learned helplessness, meaning that they may lack or underuse the resources available to them internally or externally (Greene et al., 2005; Zimmerman, 1990, 1995, 2000).

Link between theoretical concepts for context of the study. In a review of psychological empowerment, Rissel (1994) defines psychological empowerment as both a process and an outcome, where engagement in social participation is a facilitator for sustainable behaviour due to increased mastery and control. Therefore, empowerment at the individual (intrapersonal) level has a link with interpersonal and environmental factors in its development.

For the context of the current study, the theories presented by Conger and Kanungo (1988) and Zimmerman (1995) overlap in their intrapersonal components. Since the four core cognitions in Conger and Kanungo's (1988) framework explain psychological empowerment development as an intrapersonal phenomenon, it can be included as a sub-category among the 'intrapersonal' components in Zimmerman's (1995) nomological network.

Community empowerment

Later theoretical underpinnings of psychological empowerment identify active engagement and involvement in a community and social setting (Kari & Michekls, 1991), leading to community empowerment evolving into a macro-level of psychological empowerment.

Once psychological empowerment is developed, individuals collectively engage in social interactions, building networks, which is likely to lead to behaviour maintenance. The influence of the person-environment interaction is suggested to build towards community empowerment, which overall involves shared decision-making and positive health behaviours on a larger scale and in a social group setting (e.g., Kari & Michekls, 1991). This idea of group empowerment builds on the interactional components of Zimmerman's (1995) network and provides a deeper knowledge base around empowerment as a multi-layer phenomenon; a collectively empowered community is said to be reliant on the empowerment of its members, suggesting that psychological empowerment of individuals on an intrapersonal level is important to develop community empowerment. Literature

discussing development of community empowerment is presented below (Keiffer, 1984; Torre, 1986; Swift & Levin, 1987).

Keiffer (1984) provides the earliest framework for developing community empowerment. He conducted a study on a sample of emerging citizen leaders and developed four main stages of community empowerment development. The first stage, intrapersonal features, relates to psychological empowerment at the individual level. Once these features of psychological empowerment are developed, the individual feels enabled to involve themselves with interpersonal relationships. This is where social dynamics are formed, where opportunities are provided to learn skills such as shared decision-making and problem solving. The individuals move into stage 3 in which they create or are provided with opportunities to confront issues presented in society on a wider scale to personal issues and concerns. The fourth stage emphasises the integration of all these stages into everyday life, which is the first of community empowerment research to highlight the importance of behaviour maintenance incorporated into daily activities. Therefore, this suggests research into the practical application of empowerment in the long-term is still required, especially in different contexts and with different populations to attend to individual differences. However, a limitation of Keiffer's (1984) study is the lack of generalisability to the general population, and outside of a sample of citizen leaders. This should be considered when applying the stages to different settings and populations such as that of the general population.

Torre (1986) provides a 3-stage framework which involves the development of psychological empowerment to community empowerment, which is used in the current study. The 3 stages are (1) development of psychological empowerment at the intrapersonal (micro) level, (2) mediating structures appropriately built between the individual and the social environment, and (3) using social relationships and intrapersonal features to facilitate a positive impact of the socio-political environment on the individuals and the surrounding community. Stage 1 (development of micro/intrapersonal factors) can be related to the development of components and concepts featured in Conger and Kanungo's (1988) four core cognitions of psychological empowerment, and Zimmerman's (1995) network (Figure 2). Members who have developed psychological empowerment and micro (intrapersonal) features (enhanced through mechanisms of goal setting, action planning and community engagement), then continue onto the next stage: Mediating Structures. This is where individuals regularly and actively participate in community activities and socialise together, developing interpersonal features such as a sense of shared decision-making, knowledge, and building of social networks, favourable to the community. Through this active engagement in a community setting, individuals collectively move to the final stage, macro factors. This stage relates to decision-making and control over wider contexts such as social and political

factors, affecting the community. An important distinction explained in this framework which sets it apart from previous explanations, is that unless the individual successfully develops through each stage, community empowerment cannot occur.

Swift and Levin (1987) provide further support for the framework described by Torre (1986), which also describes three stages to develop community empowerment. Firstly, individual-level psychological empowerment is said to be developed by increasing perceived control, enhancing self-efficacy and physical competence. This is well supported by definitions in empowerment literature as the main components at the intrapersonal level (e.g., Rissel, 1994, Zimmerman, 1995; Spreitzer, 1995; Sak et al., 2017). The second stage involves engagement in social interaction, particularly with like-minded individuals, to enter the third stage which is the development of shared decision-making skills and goal setting within the community. Like Torre (1986), Swift and Levin (1987) emphasise that only by going through all stages does the individual develop empowerment at the highest level, this being community empowerment. At the community level, once a group of individuals taking part in group physical activity become empowered, they are more likely to want to continue actively engaging with each other for the shared goal of social networking and increased physical activity. However, there needs to be a consideration of individual differences and level of intrinsic desire or motivation to continue to make appropriate health choices.

Empowerment summary

In summary, interventions that are framed around providing opportunities for social interaction, individual feedback for progress monitoring and goal setting, were more likely to show increased self-efficacy, competence, control, and autonomy as a result. However, with the concerns of little research around older adults and empowerment, limited longitudinal data, and limited qualitative studies, research focused on a specific Welsh community of older adults using longitudinal and qualitative methods to review physical activity interventions may add to the literature and help with future recommendation for increasing older adults' empowerment levels.

Social Identity Theory

Social identity theory discusses social categorisation, self-esteem development and motivations for specific group behaviours, which helps to understand how a group functions and the importance of an individual's membership within these groups. The social environment of a group physical activity class is comprised by the group dynamics and norms, developed by individual's

intrapersonal features, and interactions with others in the group (Zimmerman, 1995). However, more research is needed in its practical application in the field of older adults' social identity development and physical activity behaviours. Theoretical explanations of social identity are discussed in this section (Tajfel, 1959; Tajfel & Turner, 1979; Hogg & Abrams, 1988; Hogg, Abrams, Otten, & Hinkle, 2004; Whaley & Ebbeck, 2002; Knight et al., 2010; Strachan, Brawley, Spink, & Glazebrook, 2010; Stevens et al., 2017.

Outlining Social identity Theory. The traditional definition of social identity: "The individual's knowledge that they belong to certain social groups or categories together with some emotional and value significance to them of this group membership", was provided by Tajfel (1959, p. 292), a key researcher in the conceptualisation of the theory. A social identity is developed and present in a group of individuals who share a similar social environment, thus explaining an across-group (intergroup) phenomenon (Hogg & Abrams, 1988). Adding to Tajfel's (1959) original definition of social identity theory, this explains the 'emotional and value significance' element of the definition provided by Tajfel (1959). Furthermore, social identity theoretical underpinnings highlight 'intergroup discrimination' as a motive and outcome of social identity in a large group setting (Hogg & Abrams, 1988).

Therefore, as part of social identity theory, intergroup discrimination describes an across-group phenomenon, where social categories are said to be parts of a structured society that exist in relation to other contrasting categories showing distinctiveness, but not necessarily with a negative or positive connotation towards them. Examples of this could be those engaged in physical activity compared to those who are physically inactive, as well as different genders, for example. In addition to this accentuated distinctiveness between opposing groups, two motivational assumptions are suggested to be involved in the development of social identity as part of a large group: a desire for cognitive coherence and a need for positive self-esteem (Hogg & Abrams, 1988). However, it is unclear at what level and contexts the development of positive self-esteem occurs, whether at the individual level, or globally, over time.

Stets and Burke (2000) 2-stage social identity formation. Stets and Burke (2000) more recently suggested that social identity is a collective concept based on the groups individuals feel they belong to, involving a main outcome of enhanced self-esteem. Thus, building on Tajfel and Turner (1979) and Hogg and Abrams (1988), the theory proposed by Stets and Burke (2000) involves two stages in developing social identity. (1) Self-Categorisation (Tajfel & Turner, 1979; Stets & Burke, 2000) which is the individual process of finding and accentuating perceived similarities between the self and others within the proposed group, as well as finding and accentuating the perceived differences, driven by motives of self-enhancement. (2) Social Comparison, which involves selectively attending to the similarities and differences that stand out the most within stage 1, and how these help towards self-enhancement for the individual and the social group. It is once these two stages are completed that self-esteem is influenced positively. The theory highlights that despite social identity being a collective phenomenon experienced by the specific group, it begins as an individual social-psychological process, involving different contributing factors and impacted by individual differences.

Intergroup behaviour as a foundational basis of social identity theory was built on by Hogg et al.'s (2004) study, which found a strong social identity to be guided by two main motivations: self-enhancement and uncertainty reduction (Hogg et al., 2004), with the 'self' aspect viewed as the group's 'self', not the individual. Additionally, findings showed that individuals who valued their social identity and belonging to a high-status group had more positive self-esteem. However, it would be worthwhile to see if these findings hold true to smaller groups with both a high and low status.

Link between empowerment and social identity

A group with a strong social identity share similar social environments. Similarly, a collectively empowered community also shares the same social and physical environment and is likely to take part in shared decision making to benefit them. If a group of older adults within a community makes decisions that improve health, they are essentially self-enhancing; this is an attractive feature of a group, so individuals are likely to want to be part of this group.

Previous physical activity and older adult interventions

This section discusses previous physical activity interventions based on either empowerment or social identity theory. The search of the literature using key words included empowerment, psychological empowerment, community empowerment, physical activity, group, older adult, intervention.

Empowerment interventions

Empowerment interventions have shown beneficial effects on older adults' participation in physical activity by focusing on developing intrapersonal skills self-management skills, self-efficacy, and opportunities for social interactions (McMellon & Schiffman, 2002; Pibernik-Okanovic et al., 2004; DeCoster & George, 2005; Adolfsson et al., 2007; Boonyasopun et al., 2008; Faria et al., 2020). However, despite the theoretical benefits of empowering older adults on their physical activity behaviours, only a handful of studies have shown effectiveness in the long term on physical activity maintenance (e.g., Sak et al., 2017). In this section, critical evaluation of empowerment interventions for improving physical activity, psychological and social outcomes are discussed (Katula et al., 2006; Chang & Fritschi, 2013; Park & Park, 2013; Schermuly & Graßman, 2015; Shin et al., 2016; Sak, et al., 2017; Houlihan et al., 2017).

Empowerment components

Studies have used self-efficacy, external feedback, motivation, autonomy, and social interactions, as a focus for their empowerment interventions (Katula et al., 2006; Chang & Fritschi, 2013; Schermuly & Graßman, 2015; Shin et al., 2016). For those focusing on enhancing self-efficacy (Katula et al., 2006; Chang & Fritschi, 2013; Schermuly & Graßman, 2015; Shin et al., 2016), the findings did show that it was directly improved, participants felt empowered, and they increased their physical activity levels. The focus on self-efficacy and autonomy as concepts of empowerment is supported by Conger and Kanungo's (1988) four core cognitions of empowerment.

Furthermore, using a clinical population sample, Pibernik-Okanovic et al. (2004) conducted a 6-week empowerment-based psychosocial intervention on adults with diabetes. Quality of life and glycaemic control was measured at baseline after 3- and 6-months, through weekly sessions of education on goal setting, problem solving, coping with diabetes, coping with daily stress, seeking social support, and staying motivated. Additionally, active learning was also adopted through exploration, reflection and sharing experiences with other participants. However, despite physical activity not being measured in this study, the findings showed increased self-efficacy and physical

competence which were positively associated with self-management behaviours and increased psychological wellbeing across older adults. It is possible for this intervention style of education and physical activity classes combining components of empowerment, to improve physical activity maintenance. Yet the link between this study and physical activity won't be investigated unless future research is completed.

Components of community empowerment

Additionally, there is support for community empowerment improving physical activity behaviours and increased perceived control, through encouragement of seeking social support (Ornelas, 1997; Faria et al., 2020). This supports previous findings of the importance of social networking and supports the core components of psychological and community empowerment (e.g., Ornelas, 1997; Adolfsson et al., 2007), and suggests interventions with a social element can be effective in supporting behaviour change and physical activity maintenance. Collective findings highlighted that because of developing increased perceived control in the intervention, older adults felt more confident to seek opportunities for future social networking, thus increasing self-awareness and contributing to self-management and sustainability of positive health behaviours.

Three studies also found a positive impact of encouraging social interaction on confidence and self-care behaviours (Katula et al., 2006; Shin et al., 2016; Houlihan et al., 2017). More specifically, during the COVID-19 pandemic, Faria et al.'s (2020) study, focusing their intervention on community level empowerment for the positive development of social interactions, found participants placed great importance on their community and the opportunities created for social interaction, especially when involving physical activity in a group-setting, as it facilitated growth of social relationships and physical literacy. Additionally, findings also showed that empowerment was present at both the individual and community level and was particularly evident when individuals participated in physical activity with others in their community; this was suggested to increase personal control for the individuals (Faria et al., 2020). Therefore, social engagement and active participation in a group setting may be helpful in the development of sustainable physical activity behaviours.

Critique

Evaluating the methodologies used, most studies were completely quantitative or cross-sectional, meaning that psychological empowerment may not have been fully developed or highlighted in the data, due to being a complex process (Park & Park, 2013; Schermuly & Graßman, 2015; Sak et al., 2017; Houlihan et al., 2017). A gap in psychological empowerment

literature is the lack of longitudinal studies for monitoring psychological empowerment over time (as it is a process). Even though all seven studies being quantitative and cross-sectional, one of the studies included a 12-month follow-up interval (Shin et al., 2016) to measure change from baseline empowerment levels over the course of the intervention, and if it affected sustainability of physical activity or behaviour maintenance. Without a follow-period or a longitudinal aspect to measuring and investigating empowerment, it is difficult to understand and thus support theoretical underpinnings which suggest empowerment enhances sustainable behaviour over a long-term period.

One study in this section conducted a follow up investigation of their original intervention (Adolfsson et al., 2007), meaning limited findings from other studies which account for longer-term sustainable behaviour over time, as they did not conduct follow-ups. However, the findings from Adolfsson et al. (2007) study showed that even after a year, the empowerment intervention had a positive impact on mastery, perceived control, and decision-making, because of the goal setting techniques used in the intervention (Adolfsson et al., 2007). Presenting further support for the positive impact of goal setting on empowerment, DeCoster and George (2005) found a positive impact on sustainability of self-efficacy and self-management behaviours with the use of regular goal setting, monitoring progress and group discussion. This indicates an effective link between group settings and continuous feedback with planning, for older individuals subsequently able to regularly engage in positive health behaviours over time. However, without longer-term follow-up, it is not known if this resulted in sustainable behaviour post-termination of the study.

The ages of samples used in studies focusing on older adults ranged from 55 years onwards, which is consistent with the WHO and other definitions of an older adult which start at age 50-60. Means there is research for a wide range of older adults. (Chang & Fritschi, 2013; Schermuly & Graßman, 2015; Shin et al., 2016; Sak et al., 2017). One study did not focus explicitly on older adults, but instead included participants aged 18 and over (Houlihan et al., 2017). The findings from this study are limited in terms of generalising to older adults, as age differences in the findings may be difficult to identify, but the findings of any empowerment interventions are still useful to consider.

Social identity interventions

There are a lack of studies using social identity theory to enhance community engagement and improve physical activity engagement in different populations. The google scholar and PubMed search only highlighted 2 studies that investigated physical activity behaviour based on an identity

theoretical understanding, and only 1 study using social identity theory in a physical activity context (Whaley & Ebbeck, 2002; Strachan et al., 2010; Stevens et al., 2017).

Stevens et al. (2017) conducted a systematic review of all previous studies using social identity theory in a physical activity context (Tajfel & Turner, 1979; Hogg & Abrams, 1988). Findings showed social factors to have a significant impact on physical activity behaviours of all adults, not specific to older adults. Social identity literature frequently highlights psychological processes and behavioural consequences being heavily structured by group memberships, internalised through self-categorisation, social comparison, and social identification (Hogg & Abrams, 1988; Tajfel & Turner, 1979). Therefore, as physical activity is often done within group settings, there is support that people feel more inclined to exercise with others who share a membership of a particular social category (Stevens et al., 2017). Additionally, age and sex appear to be common elements of shared social identity in exercise settings, especially when building on and communicating shared experiences (Strachan et al., 2017). Findings from Strachan et al.'s (2017) study also suggested that people who perceived to be a similar fitness level to others in the same exercise group setting, showed greater adherence to exercise programmes. Additionally, within a community, in-groups often include sub-groups within this larger group setting, such as a group of like-minded individuals within a larger exercise class. Again, findings showed that when given an opportunity to exercise with other in-group members, this was an important determinant of continued engagement in exercise, thus is a contributing factor to sustainable positive health behaviours (Strachan et al., 2017). This suggests that a strong social identity is likely to positively contribute to the effectiveness of group-based programmes in exercise settings.

Whaley and Ebbeck (2002) conducted a qualitative study using exercise identity as the underpinning theoretical framework, where 13 active older adults aged 66-90 in a retirement home, were interviewed based on participation in an exercise protocol attending to the government physical activity recommendations. Participants previously exercised regularly throughout their lifespan, regularly participating in social exercise and physical activity within their surrounding community. Although findings were not specifically related to social identity theory, previous research into exercise identity suggested active individuals are likely to internalise an exercise schema, a core component of a strong exercise identity, which is associated with behaviours that positively promote physical activity (Berry et al., 2014). The findings showed that participants didn't have any fears about joining the class themselves, with the majority explaining that being *made* to exercise made it less enjoyable than the feeling of *wanting* to take part in sessions themselves (Whaley & Ebbeck, 2002). This suggests that feeling inherent enjoyment and intrinsic

motivation to take part in social exercise means an individual is more likely to take part in physical activity regularly, therefore possessing an exercise schema.

However, a methodological limitation of the study relates to the sample characteristics, as there were only two males and findings only relate to those who are habitually active and possess an exercise schema. A lack of male engagement could suggest they are either less habitually active and therefore not eligible to take part in the study, or they were not reached as well as females to participate in the study. Future research should investigate exercise schemas and physical activity behaviours in older adults appear to have a more sedentary lifestyle or habits.

Another study using physical activity identity (rather than social identity), Strachan et al. (2010) conducted a quantitative examination of associations between physical activity identity and self-efficacy. The sample involved 84 moderately active older adults aged 58-95 in North America, with 87% of the sample being female. The findings showed that older adults with a strong physical activity identity reported increased physical activity levels, stronger self-efficacy, and stronger internal desire to stay physically active compared to those with a weaker identity (Strachan et al., 2010). However, the cross-sectional approach used to measure identity does not account for the dynamic nature of social identity. Both Whaley and Ebbeck (2002) and Strachan et al. (2010) use a sample of US older adults, which suggests a rationale for using participants from different countries in future studies to further investigate social identity and physical activity behaviours. The reason for highlighting differences between a US sample compared to other populations is that there may be cultural bias in how the US view physical activity compared to the UK, for example. Previous statistics highlighted that only 13% of US medical schools include physical activity in their curriculum (Garry et al., 2002), whereas it was identified that 56% of medical schools in the UK teach the appropriate guidance for physical activity in medical schools to undergraduates. Despite a higher percentage of physical activity provision for future health care professionals, it shows a major inconsistency between undergraduate medical education, and the evidence-based clinical guidelines around the importance of physical activity in the treatment and management of chronic conditions (Weiler et al., 2012). To add to this inconsistency, it was found that approximately 54% of patients in the UK reported not being provided any advice on diet and exercise by their health professionals (Shelton, 2008).

Culturally based critique of studies in this section

Most of the studies reviewed in this chapter were not based on a UK population sample. Countries include Portugal, Croatia, Sweden, Denmark, US, Japan, and Korea (Ornelas, 1997; Pibernik-Okanovic et al., 2004; DeCoster & George, 2005; Adolfsson et al., 2007). It might be that

these findings are generalisable to a UK sample. For example, some studies support the notion that attitudes towards aging are more positive in Asian culture, compared to Western cultures (e.g., Levy & Langer, 1994, as cited in Löckenhoff et al., 2009), whereas other studies report negative aging associations in western cultures (e.g., Giles et al., 2000, as cited in Löckenhoff et al., 2009). However, other research has found no cultural differences at all in perceptions of aging (e.g., Boduroglu et al., 2006, as cited in Löckenhoff et al., 2009). As the perception of active aging is likely to influence views of physical activity importance, if western countries are likely to view aging as having a negative impact on cognitive and physical functioning, older adults could be less likely to want to engage in behaviours and activity for health promotion, if they perceive a large inevitable decline. However, since the literature does not present a clear argument regarding cultural differences or biases towards aging and being active, it is not certain whether a UK sample of older adults can be considered like those in other eastern and western countries. This does however provide a rationale for expanding the research to the UK, so that any potential differences in cultures and communities can be investigated, particularly in relation to community engagement and physical activity as an older adult.

Limitations of not reviewing all literature

A limitation of this literature review is the potential for an incomprehensive review of all possible relevant papers. This could lead to a potential bias towards overall research findings and conclusions from the data, which ultimately forms the rationale for this study. However, the inability to discover and analyse an exhaustive list of every relevant research paper relating to community engagement, older adults, empowerment, and social identity, is due to the sheer volume of literature relating to these areas, as well as time constraints for the study completion. Nevertheless, the material gathered for this chapter includes all relevant papers available to the author at the time of the study.

Research Aims and Objectives

This research project aimed to use qualitative methods to explore and understand how different levels of engagement in Super Agers community physical activity sessions influenced empowerment, social identity development, and maintenance of physical activity during the COVID-19 pandemic.

The objectives necessary to achieve the overall aims were to:

- use qualitative methods to highlight the unique features of empowerment and social identity, and individual experiences between those engaged, and not engaged in Super Agers activities.

- explore how features of social identity and empowerment of older adults are linked with community involvement, specifically in a Welsh population of older adults, and how this compares to other cultures and geographic locations.

- examine how COVID-19 and its restrictions have impacted on sustainability of physical activity, mobilisation, empowerment level, perception of social identity and the community's social dynamics.

Methods

Philosophical and methodological approach

The current study adopts a qualitative descriptive approach, explained by Sandelowski, (2000; 2010), drawing on some key principles from a social constructivist philosophy (Vygotsky, 1978; 1986).

Philosophical approach: Social Constructivism

This research is positioned philosophically under social constructivism, which simply put, is where individuals believe knowledge and reality to be constructed within individuals (Sommers-Flanagan, J, & Sommers-Flanagan, R, 2018). However, a similar, yet strikingly different, philosophical approach frequently likened to social constructivism is that of social *constructionism.* Social constructionism is different in its premise that the objects, knowledge and remains are created through social interactions of a group, where knowledge and reality are constructed through conversation and discourse over time (Sommers-Flanagan, J, & Sommers-Flanagan, R, 2018). A direct quote from Guterman (2006, p. 13) describes these two perspectives, highlighting their similarities and differences as philosophical constructs:

"Although both constructivism and social constructionism endorse a subjective view of knowledge, the former emphasizes individuals' biological and cognitive processes, whereas the latter places knowledge in the domain of social interchange".

Social constructivists focus on what is happening within the minds of individuals, rather than constructionists who focus on the things that are created because of people interacting, which creates their realities. Therefore, with the positionality of the researcher in social constructivism, this influenced the direction of the current study by the way empowerment and social identity would be looked at through a social lens, yet from the voices of individuals whose similar experiences are still unique due to different cognitive, interactional, and behavioural outcomes.

The aim of a social constructivist philosophy requires researchers to actively interact with participants in a dynamic, collaborative dialogical way, which leads to the co-construction of meaning (Kim, 2014). This relates to the rapport built between researcher and each older adult during interviews, where participants discuss their experiences of physical activity. This discussion from the participant is then analysed to be explained theoretically, through an empowerment and identity lens. The collaborative element also relates to the participants' social environment within

their Super Agers classes and how this has impacted their knowledge or reality creation. One assumption of social constructivism includes the construction of a particular reality through social invention from human activity (Kim, 2001). The 'reality' relating to the current study is those who either experience being engaged in Super Agers activities or not, meaning the study will attempt to understand and explain each of their views on physical activity and social exercise. Another assumption suggests that knowledge is a product of social and cultural construction, creating meanings through individuals' interactions with each other and the physical or social environment (Kim, 2001). Thus, social constructivism influenced the current study because 'community dynamics' are a result of social and cultural constructs; the study is reviewing participants' experience of their community dynamics and how the physical and social environment of social physical activity impacts on their empowerment and view of social identity. Thirdly, the idea of learning is meaningful and a social process, occurring only when individuals are engaged in social activities (McMahon, 1997), which is the whole focus of the study and is therefore one of the main influencing factors for the direction of the study. Additionally, some individuals learnt about Super Agers and increased self-awareness of daily activity through the regular phone calls with the researcher over the length of the study.

Social constructivism drives the current study as the philosophy due to the main aim of carrying out a collaborative process between participant and researcher, fundamental for encouraging participants to talk so in-depth and vulnerably about their physical activity experiences and engagement in Super Agers activities within the community. The collaborative nature of the research process became a focus over time due to the pandemic, a need for regular assistance via telephone for participants who needed guidance, as well as an exchange of knowledge between researcher and participant in learning about the Super Agers Project and support provided to older adults. Additionally, with the COVID-19 pandemic increasing reliance on remote research procedures, it heightened the importance of using a collaborative approach; there was a lack of face-to-face situations when personal and potentially vulnerable questions were asked of participants. Vygotsky's (1978; 1986, as cited in Amineh & Asl, 2015) view of social constructivism highlights that learning amongst others precedes growth and development, which resonates with the study's focus on group physical activity and the development of empowerment through learning new skills and making shared decisions about increased physical activity. A more knowledgeable individual, such as an exercise instructor or the participants themselves who have had prior learning experiences, can support learning until the older adult feels independent enough to appraise a situation and use problem-solving skills, thus increasing their knowledge (Kim, 2001). Gaining a picture of an individual's engagement in physical activity as part of their daily routines was important to identify the reasons for further engagement in community involvement. It is

important to build a rapport with participants and collect information-rich data around the lived impact of the Super Agers project on older adults. Previous research in community psychology and social science disciplines for health promotion have adopted social constructivism in that their studies, as the assumptions of learning as social process relates to engagement with health professionals and learning exercises in a group setting (Labonte & Robertson, 1996). A qualitative research design underpinned by social constructivist values may highlight the variety of behavioural outcomes and views of health because of social-environmental interactions. Additionally, individual differences and homogeneity of communities in their views and behaviours relating to physical activity and community engagement, aligns with the assumption of human activity and social interaction creating a specific reality, which may not be experienced in the same way in another community (Lincoln & Guba, 1985; 1986).

Methodology: Qualitative Description

Delivering a project based on qualitative description means the study focuses on providing a description and explanation of each participant's experience of their engagement (or lack of) in physical activity and group exercise. Its main principle, relating to the current study, is enabling a detailed understanding, and rewriting participants' experiences using relevant theoretical frameworks. In-depth, comprehensive description of the barriers, facilitators and influencing factors towards initiation and maintenance of physical activity in a group setting (Sandelowski, 2000). Therefore, it is imperative that the current study focuses on capturing a descriptive account of the participants' experience, knowing that the description is co-created between the participant and researcher, but as close to the participant's reality as possible (raw data from the participant being collated and developed into themes by the researcher). Additionally, Sandelowski (2000) highlighted that as part of this collaborative process, researchers must stay as close to the data and the surface of the responses of participants, whilst also having some opportunity to interpret emotions of participants are shown throughout the research process. However, this interpretation is used to describe and capture the elements of the event being researched. Therefore, this allows for a coherent description of participants' physical activity experiences and the impact on empowerment and social identity of being part of the Bridgend community activities (Maxwell, 1992).

Open-ended forms of data collection and purposeful sampling with variation in the population being researched are the main methodological variables for qualitative description (Sandelowski, 2010), such as the use of semi-structured interviews and thematic analysis (both inductively and deductively). It allows the researcher to have an active role in knowledge production (Braun &

Clarke, 2019) through reflections and interpretation, whilst further discussing with participants to stay close to the event and the data.

Therefore, with the underpinning of social constructivism and a methodology based on qualitative description, the research process uses qualitative methods with textual data to aim to understand the lived experiences of older adults and their engagement in Super Agers activities, compared to those who do not participate in community physical activity (Charmaz, 2004). Based on the desire to explore the meanings that these individuals attach to their experiences, this qualitative research embodies the preference to collaborate with older adults in their 'natural' settings or environments (Sparkes & Smith, 2013). Additionally, qualitative description aligns with the aim of the study through this idea of nuances and individual differences between participants, wanting to hear the older person's voice as it is often lost in research; qualitative description is based on remaining as close to the raw data as possible.

Procedure

Participant recruitment and selection

   Sample selection. Patton (2002, as cited in Pistrui et al., 2008) suggested that qualitative inquiry is focused on in-depth relatively small samples, selected *purposefully*. More specifically, criterion-based sampling, under the umbrella of purposive sampling, was used. The researcher predetermined a set of inclusion criteria for selecting participants (Appendix 1). Despite the discourse in research around the appropriate age ranges for older adults (e.g., Nithyashri & Kulanthaivel, 2012), participants were recruited purposefully from Cwm Taf Morgannwg in Bridgend, Wales, UK, specifically focusing on older adults eligible for participation in the Super Agers Project within Bridgend. This was older adults aged 50 and over. This type of sampling was employed in the recruitment process to gain information-rich participants for an insightful qualitative understanding of the research question and aims. The author was able to learn a great deal about the perspectives of the individuals who the activities impact and influence (Patton, 2002).

   Participants and recruitment. Upon ethical approval, granted from Swansea University College of Engineering Research Committee (Appendix 1), the recruitment process involved two phases: recruitment of older adults participating in Super Agers activities, and then of older adults

not participating in Super Agers activities. The Super Agers Project Lead acted as a gatekeeper for the primary researcher to recruit suitable participants.

Recruitment phase 1. Recruitment of participants engaged in Super Agers and community physical activity sessions. The Super Agers Project Lead identified initial interest for participation, from the older adults attending Super Agers activities in-person or part of the 12-week phone support programme for vulnerable or isolating individuals due to COVID-19. An initial and brief explanation of the study was relayed to all potential participants. Individuals who continued to show interest in the study and met the inclusion criteria were provided with 1) a participant information sheet (Appendix 2), 2) a consent form (Appendix 3) and 3) an opportunity to ask further questions with the primary researcher. Eight volunteers were recruited from phase 1, and their personal characteristics can be found in Table 6).

Table. 6

Key characteristics of phase 1 (engaged group) participants

URN	Gender	Age	Demographic	Habitual activity level	Health Status	Occupation	Living circumstances	Participation in Super Agers (Length of time)
#1	Female	75	Bridgend	Super Agers activities and walking	Healthy	retired	With husband	Since opening (2019) • Walking • Tai Chi • 'Keep fit'
#2	Female	75	Bridgend	Super Agers activities and walking	Broken ankle (otherwise healthy)	retired	With husband	Since opening (2019) • Walking • Tai Chi • 'Keep Fit'
#3	Male	69	Bridgend	Super Agers activities and walking	Recovering from COVID-19	retired	Clinically vulnerable	Since opening (2019) • Tai Chi
#4	Male	75	Bridgend	Super Agers activities and walking	Recovering from COVID-19	retired	Clinically vulnerable	Since late 2019 • 'Keep Fit'

#5	Female	70	Bridgend	Only super Agers activities	Cardiac health problems	retired	Clinically vulnerable	Since opening (2019) • Tai Chi
#6	Male	54	Bridgend	Super Agers activities and walking	Healthy	Full-time carer for parent	Socially isolated	Late 2019 • Tai Chi
#7	Female	75	Porthcawl	Only Super Agers activities	Overweight (BMI >30)		Vulnerable	Late 2019 • Tai Chi • Walking group leader
#8	Male	74	Bridgend	Super Agers activities and walking	Healthy	Retired but still part-time community committee	Lives alone	Late 2019 • Tai Chi

Recruitment phase 2. Recruitment of older adults not engaged in Super Agers or community physical activity sessions. The Super Agers Project Lead contacted (1) Care and Repair services and (2) the falls prevention group connected with Bridgend County Borough Council. These services provide physical activities and physical support for frailer older adults in the community, considered 'hard to reach' or socially isolated. The contact details of those who showed interest were forwarded to the Super Agers Project Lead and the primary researcher. The inclusion criteria for older adults not engaged in Super Agers activities were those eligible for being a Super Agers member, living in Cwm Taf Morgannwg in Bridgend, aged 50 and over, and not taking part in Super Agers activities. Adding to the eight volunteers recruited from phase 1, a further 6 volunteers were recruited from phase 2. Three female participants dropped out before starting the study, due to being hospitalised because of contracting COVID-19.

The final sample included 14 older adults aged 54-80 years from Cwm Taf Morgannwg in Bridgend in South Wales. 8 of these older adults were engaged with the Super Agers project activities (4 Female and 4 Male, $M_{age}= 67 \pm 7.9$ years, see Table 6). The remaining 6 older adults were not already engaged in Super Agers activities (4 Female and 2 Male, $M_{age}= 64.4$ years ± 9.1 years, see Table 7) were recruited to take part in the study.

Table. 7

Key characteristics of Phase 2 (not-engaged group) participants.

URN	Gender	Age	Demographic	Activity level	Health Status	Occupation	Living circumstances	Physical activity type
#9	Female	75	Porthcawl	Very active	Healthy	Retired	Lives alone	Daily walk 5-10km
#10	Female	70	Bridgend	Moderately active	Healthy	Falls Co-ordinator (BCC)	Lives with husband	Renovating campervan
#11	Female	80	Porthcawl	Lightly active	Visually impaired	Retired	Socially isolated	Supervised walk with family/friend
#12	Male	64	Bridgend	Active	Previous Bowel cancer treatment	Ford parts distributor	Lives with daughter and grandchildren	Daily 10-12km walk Still works
#13	Female	60	Bridgend	Active	Healthy	Volunteer committee village hall	Lives with Husband	Daily dog walk 5-10km
#14	Male	72	Bridgend	Active	Healthy	Volunteer committee village hall	Lives with wife	Daily dog walk 5-10km

Data Collection

Three methods of data collection in this study included open-ended narrative diary entries with a time geographic diary table, a semi-structured interview and two focus groups: one for each phase of participants. All data were collected remotely and in strict accordance with participants' preferences and COVID-19 guidelines.

Procedure 1. Diary entries

Diary entries were originally designed to be completed within a defined 4-week period, where participants complete 3 entries per week. However, due to changing restrictions on physical activity and group physical activity, entries were completed as and when participants carried out physical activity, either individually or in a community setting.

4-week diary entries for not-engaged participants were carried out in January 2021 (n=6). Since participants not-engaged in Super Agers activities did not need to adhere to group exercise COVID-19 guidelines, data collection was able to commence as and when individual physical activity circumstances allowed.

Data collection was postponed for the engaged group in anticipation of the government lifting lockdown restrictions which would have enabled engagement in community-based activities in-person. Therefore, diaries for engaged participants took place in March 2021 (n=8), due to group physical activity restarting in a limited capacity in an in-person setting, or remotely via Zoom.

The diary discussion guide was either sent to the participants in Word document format via email, or through the post as a hardcopy. A researcher-client relationship was built between six 'engaged' participants and two 'not-engaged' participants, as diaries and interviews were completed through weekly phone calls due to participants requiring assistance with the completion of diaries remotely and at their own accord. For example, one of the two 'not-engaged' participants was visually impaired, so it was more convenient for the researcher to relay the diary questions to the participant over the telephone so that the response was recorded and later transcribed verbatim, relating to each diary question. To minimise researcher bias, the researcher did not expand on any of the diary questions.

Diary entry structure

For each entry per week, the entry involved two tasks. The first task presented a Time Geographic table asking participants to list and provide a brief explanation of the tasks they carried out throughout that day (Appendices 4a and 4b). Based on Ellegard and Nordell's (1997) time geographic diary, this can be an important tool for studying activities of daily living as it helps to bring focus on how days are shaped by people's decisions, thus how they are influenced by individual differences and experiences. Whilst primarily a data gathering method, it also helped to address a secondary aim of potentially increasing the participants' self-awareness, helping them to realise what they decide to do each day and how it impacts their lives and health (Bredland et al., 2018).

The second task included open-ended questions, developed from validated questionnaires and scales relating to physical activity, empowerment, and social identity (Appendices 4a and 4b). For example: "If you took part in a community activity today, how did it make you feel? Briefly explain why".

Participants were made aware that they could expand their answer beyond the questions provided, should they have wished to. Phase 1 participants, those engaged in regular community physical activity sessions, were provided with prospective and reflective questions relating to their day and experience when participating in the community sessions (five in total). Phase 2 participants were provided with prospective and reflective questions relating to their experiences throughout the week, as they were not engaged with community physical activity sessions (Appendices 4a and 4b).

Strengths of using diaries in this study. The strengths of using diaries for this study include participants having the freedom to expand on answers without certain time pressures that may be present in an interview setting (Bertaux, 1981 as cited in Cucu-Oancea, 2013). Additionally, the participants could either list bullet points or write out as fully as possible, with the option to return to the specific entries and add to their response if they wished. Importantly, the diary entries occur at, or very close to, the time the activity or experience occurred (Cucu-Oancea, 2013).

Limitations of diaries in this study. Limitations include how structured the documents were, which affects the length of processing and analysis at a later stage (Cucu-Oancea, 2013). Additionally, as most questions were geared towards community engagement, there were weeks of data that could have been missing due to being in lockdown with no activities, prior to the development of online sessions. Despite the lack of data for a length of time, it did highlight a dynamic change in mood, where after periods of no Super Agers sessions, participants were finally able to see their peers by using live streaming services such as Zoom.

At the commencement of the study, as participants were not able to meet with the researcher, the thought of having to write about their feelings and views relating to physical activity or health felt too invasive for some and resulted in a few participants dropping out.

Procedure 2. Semi-structured interviews

Both groups of participants were invited to take part in two individual semi-structured interviews via telephone call one week after all diaries were completed and sent back to the author. Interviews were conducted via telephone rather than a face-to-face method such as Zoom, as all participants in the study had access to either a landline or mobile device, meaning it was more convenient to collect data using a telephone. The interviews were recorded via a recording device and transcribed verbatim through an external transcription company. Consent was provided for the data

to be recorded. Each interview lasted approximately 1-hour, with room for discussion and expansion on questions where relevant or when questions resonated with the participants.

Individual semi-structured interviews were used to expand on the responses from each individual diary entry, with an interview schedule of questions to prompt participants if necessary (Appendices 5a and 5b). Questions stemmed from quantitative questionnaires and scales from empowerment and social identity literature (Zimmerman, 1995; Conger & Kanungo, 1988; Spreitzer, 1995; Nario-Redmond et al., 2004; Kasmel & Andersen, 2011). Examples of questions include: 'What is your view on Super Agers activities and the support you're given?', 'you mentioned that you feel valued in your classes. How is that so?', and 'How confident did you feel after being able to use zoom to see your peers?'.

Strengths of using Semi-structured interviews. A strength of using interviews is the individualised approach. The questions were determined based on participants' activity and responses throughout each week of the diary. This was to identify any daily patterns or routines in their physical activity, as well as sharing their experiences relating to community engagement and Super Agers classes (both engaged and non-engaged participants). Semi-structured interviews are widely considered an ideal method of data collection for gathering information about individuals' opinions on their own experiences and wider situations (Warren & Karner, 2005). Therefore, it is useful for increasing the depth and knowledge around empowerment and social identity in a Welsh community of older adults (Britten, 2000).

Limitations of using semi-structured interviews. Any limitations that could have arisen include the direction of the questions and responses away from original questions and research aim. However, while allowing the participant to discuss and bring up what they feel is pertinent or necessary, prompt questions and moving the participant on to another section of questions was followed.

Procedure 3. Focus groups

The last part of the data collection process included separate focus groups, which were conducted via Zoom. A set of discussion questions were introduced to participants during the focus group session, and participants were free to take this discussion in a direction that they felt was worth discussing (Appendices 6 and 7). Previous research using focus groups identified 3-5 participants to be positively encouraging for individuals to share experiences around being physically active in older age (Bredland et al., 2018). However, seven participants attended the

engaged focused group, and 2 attended their not-engaged focus group. Focus group discussions were recorded and transcribed verbatim.

Two of the five not engaged participants were not able to attend their focus group due to lack of access to the video conferencing software. It was impossible for in-person focus groups to go ahead due to the COVID-19 restrictions at the time of data collection.

Strengths of using focus group discussions via Zoom. The focus group was effective in being an enjoyable experience for the group of participants, especially as the lockdown meant face-to-face sessions were restricted. The discussion was successfully stimulated by topic guides raised by the researcher as well as arguments posed by participants (Robinson, 2020). It was important for the researcher (acting as a moderator for the discussion) to allow all participants to have a chance to discuss their opinions, meaning all attending participants contributed to the discussions as fully as possible (Robinson, 2020).

Limitations of using focus group discussions via Zoom. An overwhelming limitation is that due to all date collection being conducted entirely remotely, not every participant was able to attend their allotted focus group, whether due to other priorities, or inability to access the call. This may highlight a concern that needs to be addressed around non-engagement for older adults on a wider scale, as they may not be engaged in group physical activity due to technological issues (Rahiem, 2020). Perhaps the study missed out on vital data from those harder to reach but highlighted that being unable to use technology or not having the appliances available to them is a barrier for engagement.

Measures

Questionnaires were used to inform all data collection methods in this study. The participants did not complete any of the measures in their original form. However, the original measures provided a suitable basis for developing open-ended questions for diaries and some questions as part of the interview schedule. The items from these questionnaires were rephrased to relate to Super Agers activities for 'engaged' participants, and general life experience for those 'not engaged'. The questions were also adapted to be completely understood by older adults (Zimmerman, 1995; Conger & Kanungo, 1988; Spreitzer, 1995; Nario-Redmond et al., 2004; Kasmel & Andersen, 2011).

Psychological empowerment. Psychological empowerment was explored using the 'Spreitzer Scale' (Spreitzer, 1995), with additional support from Zimmerman (1995) and Conger and Kanungo's (1988) theoretical underpinning of psychological empowerment. The scale is based on four subdimensions of empowerment: meaning, competence, self-determination, and impact. The original scale shows high validity and test-retest reliability (see Spreitzer, 1995; 1996; Spreitzer & Quinn, 2001). An example of how original statements from the Spreitzer scale (Spreitzer, 1995; 1996) framed a diary question in the current study is as followed: An original statement: 'I have control over what happens in my department' was adapted into an open-ended question, 'How in control did I feel when taking part in a Super Agers activity today?' (Appendices 4a and 4b).

Community empowerment. Community empowerment was explored using an adapted version of the Organisational Domains of community empowerment measure (ODCE; Kasmel & Andersen, 2011), supported by Laverack and Wallerstein (2001). Kasmel and Andersen (2011) provided 3 Organisational domains for the assessment of the extent of community empowerment, which include: building infrastructure to deliver health promotion programmes, building partnerships and organisational environments to ensure sustainable programmes, and building problem-solving capability. Laverack and Wallerstein (2001) identified nine additional domains: participation, leadership, problem assessment, organisational structures, resource mobilisation, links to others, asking why, program management and the role of outside agents. In terms of validity and reliability, no studies have supported this, however findings from the original study reviewing the conceptualisation of ODCE (Kasmel & Andersen, 2011), show how community variables are difficult to operationalise when trying to adapt it to different contexts and cultures. A statement taken from the original scale: 'There exists a group of community representatives that meet regularly to work on community goals and desired community outcomes' was used to frame an open-ended question for the current study: "Please circle the phrases which are of relevance to your day and discuss them briefly- a) 'The atmosphere of the class made by the instructor and your peers you experienced when taking part in a community activity today'.

Social identity. Social identity was explored using the framework of The Social and Personal Identities Scale (SIPI; Nario-Redmond et al., 2004) which aims to distinguish between the intrapersonal and interpersonal level of the self. The scale involves 16-items where the individual identifies each statement as directly important to who they are as an individual, or not at all important to who they perceive themselves to be. Validity and test-retest reliability has been demonstrated (Nario-Redmond et al., 2004), however, construct validity was difficult to analyse, as the importance of social identity and personal identity differed depending on demographics and age of the sample, i.e., individual differences (Nario-Redmond et al., 2004). A statement from the

original scale: 'My sense of belonging in a group' was adapted and framed discussion points allowing participants to briefly explain: 'My experience socialising with others today'.

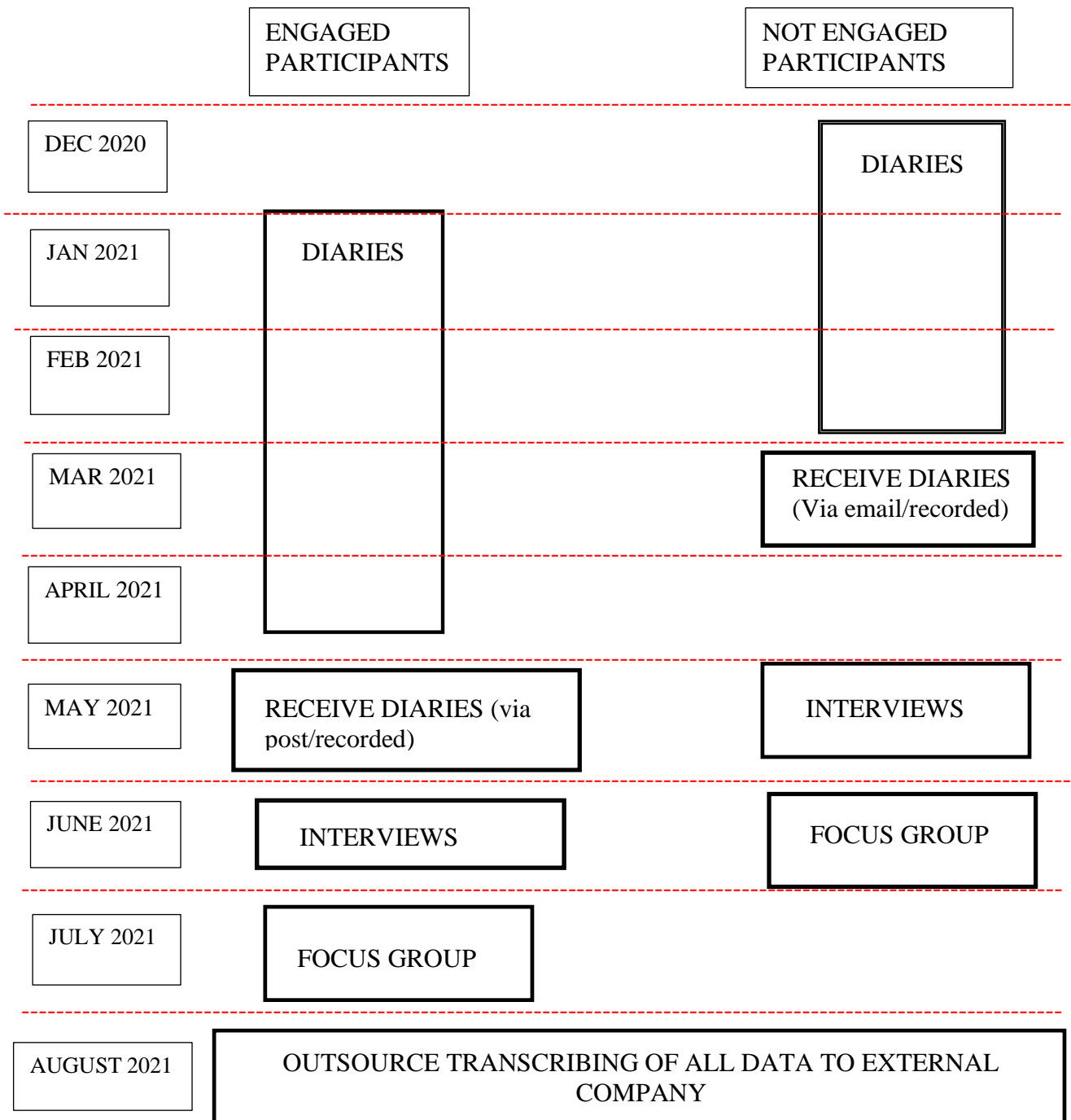|	ENGAGED PARTICIPANTS	NOT ENGAGED PARTICIPANTS
DEC 2020		DIARIES
JAN 2021	DIARIES	
FEB 2021		
MAR 2021		RECEIVE DIARIES (Via email/recorded)
APRIL 2021		
MAY 2021	RECEIVE DIARIES (via post/recorded)	INTERVIEWS
JUNE 2021	INTERVIEWS	FOCUS GROUP
JULY 2021	FOCUS GROUP	
AUGUST 2021	OUTSOURCE TRANSCRIBING OF ALL DATA TO EXTERNAL COMPANY	

Figure. 3

Visual flow chart of data collection timeline

Reflexive diary and influence on the research process/findings

A singular reflexive account was completed by the primary researcher to keep a log of personal thoughts and feelings mid-way through the data collection process, particularly as the study developed into a more collaborative approach between participant and researcher (see Appendix 9 for the full reflexive account). It was important that any thoughts and feelings which could lead to researcher bias were noted, particularly as relationships were built over time. The main thoughts brought to the researcher's attention throughout the research process were what older adults had to say about what 'Super Agers', 'empowerment', and 'COVID-19' meant to them. It was also apparent that the participants were likely to build a level of friendship with the researcher where they would ask personal questions in return. I felt that it was important to provide personal information where participants could relate to me, so that authenticity was increased, and a rapport was developed.

In qualitative research, particularly with semi-structured interviews and more personal forms of data collection, a rapport is likely to be built over time. The collaborative process in this study aided the generation of knowledge, meaning the researcher played a vital role in collecting authentic responses. As this relationship helped to facilitate the disclosure of emotions and feelings, the researcher may have had more of an impact on the data and analysis than intended. It is therefore important to acknowledge this throughout the length of the project, and to identify any changing or consistent thoughts or feelings relating to potential findings of the study (Finlay & Gough, 2003).

Figure 1 shows a depiction of Gibbs' (1988) Reflective cycle model which was used as a structure for the reflexive accounts captured by the primary researcher (Appendix 9). The framework helped to make sense of the situations encountered and acknowledge potential impacts of building a rapport with each participant, especially as there was no initial face-to-face contact due to the COVID-19 pandemic.
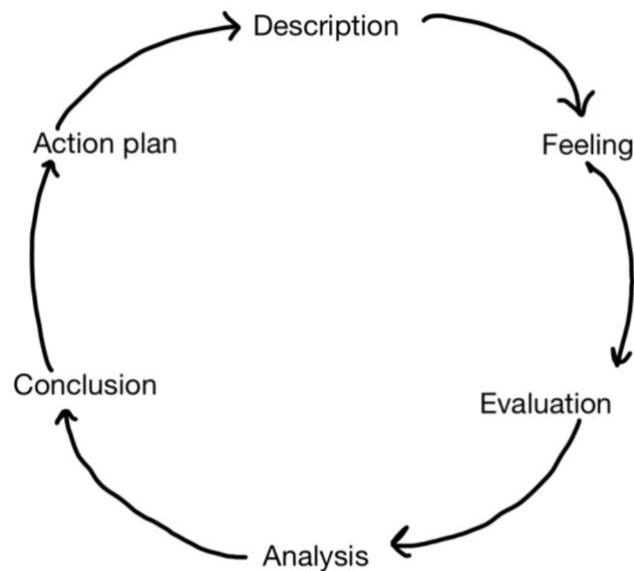
Figure. 4

Flow chart adapted from Gibbs' (1988) Reflective cycle

Positionality

The term positionality describes a person's world view and the position they adopt about a research project, and its associated social and political context (Foote & Bartell 2011, Savin-Baden & Major, 2013 and Rowe, 2014).

Naturally, it is important to start a research process by identifying any pre-conceptions I may have as a researcher. I am a 22-year-old, post-graduate sport and exercise science student with history in elite dance training, and an undergraduate degree in sport and exercise science. This means that I have had a very active childhood and with the knowledge and experience I have gained as a student immersed in sport and exercise-related research, I am certain I will continue placing great importance on being active, not just for health, but also for enjoyment.

When identifying in the literature that many older adults are considerably inactive as a general population, I thought it would be interesting to gain a better understanding of why this is the case, or if it is as widespread and homogeneous as statistics suggest. This is where the theoretical standpoint of social constructivism and qualitative description forms a basis for the research project. This idea of knowledge being socially constructed and learned through education from more experienced individuals, is suitable for the context of the study which aims to provide older adults a voice in explaining their experience with physical activity and community engagement (Sikes, 2004, Bahari, 2010, Scotland, 2012, Ormston, et al. 2014, Marsh, et al., 2018, Grix, 2019).

Locating myself as the researcher within the research participants, all participants are older adults, so I do not relate to them in terms of age. Additionally, I am from south-east England, meaning I have little connection to South Wales, apart from studying there, full time, for four years. The only way I would relate to these individuals is to the participants' grandchildren. However, as I also have grandparents and parents of my own who are aged over 50, the research I have reviewed in terms of effectiveness of physical activity interventions, and motivations for exercise, I can relate this information to their own activity levels, which has formed my own thoughts about older adults and their views of physical activity, prior to this study. My mother is regularly active, but was less so as a child, whereas my father was born and grew up in Malta, so was exposed to an island setting, including regular activities such as swimming, fishing, and being active in extremely hot weather. As an older adult however, my father suffers with Type 2 diabetes and a lack of motivation for exercise outside of benefitting his chronic illness. Therefore, I am extremely open-minded and have already realised the diversity in older adults' physical activity experiences, which means I bring to the study much less bias than if I was surrounded by either extremely active individuals or just those who are extremely inactive.

Locating myself as the researcher within the research context and process, the main biases I bring would be my lack of experience in dealing with older adults in an interview and focus group setting. This meant that the language I used for my procedures was adjusted and piloted with relatives so that it wasn't too complex or theoretical. Additionally, with no prior experience of working with a company partner, it was challenging to match their desires for the project as well as the need within the academic literature. To overcome this challenge, it was imperative for regular meetings to take place to discuss each process of the study. Focus was directed to the data collection methods and their potential findings being geared towards the company partner's needs for this research, as well as the findings that arose from the literature review. This shaped the outcome of the project through its initial objectives and aims to have the ability to be academic, having a theoretical foundation where previous research has recommended further research (a basis of psychological empowerment and social identity literature), as well as meeting the needs and questions of these company partners (such as the understanding of reasons for engagement or lack of, and the impact on empowerment and social identity).

Data analysis

Data was analysed using reflexive thematic analysis to a latent level (Braun et al., 2016; Braun & Clarke, 2019; 2020; 2021), involving critically identifying, reviewing, and analysing patterns in the data and understanding their meanings for the participants. The choice of thematic analysis in this current study supports the methodology of qualitative description, as well as the

epistemology of social constructivism, providing rich and purposeful information for future practical recommendations for Bridgend Council, by understanding the participants' experiences, behaviours, and perspectives, which are impacted by the Super Agers project (Braun & Clarke, 2019). The data was analysed deductively, where the researcher actively searched for patterns and themes relating to the theoretical underpinnings of psychological and community empowerment (Zimmerman, 1995; Conger & Kanungo, 1988; Torre, 1986), and social identity (Stets & Burke, 2000), as well as any other information participants felt was important. For example, groups of raw data with labels of "feeling valued by other Super Agers members", which falls into the social identity category were identified. It was also important to make a note of which participant was connected to each phrase, and if they were engaged in Super Agers activities or not, so that comparisons could be made in terms of identifying if empowerment or social identity was observed in either group of participants.

The decision to use deductive analysis was made as it most impactfully answered the research question around whether, or how, engagement in community physical activity such as Super Agers, impacted different features of empowerment and social identity levels, and if a comparison could be seen with those who weren't engaged in community physical activity but still carried out physical activity individually. Any patterns that may emerge from the data could also point out individual differences relating to empowerment, preferences for engagement in activity, and individual barriers these individuals may have experienced.

However, inductive analysis was also used in the later stages of the analysis. As in Galli and Vealey (2008), the analysis process began by using deductive reasoning to identify and generate raw data themes accounted for by previous research on empowerment and social identity. But the work became more inductive at the point of searching for relationships and processes which were not necessarily accounted for in the original theoretical frameworks, but that emerged from the interviews and focus group discussion with older adults.

Six phases of thematic analysis. Six phases of thematic analysis were followed for data coding and development of themes (Braun & Clarke, 2010; 2019; Hill et al., 2021), where deductive elements of the analysis specifically involved actively searching for key features of empowerment, social identity, and community engagement. The first phase of analysis involved familiarisation of the raw data by reading the raw transcripts from all diaries, interview and focus group transcripts. The familiarisation of transcripts was carried out on a case-by-case basis, where each participant's transcripts from diary, interview, and focus group was read through.

The second stage involved data coding. The primary researcher highlighted relevant data (quotes, key words) that related to the research aims (i.e., factors perceived by the participants to affect their empowerment, social identity, community engagement and physical activity) (Hill et al., 2021), and typically if they answered questions or concerns from the literature review, or relating to empowerment and information they provide on the social or physical environment, whether their home setting or relating to Super Agers activities, at the time of the study. The highlighting of initial raw quotes or key words was completed on a case-by-case basis.

The third stage involved assigning each relevant quote with a label that described their content more theoretically or with the researcher's own interpretation of the raw data (Braun & Clarke, 2010; 2019) (see Appendix 8 for an example of a highlighted and labelled transcript). Once labels were attached to the quotes, the labels were inputted, alongside a referencing system, into tables on a Word document so that they could be manually rather than digitally handled (example: participant 1, male quote 1, from diary = P1Q1D. Quotes from engaged participants were colour coded in purple, and non-engaged participants in blue font; See Appendix 10 for an example of labelled raw quotes alongside the referencing system).

The fourth stage involved printing the tables and manually grouping labels to gain a visual idea of initial codes. Following this, sub-themes were developed by clustering similar initial codes together, providing a descriptive summary of how these codes combined to identify overarching patterns within the data. These overarching patterns were provided with a detailed descriptive account of each theme and relevant sub-themes were named (for example, lack of awareness of Super Agers, Increased self-esteem from Super Agers, socialising separate from physical activity, volunteering, and responsibility opportunities). Next, a revision phase was used to ensure the themes and codes represented the data and addressed the research question. Then, deductively, the themes were organised in a hierarchical manner (i.e., themes and sub-themes), and thematic mind maps were created to assist in categorising themes appropriately, discarding any irrelevant themes. Use of the theoretical frameworks of empowerment theory, community empowerment and social identity theory, informed deductive analysis, provided a structure for grouping sub-themes into higher order themes. Sub-themes were placed under higher order themes manually, in terms of factors contributing to a positive impact on empowerment, social identity and physical activity, or factors contributing to a negative impact on empowerment, social identity and physical activity.

Rigor in qualitative research (Quality and trustworthiness)

What is rigor and why is it important?

Rigor is the way research can demonstrate integrity and competence (Aroni et al., 1999), to be called a legitimate research process. Without rigor, particularly for qualitative methods, there is a danger that research may be seen as fictional and without consideration for ethics or future replicability (Morse et al. 2002). However, researchers including Denzin and Lincoln (2000a) and Arminio and Hultgren (2002) have challenged the concept of rigor, arguing that it is an empirical analytical term and may not have a place in an interpretive approach. Instead, quality in qualitative research has taken over previous research, such as Lincoln and Guba's (1985) trustworthiness criteria, which have now been disregarded due to large criticism over its relativity to quantitative measures of rigor (Guba & Lincoln, 1994).

Researchers such as Lincoln et al. (2011) still stress the importance of being rigorous in the data analysis process but assessing quality of a qualitative research process instead can still be made to assure high accuracy and robustness (Meyrick, 2006). For this instance, Kitto et al. (2008) characterised six criteria for assessing overall quality of qualitative research and these are clarification and justification, procedural accuracy, sample representativeness, interpretative accuracy, reflexive and evaluative rigor, and transferability/generalisability. Additionally, Smith and Caddick (2012) refer to an alternative relativist approach to rigor criteria. The criteria include substantive contribution, impact, width, coherence, catalytic and tactical authenticity, Personal narrative, and storytelling as an obligation to critique, resonance, credibility, transparency. The relevant criteria will be discussed in the context of the current study, with elements of Kitto et al. (2008) and Smith and Caddick (2012) criteria overlapping where similar.

Steps taken to make the study qualitatively rigorous

Clarification and justification (Kitto et al., 2008). Clarification is important in a qualitative setting as it means making sure the research question reflects the aims and methods of the study, as well as appropriate evaluation and interpretation of the results (Kitto et al., 2008). Justification is the rationale for the research design and qualitative approach chosen for the study.

The research aims aligned with social constructivism, qualitative description and reflected the overall question by breaking down features of empowerment and social identity and using qualitative approaches to understand older adults' perspectives over a period of weeks and months. The research process and philosophical underpinning is justified in the previous section. Therefore,

the current study has successfully clarified and justified the means for carrying out a qualitative study using diaries, interviews and focus groups. Additionally, qualitative research relies on extensive interaction with the people being studied, which the study did through its longitudinal diary process and follow up interviews.

Substantive contribution (Smith & Caddick, 2012). This research study contributes to an understanding of the social environment and the features that comprise this, in the Welsh older adult participants. The findings of the study contribute to a wider population of active older adults and highlight the benefits of being engaged in group activity on empowerment and social identity development.

Procedural rigor (Kitto et al., 2008). This refers to the "explicitness" of the description of the way the research was conducted. It allows the researcher to ask questions like 'Have the techniques of data collection been clearly documented?', and 'are the forms of data analysis completely transparent?' (Kitto et al., 2008). This criterion is like **credibility** (Smith & Caddick, 2012), which questions the amount of time the researcher has spent with participants. This chapter clearly highlights how participants were accessed and recruited, and how the nature of the study involved the development of a rapport and trust between researcher and participant. Furthermore, a clear schematic highlighting the data collection procedure, as well as an explanation of the six-phase thematic analysis process is provided in this chapter. The study also shows procedural rigor in the clear use of prolonged engagement with participants, as well as the use of triangulation of data collection methods (Lincoln & Guba, 1986). For example, regular contact was made with participants who required assistance with diaries, weekly phone call check-ins with all participants, interviews and focus groups. The use of time geographic tables within diaries for a period of 4-weeks added a longitudinal element. Further adding to triangulation of methods, focus groups included discussion in a group setting as well as self-report data from diaries and expanded responses from interviews.

Phone calls and video calls were the most convenient method of communication for both researcher and participants. The lack of face-to-face communication helped to increase self-disclosure amongst participants (Tracy, 2010; Lapidot-Lefler et al., 2015). Regular contact with participants each week also helped to increase accountability in completing the diary entries and helped to prevent study attrition, through building a relationship and collaborative participation.

Representativeness. This relates to the sampling techniques and if they support the research question and conceptual generalisability (Kitto et al., 2008). Purposeful sampling was used as a

main method of sampling, where older adults taking part in Super Agers activities were recruited. The need for the study involved an interest from Super Agers Project Lead and Bridgend Council to investigate the effectiveness of their Super Agers Project. For recruitment of participants not engaged in group physical activity, snowball sampling was used, and this involves networking from one difficult-to-access type of participant to a wider range of participants (Kitto et al., 2008). Through comparison of participant experiences and responses, from individual interviews and focus group discussions, the findings of the research have highlighted individual differences as well as experiences accounting for the wider population of older adults eligible for Super Agers engagement or general group physical activity as an older adult.

Additionally, findings are closely related to contexts within the COVID-19 pandemic, but methods can be replicated, whether in-person or remote (Ghafouri & Ofoghi, 2016). Additionally, making sure the study had reliability involved providing detailed explanation of the data collection procedure and measures, as well as describing thoroughly the steps taken to analyse data, so that future researchers, should they wish to, can adopt similar protocols.

Reflexive and evaluative rigor. This criterion questions whether the study has a clear statement of the effect on the data of the researcher's views and the methods chosen, as well as the evaluation of the researcher-client relationship and discussion of ethical issues (Kitto et al., 2008). The use of a reflective summary of the data collection procedure aided the researcher to reflect on decisions made with acknowledgement of personal assumptions or biases about the topic (Harwood & Knight, 2009). This was important when conducting open-ended discussions with participants, making sure there was a distinction between relating and empathising with participants, as well as making sure they lead the direction of the interview. Furthermore, ethical approval was granted before the study commenced, as well as a reflexive account highlighting the collaborative nature of the study.

As member checking was disregarded as a valid and reliable process for evaluating rigor (Lincoln and Guba, 1985), *member reflections* between the researcher and the participants were incorporated instead (Schinke, Smith & McGannon, 2013). This involves the generation of any additional, crucial data and insight. (Schinke, Smith & McGannon, 2013). In relation to the study, themes that were present throughout diaries, interviews and focus groups were brought up with participants to further explore their views. Additionally, member reflections was useful in getting further information from participant's time geographic diaries in their interviews.

The use of *critical friends* (Smith & McGannon, 2018) further encouraged reflexivity by challenging the researcher and supervisors' theoretical knowledge and the philosophical underpinnings of the study. This allowed the researcher to further question and explore different explanations and interpretations of the methods, types of data collection, and results, so that the raw data had the opportunity to be analysed from a wider perspective and with extended knowledge from superior staff.

Transferability (Kitto et al., 2008) **and Width** (Smith & Caddick, 2012). The comprehensiveness of the research findings is mostly attributed to the quality of the diaries, interviews and focus groups, as well as the analysis. There are quotations to support every finding in the study; approximately 70 hours of thick descriptive data (via interview recordings) and 100 pages of diary data were collected to enhance transferability (Lincoln & Guba, 1986). Results are presented in both table format, interpretatively and descriptively in the results section, following recommendations from Braun and Clarke (2019). Additionally, the discussion section critically analyses the application of findings to other older adult contexts and adds to current research around the importance and success of group physical activity for benefitting older adults' empowerment, physical and mental wellbeing.

Interviews were arranged at a time chosen by the participants, carried out either in their own homes, where they felt comfortable and secure in their environment; this aligns with the qualitative and social constructivist underpinning in achieving the research aims through exploring the meanings that people attach to their experiences as qualitative researchers prefer to engage with people in their 'natural' settings or environments.

Results

To reiterate, this research project aimed to use qualitative methods to explore and understand how different levels of engagement in Super Agers community physical activity sessions influenced empowerment, social identity development, and maintenance of physical activity during the COVID-19 pandemic.

Participants were asked to talk as widely as possible about the different ways their engagement (or lack thereof) in regular physical activity in a community exercise group setting and an individual setting, influenced or has been influenced by features of empowerment, social identity, and COVID-19. Firstly, their raw responses and labelled quotes were constructed inductively into sub-themes and categories. These were grouped into sub-themes and include intrapersonal features, motivation, interpersonal features, social-environmental features, and societal/shared views, and walking. These themes were further grouped into whether they were related to or impacted by COVID-19. To distinguish similarities and differences between participant groups, three higher order themes were produced, where lower order themes were grouped into: (1) For those engaged in Super Agers activities (group physical activity), (2) For those not-engaged in Super Agers/taking part in individual physical activity, and (3) themes shared by both those engaged and not-engaged in Super Agers activities (group physical activity). Finally, two first order themes: (1) positive features, development, or impact (see Table 8), and (2) negative features, development, or impact (see Table 9).

First order theme 1: Positive features, development, or impact

Table. 8

Table presenting all themes for 'Positive features, development or impact'

Sub-categories	Sub-themes	Lower order themes	Higher order themes
			Engaged in Super Agers activities (Group physical activity)
		Not related to COVID-19	
	Intrapersonal features		
Noticeable benefits on physical functioning			
Increased physical competence from engagement in Super Agers			
Increased confidence from Super Agers staff support			
	Motivation		
Retirement provided freedom to do Super Agers activities			
Positive mindset for being active			
	Interpersonal features		
Super Agers provided OA with opportunities for volunteering and responsibility within the community of older adults			
	Social-environmental features		
Super Agers classes provide a supportive motivational climate			
Social aspect main motivating factor for engaging in Super Agers			
Sense of familiarity/positive group dynamics			
Super Agers like-minded people			
Super Agers engagement increased self-esteem			
		Related to COVID-19	
	Interpersonal features		
Ability to use technology prior to COVID-19 increased opportunities for socialising throughout the pandemic			

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	Social-environmental features		
Shared experience of Super Agers during COVID-19 provided social support			
Stereotypes of older adults and Super Agers social identity			
Consistent physical activity throughout COVID-19			
		Not related to COVID-19	**For those not engaged in Super Agers/take part in individual physical activity**
	Intrapersonal features		
Benefits of non-intentional physical activity (household tasks) on physical functioning			
Social isolation and independence			
Increased self-awareness of sedentary behaviours during lockdown.			
	Motivation		
Introjected regulation			
			Both those engaged and not engaged in Super Agers activities
		Not related to COVID-19	
	Intrapersonal features		
Actively searching for physical activity and friends in community			
Intrinsic motivation			
	Interpersonal features		
External motivation			
	Social-environmental features		
Positive mindset and outlook on the future			
Appreciate feeling valued by others.			
	Walking		
Walking acts as routine for individual physical activity			

	Related to COVID-19
	Intrapersonal features
Enjoy Learning new skills during lockdown	
Goal setting important motivator throughout lockdown	
	Walking
Walking external motivation to be active during COVID-19	
External feedback devices	

(1) For those engaged in Super Agers activities (group physical activity)

Not related to COVID-19

Intrapersonal features

Noticeable benefits of improved physical functioning, directly influenced by Super Agers engagement. Older adults taking part in group physical activity sessions, including regular yoga, walking and Tai Chi with their instructor, found noticeable benefits of this on their physical functioning. Engaged participants visibly noticed that they had better balance, flexibility, and cardiovascular endurance, contributing to improving their overall wellbeing. For example: *"...yoga, tai chi and walking showing noticeable physical benefits"* (Female, engaged, #1, Diary), and *"...increased distance walked now that I am introducing community sessions and more activity into my day"* (Female, engaged, #7, Interview).

Increased physical competence from engagement in Super Agers. Another distinction from participants attending group physical activity sessions compared to those not engaged was their self-awareness and perception of increased physical competence: *"... I do feel like the exercises are easier in tai chi"* (Male, engaged, #3, Focus group). Engaged participants highlighted this feeling of overcoming any physical challenges they may have faced when starting the classes, showing how being involved in physical activity amongst others as well as an informed instructor who can provide feedback, can directly increase physical competence and enjoyment in the activity.

Increased confidence from Super Agers staff support. Additionally, a female participant engaged in regular Super Agers activities suffered a physical injured (broken ankle) throughout the study, because of falling. However, despite her injuries reducing her confidence in activities such as walking unattended and Tai Chi classes, she instead had the opportunity to take part in the chair-based exercises offered as another Super Agers activity, for older adults less mobile: *"...I have a*

better view of my physical abilities knowing I can try and learn new skills whilst being in a boot!", and *"I did as much as I could over Zoom but using the chair so I could still take part"* (Female, engaged, #2, diary). With support from peers and instructors through rehabilitation, she also had the choice to turn off her camera or have it on so that others could see her progress when she felt more confident to do so.

Motivation

Retirement and the pandemic provided the opportunity for freedom to do Super Agers activities alongside other priorities. All engaged female participants highlighted the benefits of retirement in increasing their freedom and independence with how they spent their day, meaning that they felt they had time to take part in activities such as Super Agers, without feeling like they were missing out on priorities such as time with family: *"...because you don't work anymore you've got lots of time to be involved with family"* (Female, engaged, #2, diary). Additionally, for these engaged women, the pandemic meant that spending time with family and socialising were restricted, which meant that they automatically had more time for physical activity and appreciated the regularity of Super Agers activities when they occurred: *"Enjoying freedom of retirement means I can do what I want to do"* (Female, engaged, #1, diary).

Positive mindset for being active. When asked 'What makes you get out and about each day?', the responses from most participants engaged in group physical activity included *"making the most of it"* whilst their health and abilities allowed. Engaged participants felt that starting each day with an active mindset was inherently enjoyable and required for them to stay out of a cycle of sedentary behaviour throughout the day: *"Just get out there and do it attitude"* (female, engaged, #1, diary), *"...Being fit enough to spend time with family"* (Male, engaged, #8, interview). Overall, healthy aging is an important motivator for older adults to be active. Therefore, some older adults required external guidance and support to being active, whilst others had the internal resources to participate in physical activity and set their own goals, even if it involved being part of a group setting.

Interpersonal features

Whilst benefitting 'internally' from group physical activity, older adults also displayed improvements in the resources needed to build social interactions.

Super Agers provided older adults with opportunities for volunteering and responsibility within the community. The opportunity for volunteering and responsibility for some engaged participants engaged encouraged them to promote the group physical activity classes to other older adults in the community. Additionally, opportunities within Super Agers activity sessions to have a leadership role showed a direct influence on sustainability of physical activity behaviours, as the onus is on the individual and the members of the group to keep the session running for others to participate in. An example includes an engaged female participant who actively *"turned an instructor led group into their own exercise group when funding ran out to make sure the group still went ahead"* (Female, engaged, #7, diary)*,* showing motivation in attempting to continue the activities and exercises previously taught to her by an instructor, and a willingness to take a lead.

Social-environmental features

Super Agers classes provide a supportive motivational climate. Participants frequently mentioned the friendly and supportive environment of Super Agers classes, created by both instructors and members, providing a safe space for learning new exercises without fear of failure, especially when welcoming newcomers: *"...Need a safe environment for growth and development in a group environment"* (Female, engaged, #7, interview). With this presence of a facilitative environment, it is important for prospective newcomers to be aware of this environment as it will likely influence their engagement in group physical activity. Despite this, participants not engaged described the barrier to joining a new class filled with new people is if the experience is shared with someone else: *"Easier to walk in with someone else"* (Female, not engaged, #11, diary).

Social aspect main motivating factor for engaging in Super Agers. Some older adults who regularly participate in Super Agers classes highlighted the importance of the social aspect of group activity for their motivation to attend: "*Being social is part of keeping fit!"* (Male, engaged, #12, diary). Socialising appears to be a main motivator to attend Super Agers activities, with the added benefit of being active: *"... Social aspect big part of creating sense of community, which helps to increase physical activity levels"* (female, engaged, #1, focus group). These older adults enjoy taking part in activities and being amongst other older adults in their community: *"I like the feeling of starting new groups and activities as a group"* (female, engaged, #2, diary). Taking part in regular physical activity around others can lead to new friendships being made and may help to keep individuals returning to do physical activity.

Sense of familiarity/positive group dynamics. Older adults regularly engaged in Super Agers classes enjoyed meeting new people and catching up with friends made in their classes; these classes brought them a sense of familiarity and created a sense of belonging: *"Super Agers brought many opportunities to meet new people"* (Female, engaged, #2, diary). Additionally, the class environment provided enjoyment and a safe place for those who may be particularly shy or socially isolated outside of this environment: *"Feel quite shy so the social part of going to Super Agers helps give me a sense of belonging"* (Female, engaged, #7, diary). Engagement in Super Agers classes provided a positive atmosphere for those who needed to feel related to other older adults.

Super Agers like-minded people. An interesting discovery, particularly from the focus group of older adults engaged in Super Agers activities, is that these older adults frequently emphasised their enjoyment in attending classes with like-minded people, building friendships, showing a strong group bond between these older adults: *"...enjoy company of Super Agers as they are like-minded and there for the same reasons of socialising and being active"* (Female, engaged, #1, diary). This collective like-mindedness could mean these individuals are empowered as there is shared decision making to be active, as these individuals all made the choice to participate in physical activity in a group setting. Additionally, reasons for engagement in Super Agers activities mainly centred around the need and preference for socialising and being physically active. Participants enjoyed being around others who also want to be active, which in turn encourages these older adults to continue attending: *"enjoy others being enthusiastic about Super Agers and physical activity"* (Female, engaged, #1, interview). This shows that being valued as a 'super ager' has an extremely powerful impact on group membership and cohesiveness, as well as views of physical activity.

Engagement in Super Agers classes increased self-esteem. The environment of Super Agers classes, the encouragement from others, the external feedback from instructors and an individual's internal feedback, lead older adults to feel more positive about themselves, which suggests that Super Agers classes positively influence self-esteem. A response from the interview question: 'How did Super Agers activity make you feel for the rest of your day?', an engaged older adult said, *"Feel good about myself since being part of a group"* (Female, engaged, #1, diary). This quote highlights perceptions of increased self-esteem directly as a result from returning to Super Agers classes after lockdown, realising the importance of being part of a group.

Related to COVID-19

Interpersonal features

Ability to use Technology prior to COVID-19 increased opportunities for socialising throughout the pandemic. Participants who felt competent in using online technology, prior to the COVID-19 pandemic and throughout the length of the study, felt like they had opened themselves up to more opportunities for continued socialising, group physical activity, and access to online material throughout lockdown. Therefore, engaged participants who preferred the social aspect of group physical activity and had access to online technology throughout the pandemic, were able to be involved in remote sessions online: *"Enjoy talking and socialising with friends and people within community… it was brilliant the moment I could see everyone's face on my screen that I haven't even seen in person for ages!"* (Female, engaged, #2, diary). Other engaged participants relished the chance to learn technology that was new to them, as it helped them to seek out or create their own opportunities for continued socialising and keeping in contact with other Super Agers throughout periods of isolation. One participant explained, *"… [it is amazing] how technology is impacting our lives and I feel fortunate that I can understand and be part of the technical revolution"* (Male, engaged, #4, diary).

Social-environmental features

Shared experience of Super Agers during COVID-19 provided a form of social support. Those engaged in Super Agers activities benefitted from the shared experiences of being engaged in physical activity in a group setting during covid. sharing conversations and providing support to next door neighbours when unable to see family due to lockdown restrictions on travel and proximity: *"…Shared experience of COVID has bought community together more"* (Female, engaged, #2, diary). The positive experiences arising because of COVID appeared to provide an opportunity to encourage older individuals to experience growth and development in their physical abilities and psychological skills, such as highlighting the importance of socialising and facilitating older adults who live alone to take control over the decisions they make throughout each day: *"…Felt extremely housebound without the support of Super Agers"* (Male, engaged, #4, diary).

Stereotypes of older adults and Super Agers social identity. Older adults being labelled as 'vulnerable' by the media and government due to COVID-19 health and mortality concerns negatively reinforced some participants' lack of confidence in themselves to make their own decisions, and perception of physical competence. For example, a female participant mentioned that

"people perceive her to be less independent than she is", due to her sight loss (Female, not engaged, #11, diary). Another participant mentioned they *"tried to come to terms with being identified amongst the 'vulnerable group'"* (Female, not engaged, #13, diary). These stereotypes based around physical incompetence and at high risk to COVID-19 is likely to impact a collective group of older adults. However, Super Agers engagement provided an opportunity to form a new identity for older adults within the community, changing their views towards physical activity as a desirable behaviour, and a desirable and valuable group membership, *"Super Agers is a way of forming new identity and sharing experiences with others"* (Female, engaged, #1, diary).

Consistent physical activity throughout COVID-19, being involved in both group and individual physical activity. Most engaged participants reported maintaining a consistent level of physical activity throughout lockdown, specifically by participating in different types of physical activity throughout the week: *"...did my morning walk and then yoga completed by myself after my community Super Agers session"* (Female, engaged, #2, diary). By participating in regular Super Agers physical activity sessions, which they enjoyed attending, or having a responsibility to walk their dog each day, it meant that for a certain number of times per week they were committed to engaging in some sort of physical activity, which helped them to be less sedentary than if they didn't have priorities or commitments relating to physical activity: *"...2 dog walks a day and 30 mins banded exercises at home, I'm able to meet these government recommendations"* (Male, engaged, #4, interview). The commitment to different forms of physical activity during the week positively influenced their decision to undertake extra forms of physical activity by themselves such as a walk or a pre-recorded workout.

(2) For those not engaged in Super Agers/taking part in individual physical activity

Not related to COVID-19

Intrapersonal features

Benefits of intentional and non-intentional physical activity (household tasks) on physical functioning. Participants not engaged in community activities mentioned the benefits of daily tasks and non-intentional forms of physical activity on their physical functioning: *"energised after doing daily tasks"* as well as *"feeling stronger after renovating the van because I'm getting in and out, reaching up and putting nails in..."* (Female, not engaged, #10, interview). It could be that they believed household tasks to be a useful form of time and physical investment, benefitting them not only in physical competence but also getting tasks completed.

Social isolation and independence. Additionally, participants who lived alone and weren't engaged in any form of group physical activity recognised their achievements in looking after themselves independently, assimilating this into a new identity by highlighting their competence in carrying out essential and daily tasks without the reassurance, guidance or help from others: *"Since husband died had to adapt and learn to be independent"* (Female, not engaged, #9, diary).

Increased self-awareness of sedentary behaviours during lockdown. Once older adults were restricted to staying indoors, they became aware of their sedentary behaviours: *"Need to do more exercise for different parts of the body"* (Female, not engaged, #9, focus group). This applied to two older adults who weren't engaged in Super Agers sessions, perhaps realising there was an element of physical activity missing in their routines. However, considering individual differences, other older adults simply stated that they enjoyed being sedentary.

Motivation

Introjected regulation. Some participants not engaged in Super Agers activities identified the benefits for keeping fit and active were down to introjected regulation, participating in physical activity for the known health benefits rather than because of inherent satisfaction. A non-engaged participant mentioned taking part in physical activity as opposed to staying sedentary because they were *"...aware that the more active the better"* (Female, not engaged, #10, diary). With this self-awareness around the benefits of physical activity on health, taking part in physical activity in a group setting with an informed instructor may benefit these individuals.

(3) Themes shared by both those engaged and not engaged in Super Agers activities (group physical activity)

Not related to COVID-19

Intrapersonal features

Actively searching for physical activity and friends in community lead them to finding Super Agers. Both pre-pandemic and during periods of lockdown, some participants actively engaged in searching for physical activity guidance available to them in their community: *"Lockdown opened people's minds to explore what's in the community"* (Female, engaged, #7,

diary), and "…when I settled in this area, I kind of wanted to know what was about, to make new connections and I came into contact with Ady… started Tai Chi" (Male, engaged, #6, diary). Those who sought out and became engaged in Super Agers activities helped themselves to improve self-seeking behaviours because of their success in searching for physical activity guidance. The positive reinforcement of self-seeking behaviours, and the facilitative environment of Super Agers classes, encouraged participants to make decisions for their own health: "…*use exercises learnt in tai chi classes to maintain fitness over lockdown…*" (Female, engaged, #7, diary).

However, whilst participants had intentions of actively looking for things to do in the community, COVID-19 was a barrier for starting new activity for those not already engaged. A result of the collaborative nature of the study made not engaged participants more aware of Super Agers activities available, through explanation of the study at the participant recruitment phase being a review of the Super Agers project. Participants had questions and pressed for more information on the project, and as a result mentioned their interest in joining these activities after lockdown: "*I would now be interested in joining Super Agers activities when COVID allows*" (Female, not engaged, #10, focus group). Social support and raising awareness of activities in the community is an external motivator for individuals to engage in physical activity, who require guidance and support.

Intrinsic motivation. Some participants, engaged in both individual and group physical activity explained that they inherently enjoyed 'being active' for the activity's sake, as well as the positive release and enjoyment after being active: "*…always enjoys keeping fit*" (Female, engaged, #1, diary)*, "Feel energised after my tai chi session" (Male, engaged, #4, focus group), and "I love going for walks and just moving my body especially down by the beach!"* (Female, not engaged, #9, interview). Intrinsic motivation can therefore be highlighted as an important contributor for sustainable physical activity or a feature that older adults should inherently possess for the outcome of increased empowerment.

Interpersonal features

External motivation. Some participants felt that they could not stick to being active unless they were held accountable or had guidance from more informed individuals: "*…I've only ever stuck to an exercise programme when it was a group activity*" (Female, not engaged, #10, focus group) and "*…Don't stick to regular exercise by myself*" (Female, not engaged). An engaged female participant perceived noticeable benefits of being engaged in Super Agers activities to motivate her to continually participate in group sessions: "*… Super Agers sessions keep me motivated to stay active*" (Female, engaged, #7, interview), as well as another engaged participant

highlighting the need to be guided throughout exercise by a coach for support and external feedback, *"Need to have coach in front to learn and guide through session"* (Female, engaged, #7, diary).

Social-environmental features

Positive mindset and outlook on the future. An admirable characteristic of most participants was their positive outlook on the future. It is likely a generational characteristic, and one that contributes to their interest in wanting to take part in physical activity to benefit their health: *"You've got to look forward and be positive"* (Female, not engaged, #11, interview), as well as *"You will lack motivation without a positive mindset".* Additionally, in relation to group dynamics and community cohesiveness, a response from the focus group discussion for engaged participants was that Super Agers all have a *"camaraderie friendship mindset"* (Male, engaged, #6, diary), which shows a bond and belonging between these participants because of engaging and building friendships in Super Agers classes. The positive community dynamics, particularly amongst those engaged in Super Agers, is mostly a combination of the positive mindset of these individuals as well as the supportive environment in the classes and from staff, an environment that participants not engaged in Super Agers activities would likely benefit from.

Appreciate feeling valued by others. Most participants who were engaged in group physical activity mentioned that they felt valued by other members in Super Agers classes, which helped them to appreciate the opportunity of being part of a physically active group. A male participant engaged in community physical activity sessions highlighted that he *"felt frequently involved with the physical activity community"* (Male, engaged, #4, focus group). Additionally, not engaged participants frequently talked about feeling valued by their close friends and family, as they felt membership amongst their family and friendship group was of higher value than their perception of an exercise class. For example*: "feels valued by her family as they ask her for advice" (*Female, not engaged, #11, diary*),* which suggests that feeling valued is important by those the individual perceives to be important and influential in their life.

Walking

Structure for individual physical activity. Walking was used by all participants as a tool for structuring their physical activity participation and as a form of monitoring progress. Some

participants reinforced engagement through regular walking by attempting to walk a certain number of miles per day or using a FITBIT or external feedback device to record 10,000 steps per day: *"...I do a 12,000 step walk every morning"* (Male, not engaged, #12, diary), *"...I do an average 5-mile daily walk"* (Female, engaged, #1, diary), and *"...10k steps each day"* (Male, not engaged, #14, diary).

Related to COVID-19

Intrapersonal features

Enjoy learning new skills during lockdown. Learning new skills was a valuable part of most participants' routine they developed during lockdown in early pandemic: *"Picking up new skills in lockdown"* (Female, engaged, #1, diary). Due to government restrictions on socialising, this extra time spent at home provided an opportunity for participants to engage in new hobbies and learn a skill they were previously interested in but perhaps didn't have the time for previously. For engaged older adults, this meant learning how to use zoom or being engaged in a tai chi class that was new to them: *"Doing tai chi via zoom is a new experience"* (Female, engaged, #2, diary). Participants not engaged with Super Agers said they learnt new skills relating to their job, as two participants had not yet retired, *"Learn new skills at work"* (Female, not engaged, #10, interview; Male, not engaged, #12, interview). However, these skills may not be transferrable across other life domains when retired.

Goal setting important motivator throughout lockdown. Participants' responses around maintaining their activity levels throughout lockdown was dependent on them creating and meeting reachable goals: *"If you have unachievable goals, more likely to fail"* (Female, engaged, #1, focus group). For not engaged participants, they used periods of lockdown during early pandemic to challenge their distance and time on long distanced walks, *"...Try to get PBs for 6k walks"* (Male, not engaged, #12, interview).

Walking

Walking external motivation to be active during COVID-19. All participants made it clear that their daily routines involved walking, showing a form of commonality: *"I walk every day"* (Male, engaged, #6, diary). Walking served different purposes for different circumstances, with some participants going for *"walks in miserable weather"* (Female, engaged, #1, diary), whilst others preferred walking on milder days to appreciate the surrounding scenery, to socialise with

friends, for a break from a working day, or to achieve goals around step counts or distance personal bests: *"...walked with a friend who lives alone"* (Female, not engaged, #9, diary). However, with a lack of accessibility to facilities and physical support for physical activity throughout COVID-19, walking acted as a main form of activity either to see their family or be physically aided, such as with issues of sight loss and lack of balance: "*...Daughter came and helped take me out for a walk...*" (Female, not engaged, #11, diary). Walking as a universal form of physical activity for all participants in the community, it shows similarities in their views of walking, and their motives for being active.

Particularly during the pandemic, walking allowed the older adults to stay continually active as no extra equipment was needed and it could be carried out individually. Participants challenged themselves through walking in bad weather, an engaged female participant (Female, engaged, #1, diary) stated that she just *"ordered warm clothes to continue walking in winter safely"*. Additionally, walking in all weather conditions brought out the feeling of being *"refreshed"* or as some form of *"release",* which is perhaps why some participants reported seeing "*many people out walking because of lockdown" (*Female, not engaged, #9, diary; Female, engaged, #1, interview*).*

External feedback devices. During the pandemic, engaged participants were provided with a pedometer, to monitor their walks and see their progress from an external feedback device. Participants said they found it *"...extremely useful for monitoring progress and seeing how far [they] walk each day"* (All engaged participants, focus group), highlighting the positive impact it had on their goals. External feedback in the form of a smart watch was also a useful motivator for not engaged participants as a tool for monitoring progress and setting future goals. Throughout lockdown, participants found tracking their steps and distance through a smart watch to be extremely motivating for them to reach their goals and create challenges for themselves to keep them busy during lockdown: *"I use my Fitbit and phone when I'm out walking so, I can see my steps"* (Female, not engaged, #9, diary).

First order theme 2: Negative features, development, or impact

Table. 9

Table presenting all themes for 'negative features, development or impact'

Sub-categories	Sub-themes	Lower order themes	Higher order themes
			Engaged in Super Agers activities (group physical activity)
		Not related to COVID-19	
	Engaged older adults' assumptions of those not engaged		
Not engaged participants' fear of judgement in a group activity setting.			
Preference for sedentary behaviour.	**Stereotypes and perceptions**		
Imbalance of gender participation in group physical activity classes.			
The Super Agers classes provided are not manly enough.		Related to COVID-19	
	Social-environmental features		
COVID-19 stopped Super Agers classes, negatively impacting engaged participants' activity levels.			
			Not engaged in Super Agers/taking part in individual physical activity
		Not related to COVID-19	
	Intrapersonal features		
Individual preference for not taking part in group physical activity.			
			Both those engaged and not engaged in group physical activity
		Not related to COVID-19	
	Social environmental		
Lack of branding awareness.		Related to COVID-19	
	Intrapersonal features		
Apprehension to take part in unsupervised Physical Activity due to lockdown.			
	Social-environmental		

Lack of mediating structures built to raise awareness of Super Agers during COVID-19.

Damaged growth of relationships formed in Super Agers.

(1) For those engaged in Super Agers activities (group physical activity)

Not related to COVID-19

Engaged older adults' assumptions of those not engaged

Participants not engaged in group physical activity may be afraid of judgement from others in a group activity setting. An assumption made by those engaged in Super Agers activities is that older adults who aren't taking part in group physical activity may be apprehensive of taking the first step into a group scenario because they are unsure about doing physical activity in front of people they don't know: *"Not everyone has the confidence to do those exercises in front of others"* (Female, engaged, #7, diary). By joining classes an individual may not feel comfortable doing, it could positively challenge them to progress. Once this progress becomes physically noticeable, it is likely that competence and confidence will increase as a result, thus enhancing psychological empowerment, something these individuals may be lacking.

Preference for sedentary behaviour. It could be argued for those who do not want to engage, that without an intrinsic drive to want to be active, individuals would rather stay comfortable in their sedentary behaviour than seek opportunities to be more active to benefit their health before it is too late: *"Easy to slip into a bad routine of activity"* (Female, engaged, #7, interview). Therefore, pushing individuals into group activity when they prefer their daily routine as it is, could potentially drive them away from wanting to join as part of their own will.

Stereotypes and perceptions

Imbalance of gender participation in group physical activity classes. Older adult males engaged in Super Agers activities felt outnumbered in group physical activity classes, highlighting the imbalance of genders within tai chi classes, with more women participating than men. One participant suggested, *"when I was doing my classes, it was 99% women"* (Male, engaged, #6, diary). However, despite the disproportion in male participation in Super Agers activity, the participant claimed that the lack of male engagement compared to females did not deter him to

continue participating in his tai chi classes: *"Regardless of female predominance, still felt welcome in tai chi sessions"* (Male, engaged, #6, diary).

The Super Agers classes provided are not manly enough. Older adult males who take part in Super Agers classes felt that the options available were limited, particularly for the male audience. Views of the classes available are that they focus more on flexibility and balance rather than power and strength, therefore challenging ingrained views of what an active male should be taking part in: *"...perception that sessions are not manly"* (Male, engaged, #6, interview). Perhaps it is the lack of relatedness to other peers in a group that may present a barrier for male engagement, and that sessions with predominantly female members may subconsciously adopt exercises that require less strength and power.

Related to COVID-19

Social-environmental features

COVID-19 stopped Super Agers classes, negatively impacting engaged participants' activity levels. Some engaged older adults struggled to continue exploring and increasing physical activity levels when all community activity was stopped during early pandemic. These individuals felt a lack of stimulation for taking part in physical activity, suggesting a direct impact of a lack of community sessions, *"...Find same chair exercises boring if do them repetitively every day"* (Female, engaged, #2, interview), and felt that exercise that they previously enjoyed they weren't able to continue, *"...Due to COVID, no group activities, meaning exercise is very restricted"* (male, engaged, #4, diary). Despite most participants taking part in regular walking throughout lockdown and enjoying the benefits, some came to find it repetitive, especially as there was no perceived alternative during lockdown: *"...Lockdown meant a lack of inspiration to walk"* (Female, not engaged, #11, diary). Initially, as physical activity was limited to using outdoor space near their homes, a combination of a lack of stimulation throughout the day of new activities and routines, as well as no community sessions, negatively impacted on motivation to be active and seek different types of activity, leading to a more sedentary lockdown routine instead.

(2) For those not engaged in Super Agers/taking part in individual physical activity

Not related to COVID-19

Intrapersonal features

Individual preference for not taking part in group physical activity. For some older adults, they either don't engage in any form of physical activity because they simply lack the desire to be active, or they don't take part in group physical activity because they prefer to exercise individually. One participant not engaged in Super Agers activities made it clear that they had no community involvement but equally have no desire to want to engage: *"I don't do any of those group things, just go walking by myself like…"* (Male, not engaged, #12, diary). It is clear that older adults not engaged in Super Agers activities are still physically active, but simply preferred to exercise individually or amongst family and friends: *"My husband and I used to play golf… never got involved with the club malarky but just liked to play by ourselves"* (Female, not engaged, #13, diary). All not engaged participants also mentioned keeping socialising and physical activity separate from one other, an important distinction between those engaged *"… I like to do my walking then go down to the pub to socialise"* (Male, not engaged, #12, diary) and *"… I like going for walks with my 3 close friends or my daughter"* (Female, not engaged, #11, diary). However, other not engaged participants mentioned they had no community involvement due to the pandemic and are interested in increasing their physical activity: *"I would like to join tai chi or something after lockdown hopefully"* (Female, not engaged, #9, focus group).

(3) Themes shared by both those engaged and not engaged in Super Agers activities (group physical activity)

Not related to COVID-19

Social environmental

Lack of branding awareness. Some older adults who attended regular Super Agers sessions were unaware of other types of classes and support available, but still managed to find and engage themselves in community activity: "*…joined tai chi but didn't know what Super Agers is*" (Male, engaged, #6, interview). Additionally, most engaged participants highlighted that something needed to be done to raise awareness of Super Agers and generally what is available to older adults in the community, particularly through different platforms: *"online format, in the post, and word of mouth from younger family members"* (Engaged focus group). With a lack of awareness of activities, a lack of timetables of activities available through different media, and exclusivity around online classes, attendance rates are inevitably limited, therefore a highlighting a big barrier to engagement in community activity.

Related to COVID-19

Intrapersonal features

Apprehension to take part in unsupervised PA due to lockdown. Participants felt apprehension to go outside, particularly in bad weather, after not being involved in different types of activity during the pandemic. Some of them felt that their confidence was diminished when walking alone, due to being socially isolated and therefore having a lack of opportunity to work on components of fitness for a sustained period: *"Feel apprehensive to go out as it has been so long"* (Female, not engaged, #11, diary), whilst another mentioned *"...bad weather means I might fall"* (Female, engaged, #2, diary). Regardless of whether these older adults are engaged in community physical activity or not, periods of isolation in confined areas means confidence to either go outdoors or take part in individual physical activity and explore the greenspace would need to be rebuilt again, as without regularly taking part in walking outside, for example, competence is likely to decrease.

Social-environmental features

Lack of mediating structures built to raise awareness of Super Agers during COVID-19. A concern was raised around a lack of awareness of Super Agers and group opportunities in the community, for encouraging those not engaged to participate. An older adult not engaged explained, *"...Lack of awareness around activities available in the community" (Female, not engaged, #10, focus group),* as well as another participant not even aware of the different classes and timetables available: *"...Not aware of keep fit classes in community"* (female, not engaged, #9, focus group). Perhaps the reason why there are older adults who still aren't engaged in community sessions simply because they don't know they are there. Additionally, restrictions on capacity of older adults attending sessions throughout the pandemic meant that it was difficult for potential newcomers to join as classes were moved to online settings via Zoom, and for convenience, passwords were only provided to those already engaged in the activities. This unintentionally contributed to exclusivity for those who were unaware of Super Agers in the first place and those who are eager to join but now don't know how: *"You can only really do the activity over lockdown if you were part of it before"* (Female, not engaged, #10, focus group). Therefore, COVID-19 had an extremely harmful impact on not only the growth and awareness of Super Agers and community physical activity engagement, but also the inclusivity element previously highlighted as an important feature for creating cohesiveness and positive community dynamics of older adults in the Bridgend community.

Damaged growth of relationships formed in SA. The final theme describes the devastation of the pandemic on older adults in the community. The damage to the potential growth and development of a group identity formed in Super Agers classes during COVID-19, as well as the awareness that could have been raised for Super Agers activities, was prominent: *"COVID stopped the growth of engagement in Super Agers activities"* (Male, engaged, #6, interview). Additionally, not engaged older adults looking for community sessions and groups to join were unable to join sessions even after they were made aware of Super Agers activities: *"Was hoping to join exercise classes but COVID stopped them*" (Female, not engaged, #9, focus group). With awareness and knowledge of Super Agers being disrupted, a contributing factor to non-engagement in physical activity is a lack of mediums to access older adults in the community effectively.

Discussion

The aim of this study was to use qualitative methods to explore and understand how different levels of engagement in Super Agers physical activity sessions influenced empowerment, social identity development, and maintenance of physical activity during the COVID-19 pandemic.

The key findings shown by the themes that were identified highlighted interrelated components of psychological empowerment, community empowerment and social identity, that were influenced both positively and negatively by participation in group physical activity, a lack of group engagement, and COVID-19. These findings have identified similarities and differences in empowerment and social identity development between older adults who regularly participate in group physical activity compared to those who only take part in individual physical activity. Super Agers can use the findings to broaden the accessibility and awareness for more older adults in the community, by better understanding the physical activity preferences of older adults and how this impacts their empowerment, identity, and physical functioning as an aging individual. The associated key findings are presented and discussed below in relation to previous relevant literature.

Psychological empowerment

Findings from participants engaged in Super Agers

Older adults engaged in Super Agers and regular community physical activity reported direct benefits on psychological empowerment, supported by the intrapersonal components listed in Zimmerman's (1995) nomological network, Conger and Kanungo's (1988) and Spreitzer's (1995) four core cognitions (competence, meaning, self-determination, and impact). Participants highlighted a perceived increase in physical competence and physical functioning, which are psychological features described in psychological empowerment literature. This suggests that community physical activity can facilitate the development of core components of empowerment (such as competence) and contribute towards sustainable physical activity behaviours due to increased perception of proficiency in performing the skills older adults learned in their classes. Findings from a study by Houlihan et al. (2017) also show positive development of self-efficacy engagement in community physical activity classes, which is likely to influence global physical competence, in successfully executing exercises and skills learnt in the classes over time.

Additional to increased global physical competence, participants engaged in Super Agers activity noticed increased confidence within themselves and their peers. The perception of a group-wide increase in confidence in Super Agers classes can be supported by collective efficacy literature. Collective efficacy is defined as "the shared perception of a group of its efficacy to perform a behaviour and to organize and execute the actions required to reach certain levels of achievement" (Bandura, 1997, as cited in Martínez et al., 2011, p. 447). This can account for the way engaged older adults in Super Agers classes experienced and noticed increased competence in physical functioning and efficacy of exercises learnt in classes, amongst themselves and their peers. This idea of noticeable increases in confidence and competence within a particular group membership also resonates with the formation of social identity through feeling part of a group, thus also highlighting a link between improved psychological empowerment and strengthened social identity (Stets & Burke, 2000).

Self-determination, the degree of choice in initiating and regulating actions, is another of the four core cognitions that Conger and Kanungo (1988), and Spreitzer (1995) proposed as important for empowerment to be developed. As an older adult retires from their work life, they have increased time to fill throughout their day. Participants engaged in Super Agers activities highlighted that retirement provided them with the freedom to search for opportunities and take part in regular classes such as those provided by Super Agers. Seeking these classes themselves and becoming engaged reinforced autonomy and increased perceived control over their decisions as they experienced a positive outcome of their self-seeking behaviour (physical activity opportunities). Previous research supports the importance of perceived control as a component in the development of empowerment, as findings show the positive impact of high perceived control on decisions around health behaviours and active engagement in community settings (Conger & Kanungo, 1988; Spreitzer, 1995).

For some, the social aspect of group activity was a main motivator for engaging in Super Agers, although others required external motivation, accountability and direction from instructors and peers to continue to take part in physical activity. The findings support Rasmussen et al. (2018) who also conducted a qualitative study, showing different motives for engaging in physical activity and needs satisfaction fulfilled by social exercise, where participating in group exercise fulfilled different needs for different individuals. This study adds to the literature in showing that even though some older adults participate regularly in their community, their individual motives for engaging stem from the satisfaction of their individual needs, such as inherent satisfaction of exercise, the need for social exercise, or being held accountable for their engagement in physical activity. It is also interesting to note, that despite the varying motives for active engagement, the

result of being regularly engaged in the community and regularly performing positive health behaviours, is a component that contributes towards psychological empowerment development (Conger & Kanungo, 1988; Spreitzer, 1995). Moreover, despite having individual motives to engage in group physical activity, the individual is likely to become empowered in the process.

Increased participation in physical activity was more noticeable when members who took a leadership and volunteering role felt valued by other individuals in the community. This is supported by a previous study, where findings showed that leaders who were relatable to the other general members and residents of the community acted as vicarious reinforcement for residents, as they witnessed the benefits of being both actively engaged and physically active (Rasmussen et al. 2018). A participant engaged in Super Agers sessions set up a regular walking group with peers, after finding that there was not enough provision of walking groups in the local community. This shows resource mobilisation and is supported by Zimmerman's (1995) empowerment framework. The framework emphasises the benefits of utilising resources within an individual's internal and external environment, particularly through opportunities for volunteering and adopting responsibility provided by Super Agers project staff. Therefore, facilitating opportunities for responsibility can positively influence the development of empowerment at the intrapersonal level Conger and Kanungo, 1988; Spreitzer, 1995), and encourage other older adults to be more physically active in their community.

However, despite the potential benefits of engagement in Super Agers activities and social exercise, the pandemic seriously impacted on access to physical activity opportunities in the community. Similarly, a review conducted by Son et al. (2021) on the impact of quarantining, found that older adults felt like there were limited volunteering opportunities throughout the COVID-19 pandemic, due to lack of community activities taking place. But when asked retrospective questions relating to pre-pandemic, volunteerism was found to provide a sense of purpose and meaningful social connections (Son et al., 2021), which could explain the positive outcomes of volunteering from older adults in leading their own smaller exercise groups through their engagement in Super Agers activities. Older adults who perceive responsibility for managing their own physical activity groups are more likely to ensure that the requirements of the group they are leading continue to be fulfilled, therefore making them feel empowered (Warburton et al., 2013; Ormsby et al., 2010).

Findings from participants not engaged in Super Agers activities

 A distinction between the participant groups was that participants who were not part of a group setting preferred non-intentional forms of physical activity, such as gardening, household cleaning and active tasks like decorating, which led to improved functionality and competence. They felt that

as these tasks were useful to their daily living, they are more meaningful activities rather than taking time away in their day to carry out exercise or physical activity for the activity's sake. Nevertheless, the increased physical competence they perceived from day-to-day household tasks is supported by Bredland et al. (2018), who also found that older adult participants had increased self-awareness and appreciation of the cardiovascular intensity of housework or gardening, in raising heart rate and in turn, acting as a form of light aerobic exercise. Increased competence from participation in regular physical activity is supported by Conger and Kanungo (1988) and Spreitzer (1995) as a component of psychological empowerment development, as well as Zimmerman's (1995) intrapersonal components of psychological empowerment. This suggests that being involved in any physical activity can contribute towards becoming empowered, and a focus need not just be on trying to engage in community activity, if there are other meaningful tasks which produce the same outcomes on health.

Older adults who did not take part in group physical activity displayed characteristics of introjected regulation as their main motivations for exercising (Deci & Ryan, 2000). This controlling form of behaviour, regulated by avoiding negative consequences rather than for the enjoyment of the activity, suggests that participants feel controlled by their health, which could be seen as a lack of self-determination in wanting to engage in other activities such as community activity, outside of their own individual physical activity (Conger & Kanungo, 1988; Spreitzer, 1995). Participants lack 'self-determination' and 'meaning' to be actively engaged in community physical activity and may only be taking part in activity to avoid negative consequences of ill health. It is uncertain as to whether externally controlled motives and behaviours can contribute to empowerment development, or whether these motivates are a barrier to this.

Some participants not engaged in group physical activity expressed that they were simply not interested in joining an exercise class; they were content with their socialising opportunities with friends and families and took part in self-led physical activity, such as regular walking. Drawing on Ryan and Deci's (2000) continuum of motivation, this reflects amotivation towards wanting to engage in a group. Their lack of motivation in this context may not be due to physical incompetence, as they mentioned taking part in their own individual physical activity, but it emphasises common misunderstandings in the literature around individual preference for engaging in different types of physical activity being mistaken for barriers to participation. However, in relation to the development of psychological empowerment, meaning is a core component in Conger and Kanungo (1988) and Spreitzer's (1995) models, which means the amount of active engagement and participation in physical activity and the community is an important contributing factor to the development of psychological empowerment. While a lack of engagement in the

community may suggest a challenge in developing psychological empowerment, these individuals may feel like engaging in group physical activity sessions will not satisfy their three basic needs, highlighted in SDT (competence, relatedness autonomy; Ryan & Deci, 2000), and it is likely that they satisfy these needs elsewhere through their individual physical activity and socialising separately with their friends and family. Therefore, it is important to understand how active engagement in community physical activity facilitates the development of psychological empowerment, and how participating in individual physical activity differs.

Findings shared across both groups of participants

There were negative impacts of COVID-19 on physical activity and social-psychological components of psychological empowerment, experienced by both sets of participants. This was mainly due to a lack of social interaction, communication, and supervised physical activity. Apprehension to take part in unsupervised physical activity, such as walking, or home-based exercises, during and after the lockdown period was an unforeseen outcome by these participants of the pandemic. Social isolation and limitations on proximity of outdoor physical activity participation negatively impacted on the older adults' physical activity levels and competence of previously regular activities, such as walking outside, and organised activities, such as Super Agers sessions. Without the development of competence through regular engagement (such as previous regular walking outside in adverse weather or taking part in guided Super Agers tai chi classes) competence is likely to decrease due to this lack of routine or practice, resulting in weakened neural pathways or motor unit recruitment (Katsumata et al., 2011). In support, Katsumata et al. (2011) examined fear of falling, self-efficacy, and global competence in socially isolated and community-dwelling older Japanese citizens. Findings showed that limitations on participants' behaviours and movements which would have occurred far away from their homes was associated with increased fear of falling and low self-efficacy relating to preventing falls, which was particularly evident in older males with functional disability. Despite the participants in Katsumata et al.'s (2011) study having functional disability, these findings resonate with those in the current study that with COVID-19 restrictions imposed early in the pandemic, forcing individuals into socially isolating at home, there was a heightened negative impact on physical competence. It is unsurprising that some older adults have become out of practice and less able to carry out tasks they used to be competent at before being limited to their home environment. Therefore, Super Agers should make older adults aware of the support available and increase accessibility to their services. This can be done through preparing remote platforms and educating older adults on how to use it, acquiring different locations of facilities, or a bus service to group sessions, so that they are able to readily participate in regular supervised activity to help increase their competence.

Congruent with previous research (Ryan & Deci, 2000; Dacey et al., 2008), the current study identified that increased physical activity levels in some older adults across both participant groups was due to intrinsic motivation to be active, whether individually through walking regularly, or in a group setting. This is also supported by the self-determination element in Conger and Kanungo (1988) and Spreitzer's (1995) four core cognitions, highlighting the extent of control individuals have over their decisions to participate in physical activity. Self-determined extrinsic motivation was also evident in the current study. Some older adults engaged in Super Agers activities already, as well as those not engaged who were interested in joining in the future, felt that guidance from instructors or monitoring progress through external feedback was a large contributor to their maintenance of physical activity participation (Dacey et al., 2008; Maula et al., 2019). Older adults not engaged and those who are motivated by external factors would most likely benefit from raised awareness of provision of services in the community to assist them in their engagement in community activities, where they would be exposed to encouragement from peers and instructors. In support, results from a previous study examining motivation towards physical activity, involved 645 older adults aged 60 and over, and demonstrated that different types of motivation differentiated activity levels and maintenance of physical activity over time (Dacey et al., 2008). Increased intrinsic and self-determined extrinsic motives (such as attending classes for flexibility to help prevent future injury) was positively associated with physical activity behaviour in older adults (Dacey et al., 2008).

Zimmerman's (1995) nomological network for psychological empowerment describes that motivation control was an important intrapersonal component. In the context of the current study, the use of external feedback devices such as smart watches or pedometers positively impacted most participants' motivation to set and achieve challenging physical activity goals or monitor progress throughout lockdown, when guidance was not available. There is further support from DeCoster and George (2005) who found that regular goal setting and progress monitoring contributed towards sustainability of self-efficacy and self-management behaviours, characteristic of empowerment. Thus, Super Agers positively impacted their engaged members' motivation and psychological empowerment through the provision of pedometers throughout the early pandemic, as well as those not engaged making use of smart watches. As the findings show external feedback devices to positively facilitate motivation control and psychological empowerment, the local community could also consider providing older adults with education and opportunities for using these devices, so that they are able to independently monitor progress and provide internal and external feedback.

Learning new skills, throughout periods of social isolation due to the pandemic, shows the development of psychological empowerment in the form of skill development, explained in Zimmerman's (1995) network (e.g., Son et al., 2021; Mattioli et al., 2020). Some individuals were eager to expand on their regular physical activity by finding other new enjoyable ways they could carry out physical activity, such as the older adults interested in engaging in Super Agers activities after taking part in the study. Supported by Zimmerman et al. (1992), intrinsically motivated skill development could be due to an individual becoming aware of their positive feelings (and positive reinforcement), which could be like their past experiences of learning and executing a new skill, and the associated outcomes and benefits of that process. This may help to motivate individuals towards learning new skills in the future. Additionally, learning activities aimed at maintaining or increasing proficiency levels are known as competence development activities and are considered important for encouraging lifelong learning, supporting the benefits of being active for 'healthy aging' (Schoonenboom et al., 2006). Competence development (Hyland, 1994) describes the general development of knowledge, understanding and mastery of a skill in a specific domain. In relation to the current study, the domains include physical activity, day-to-day tasks, and other activities that the individuals find enjoyable, interesting, or challenging.

The participants who enjoyed walking, regardless of weather, appear to be inherently satisfied by the activity, which could suggest that the activity is valuable to them (Zimmerman, 1995). In support, a previous study found walking to be a favourite activity and pastime amongst older adults aged 65 and over (Szanton et al., 2015). The study recommended that future interventions and community projects trying to improve physical activity maintenance should understand the types of activities that are favoured by older adults in the community.

Community empowerment

The study uses a variety of theoretical frameworks with overlapping components, such as psychological and intrapersonal features. To reduce any duplication of findings or discussion, the previous section discussed these findings, also overlapping with the first stage in Torre's (1986) framework for community empowerment development: 'development of psychological empowerment at the intrapersonal level'.

Findings from older adults engaged in Super Agers activities

The second stage of Torre's (1986) community empowerment framework: mediating structures appropriately built between the individual and the social environment, was negatively impacted by

the pandemic. The lockdown reduced accessibility, availability, and opportunity for physical activity maintenance in a social setting. With a lack of mediating structures, it was difficult for older adults previously actively engaged in the community prior to the pandemic, to be able to progress through the second stage of community empowerment, and even more so the older adults who were not involved with their community. For the older adults previously taking part in regular Super Agers activities, regular individual physical activity may be difficult to maintain after previously being in the company of others when active. With a lack of guidance on new skills that can be learnt, a lack of in-person classes and limited access to sessions which require online technology, this may introduce a new barrier, challenging individuals to engage in their own forms of physical activity (Adolfsson et al., 2007). A similar study conducted during COVID-19 on a sample of different ages showed 43.57% of people's physical activity levels to decrease throughout the pandemic, which is negatively associated with a restriction on all indoor activities, and outdoor activities being permitted by weather (Joshi, 2020). A loss of freedom, boredom and loneliness were associated with low motivation and quarantine restrictions. Therefore, the pandemic had a substantial effect on opportunities for the development of empowerment, social identity, and subsequent physical activity adherence for older adults.

Group exercise that encourages a facilitative environment and a sense of familiarity amongst peers was evident in Super Agers classes and highlights the importance of social support in developing community empowerment. Supported by the basic need of relatedness (SDT, Deci & Ryan, 2000), having a supportive social network can be a valuable contributor to active engagement, leading to increased motivation for attending classes, especially if participants make friends out of meaningful social interactions (Rasmussen et al., 2018). Parallel to the motivational climate of Super Agers classes, older adults who weren't engaged in community activities also mentioned that they preferred to exercise with family and friends, which could also be seen as a familiar social environment. This supports previous findings that older adults need to feel like others in a group to want to participate regularly, which could mean that awareness of a sense of relatedness within exercise groups may help non-engaged adults to get involved (Hartley & Yeowell, 2015). This suggests that a sense of familiarity in a group environment is a likely contributor to active engagement and one that should be encouraged to support the development of community empowerment.

Shared development of intrapersonal characteristics amongst a group (such as self-efficacy and competence) is discussed in community empowerment literature (e.g., Torre, 1986) as the third stage: 'using social relationships and intrapersonal features such as perceived control and competence to facilitate a positive impact of macro factors from the socio-political environment on

the individuals and the surrounding community'. As individuals experience increased competence and self-efficacy and noticed it in peers within the class environment, this shows a positive influence of Super Agers classes on intrapersonal features of psychological empowerment. The shared experience of developing competence and other intrapersonal features also contributed towards community empowerment, as an outcome of the shared development involved those already engaged to encourage others to be active across the community. This supports that the Super Agers project positively influenced community empowerment, shown by the development of all three stages of Torre's (1986) community empowerment framework, identified in those engaged.

Findings from those not engaged in Super Agers

It can be argued that no findings are findings in themselves. There were no themes relating to community empowerment and interactions with social environments from participants not engaged in Super Agers activities. According to Torre's (1986) framework for community empowerment, an individual must successfully progress through each stage to become empowered at the macro, community level. However, whilst some participants not engaged in community activity showed features of being psychologically empowered in their responses (e.g., Zimmerman, 1995), the second stage of Torre's (1986) framework, which involves interacting and utilising the mediating structures present in the social environment to be actively involved with the community, were absent in these individuals' responses. Thus, without findings supporting this second stage, as well as the final stage which involves developing and applying those individual-level psychosocial features, shared decision-making skills and problem-solving skills to positively influence the social environment, older adults in this study with no community involvement did not develop the necessary features to be collectively empowered. However, it is out of the scope of the study to suggest that community empowerment was completely non-existent in these participants. Nevertheless, the study adds valuable findings to the body of literature trying to understand how community engagement can positively facilitate how and if community empowerment is developed.

Findings from both groups of participants

A large barrier for engaging new older adults on to Super Agers classes and introducing those already engaged to new classes, was the lack of advertising of classes and timetables, awareness of facilities and services and branding; most participants were passionate about this. The lack of awareness and therefore lack of engagement ultimately contributes to limited community empowerment development, which shows how valuable these findings are for identifying how

effective Super Agers has been, in trying to encourage older adults to participate actively within their community. This is supported by Maula et al. (2019) who also found older adult participants reported that a lack of advertisement and awareness of activities available within the community was a considerable barrier to engagement in physical activity, especially for those who require external motivation to engage themselves in physical activity. However, it could also be argued that individuals who lack awareness of the services are not utilising self-management or self-seeking behaviours, and therefore are not psychologically empowered (e.g., Zimmerman, 1995; Rissel, 1994). This concern goes both ways: if Super Agers are ineffective in their ability to broadcast their services and support to their target audience, then it is difficult for older adults to be made aware of these classes, even if they use their time to search for community services for physical activity guidance.

A main part of developing community empowerment is that individuals regularly participate in community activities and socialise together, developing interpersonal elements such as a sense of shared decision-making, knowledge, and building social networks, favourable to the views and values of the community (Torre, 1986). Whilst older adults engaged in community activities might have developed community empowerment prior to the pandemic, COVID-19 negatively impacted on mediating structures which would normally contribute to the development of social networks and meaningful relationships, important factors in community empowerment models (Torre, 1986). As a result, the lack of awareness of community activities, restrictions on capacity of in-person sessions, and the move to online or pre-recorded sessions, the social interaction and physical activity within the community was limited. This inevitably restricted the maintenance and further growth of community empowerment for individuals who were already engaged, as well as those who were interested in taking part but had not yet had the chance to do so. Previous findings within the context of COVID-19 suggest that physical activity interventions at a community-level were important for participants prior to and during the pandemic, as social interaction was valued by members of a Portuguese sample (Faria et al., 2020). Therefore, making delivery of sessions, and awareness of timetables accessible to older adults is important for continuing to facilitate social interaction and develop a sense of community.

Moreover, the changing delivery format of Super Agers classes due to the pandemic was perceived as useful for some participants, who had different motives for engaging in group physical activity. For those who were motivated by the physical aspect of Super Agers classes, pre-recorded classes as well as live sessions allowed them to access the classes regularly throughout lockdown, to maintain their activity levels. Those who were motivated by socialising felt they missed out on catching up with their peers, and so preferred live sessions, but could only engage in socialising if

they were able to use and access the online technology. Those who were new to using technology, such as live video calls or even internet searching, were challenged in their continued engagement in Super Agers classes throughout the pandemic. The evidence of some participants experiencing a negative relationship with technology, indicates that technology is not for all, and not available for all to use and learn independently (Lizzo & Liechty, 2020; Nimrod, 2019).

Social identity

Findings from older adults engaged in Super Agers activities

Relating to the first stage of social identity development in Stets and Burke's (2000) framework: self-categorisation, it was noticeable that older adults engaged in regular Super Agers sessions kept consistent in their physical activity levels throughout lockdown. This was said to be due to already taking part in varied forms of physical activity, both individual and group based. Drawing on a study by Hartley and Yeowell (2015), findings showed that older adults who were provided with varied physical activity requiring different levels of effort found this helped with their adherence. Therefore, by providing a diverse selection of physical activity, as well as encouraging older adults to be active outside of classes, older adults may be more likely to maintain appropriate physical activity levels as they learn new skills and increase competence (Hughes et al., 2011; Mulgan, 2010). Additionally, this finding is supported by the first stage of social identity development (Stets & Burke, 2000), because only those engaged in Super Agers displayed desirable physical activity behaviours by making sure they are active in different ways.

Drawing on the second stage of social identity formation: social comparison (Stets & Burke, 2000), members of Super Agers sessions reported being amongst like-minded individuals, creating a positive environment for encouraging physical activity. It is likely that like-minded individuals share similar attributes and beliefs, which could mean that engagement in group physical activity is a result of shared motives for self-enhancement and positive self-esteem through being active (Stets & Burke, 2000). Like-mindedness amongst participants engaged in Super Agers activities also supports the second stage of community empowerment development, where Swift and Levin (1987) mentioned that social interaction, particularly with like-minded individuals, is an important contributing factor for increasing shared decision-making and goals within community group settings and subsequently developing community empowerment. The development of collective efficacy in Super Agers classes can also contribute to a strengthened social identity. Collective efficacy influences a group's emotions and helps individuals feel part of a group, which is an

important process in the final social comparison stage in social identity formation: providing a sense of belonging within a group membership (Stets & Burke, 2000; Kessler & Hollbach, 2005).

Increased self-esteem resulting from social group membership suggests the development of strong social identity formation (Stets & Burke, 2000). Increased self-esteem of engaged participants supports previous work by Hartley and Yeowell (2015), who found that engagement and interaction with an individual's social environment and physical environment (such as engaging in a group exercise class with peers in an exercise facility) that encourages a positive motivational climate, facilitates the achievement of self-enhancement, self-esteem and other positive health behaviours seen as attractive when looking to be part of a group. Further support is garnered from social identity literature regarding the innate motivational desire for positive self-esteem to contribute to positive self-enhancement and the development of a social identity which is valued by members and out-groups (Hogg & Abrams, 1988). This could explain why older adults who found benefits of engagement in group physical activity developed both empowerment and a strengthened social identity, despite the constraints of the pandemic.

Whilst most participants engaged in Super Agers had developed a strong social identity through their membership in this group, a minority of male participants felt outnumbered when attending sessions, and felt the classes provided by Super Agers were not 'manly' enough. Specifically, tai chi was described as having limited use for meaningful everyday tasks or developing power. Research has highlighted that men are more likely to engage in what they perceive as "masculine" environments (Bredland et al., 2018). This explains why the male participants in the current study were concerned about why there were so few men taking part in the session, and why those not engaged were more inclined to walk by themselves, go to the gym, take part in gardening and activities such as building or mending, or use equipment such as bikes or treadmills. To encourage males to continue engaging in the activities provided by Super Agers, there needs to be classes that have attractive features to older males, especially if their motives for being active involve performing 'useful' physical activity for daily tasks related to strength, such as moving furniture. Bredland et al.'s (2018) study showed similar findings. In their study male participants had deeply ingrained views of physical activity specifically to develop physical functioning, where male respondents wanted to be physically active in their everyday routines and preferred this activity to be useful in terms of essential household jobs. Therefore, widening the scope of activities available within the community, as well as encouraging older males to engage may be valuable, and could include 'male-only' classes to encourage increased attendance by older adult males in group physical activity.

Findings from both groups of participants

       The vulnerable narrative placed as a stereotype on older adults in the UK by the government during the pandemic was a negative impact of COVID-19, as discussed by participants in the current study. Swift and Chasteen (2021) synthesised previous findings around stereotypes and ageism, highlighting that as a result of societal-level pairing of the words "vulnerable" and "older people" when describing the pandemic (Ayalon et al., 2020, as cited in Swift & Chasteen, 2021), older adults were more likely to internalise negative age stereotypes and develop self-limiting views of old age, therefore risking a lack of active participation and negatively impacting wellbeing in later life (Levy, 2009; Swift et al., 2017). Therefore, it is important to acknowledge the impact of labelling and identify older adults using positive labels, to encourage physical activity engagement and independence.

Despite negative narratives from wider fields having an influence on older adults, the sense of a strong social identity formation was only present amongst the older adults engaged in Super Agers activities. Older adults who did not participate in any form of social exercise did not present any responses relating to social identity development and could have been more likely to attend to the negative narratives portrayed by the media and government during the pandemic. Those engaged in Super Agers valued the experience of being a member of the Super Agers 'group' during the pandemic and experienced the formation of a new identity after retiring. These findings support Stets and Burke's (2000) 2-stage theoretical framework in the way that a group membership encourages self-esteem and the feeling of belonging. This is also supported by Stevens et al. (2017) who found the importance of social factors and interaction with the social environment to positively influence physical activity behaviours. The fact that those engaged feel valued in their membership with other Super Agers members suggests that there is a positive social identity, which is a likely contributing factor that encourages these participants to continue being active, in the presence of their peers and 'like-minded' individuals. On another note, those not engaged in group physical activity did not discuss any themes relating to social identity features or components, which suggests that these individuals are not benefitting in this regard from being amongst others in a group format.

Study critique, practical application, and future research considerations

Strengths and insights

Previous research highlighted a need for further investigation of the views of older adults who do not attend or engage in physical activity groups (Hartley & Yeowell, 2015). The current study successfully examined older adults both engaged and not engaged in group physical activity, through the lens of empowerment and social identity, which has received limited attention in the past. This study gave a voice to older adults. Any positive feedback, concerns or barriers were brought to light by these participants. It led to an enhanced understanding of the contributing factors and individual differences for engagement in physical activity. The study added valuable findings of the effectiveness of group physical activity on empowerment and social identity, and if they were different between the groups of participants.

Another strength is the purely qualitative and longitudinal nature of the study, spanning over a period of months. This authentically captured the natural responses of older adults and their associated fluctuations in empowerment, social identity, and physical activity participation. The researcher was as much a listener for these participants and their everyday experience throughout the pandemic, as a researcher for Bridgend Council. This method of research provided for Super Agers and Bridgend Council provided a valuable and extremely raw review of their classes and support for the participants engaged, especially as the research process also started early in the pandemic. It documented an experience that has never been reviewed or discussed before in any previous literature.

Applied implications

For the future development of physical activity programmes for older adults, the study adds valuable information to the literature showing engagement in group physical activity is moderated by different motives and needs. The collaborative nature of the research project was valuable for highlighting any specific components from the theoretical frameworks and their presence in participants' responses.

For Super Agers and Bridgend County Borough Council, this study provided a review of the project from the individuals that use their services, as well as those who preferred not to engage in the activities they provide. This qualitative review provided Bridgend Council with insights directly from the participants, centred on the project's direct impact on physical activity, empowerment,

social identity, physical and mental wellbeing, during the pandemic. Any limitations discussed by participants have now been brought to light, and any strengths have been appreciated and emphasised. Super Agers can use this to inform their future practices, by working on the limitations presented, and emphasising the strengths.

Limitations

Due to the current study being conducted throughout a global pandemic, using a sample of older adults was an initial concern. Retention rate of participants fluctuated throughout the research process. For example, two participants contracted the COVID-19 virus and were unable to continue with the research process due to health concerns. Additionally, participants had to rely on their phones, emails or contact from the Super Agers project lead to keep in contact and provide the researcher with data. As many of the participants were advised to shield and completely socially isolate, as well as travel restrictions, reaching participants to collect data was reliant on their technological literacy, or confirmation that they received hard copies of diaries in the post. It is unlikely that the assistance of completing diary entries via phone call influenced these specific participants' responses, however it is likely that underreporting could have occurred from those who did not require assistance, as they were required to write down their responses rather than verbalise it.

Another limitation of the methodology involved authenticity and underreporting of responses. Individuals in the focus group may not have expressed their own definitive views of the question prompts, leading to conformity in their responses in order not to upset a majority view (Holloway & Wheeler, 2010). Additionally, individual responses from diary entries or telephone interviews may also include inflation or deflation of views towards physical activity and the provision of services in the community, particularly if emotions were heightened because of panic and uncertainty during the COVID-19 pandemic. However, participants experiencing social isolation highlighted the value of regular phone calls and tasks for them to complete over a period, as included in the longitudinal aspect of the diaries and interviews.

The conclusions reached, and applied implications offered, have emerged from a community of older adults and a physical activity project in Bridgend, Wales. Despite considering individual differences in terms of lifestyle, social preferences, occupation, and overall health, demographic, and cultural differences among the group of participants were rarely raised. Therefore, it is necessary for future research to examine factors affecting empowerment and social identity of different communities of older adults, to provide appropriate services for physical activity and group exercise.

Limitations of the thesis itself include the use of a variety of concepts and theoretical frameworks. This may have led to a lack of detail across all areas, and instead providing a superficial approach and analysis of each.

Furthermore, the use of two separate groups of participants and comparing these throughout the length of the study introduces a risk of bringing overly complex ideas and a lack of deep understanding or clarity for achieving the aims of the study: reviewing the Super Agers project and the impact on empowerment and social identity. Additionally, the literature review does not provide an exhaustive list of all relevant literature, due to the timescale and level of the project. The extensive dataset revealed several important issues which were touched on in the results (gender, stereotypes) but an in-depth exploration was beyond the scope of the study and so future research should look further into stereotypes between genders and as an older adult, as well as the effect of branding on older adults, expand the scope of this study and touch upon further issues revealed in the dataset. Related to this, is the lack of experience from the researcher in dealing with two complex theories and two separate groups of participants, throughout a pandemic.

Despite attempts to minimise bias and inconsistencies in the study, there are inconsistencies in the literature surrounding the terms, sedentary behaviour, and physical inactivity, which may impact the extent to which results from the study can be extrapolated or generalised. For example, a systematic review including over 500,000 older adults' survey responses on the prevalence of sedentary behaviour, showed that across Australia, UK, Canada, Japan, Norway, Spain, and USA, 58.9% of older adults reported sitting for over 4 hours of their day (Harvey et al., 2013). This survey focused on the term sedentary behaviour; however, it might be the case that outside of these 4 sedentary hours, older adults are incredibly active. It is therefore difficult to explain and objectively identify what an inactive individual participates in, compared to an individual that is active throughout their day whilst also displaying sedentary behaviours. In support, Thivel and Duclos's (2018) study clearly highlights that an individual may be classified as both active and sedentary and it should not be confused with those who are both inactive and sedentary. To minimise confusion, it has been stated that individuals are active when they reach physical activity recommendations for their age, which does not necessarily prevent them from also devoting a significant part of their time to sedentary behaviours (Thivel & Duclos, 2018). Statistics such as those in Harvey et al. (2013) may confuse readers and be difficult to align with studies on physical activity or sedentary behaviour, as it might not be the message that is meant to be portrayed. Careful consideration and operationalisation of these terms should be a core element of all research in this area, alongside efforts to establish consistent and clear definitions and conceptual understanding.

Furthermore, the development of a more recent definition of physical activity, when an earlier definition was widely used in previous research, might mean that previous studies may not be as generalisable or within the same boundaries of physical activity as newer studies using Piggin's (2020) definition. Both definitions highlight that physical activity involves general movement, however, Piggin (2020) confines these movements to cultural contexts influenced by certain intentions (Caspersen et al., 1985; Piggin, 2020). The current study involves investigation of older adults and their activity levels within their community, which is a culturally specific space and context. Additionally, the study investigated the influence of group physical activity on empowerment and social identity, which is supported by the newer physical activity definition (Piggin, 2020).

Another limitation of the study could involve the age ranges of participants. The WHO (2022) definition of an older adult is defined as 60 years or over. However, the premise of the study was to investigate the Super Agers Project, which specifically focuses on engaged older people '*aged 50 plus living either independently or with additional care needs*' (Super Agers Project application for funding, 2019), which is why participants younger than 60 years old were eligible to participate in the study. Despite the WHO categorising older adults as aged 60 and over, there is a lack of consistency. For example, the physical activity government guidelines for older adults are from 65 years and older (Centers for Disease Control and Prevention, CDC, 2022). This lack of standardisation regarding the age range of an older adult may lead to inconsistent findings when comparing between studies. Therefore, it is important to re-emphasise that the current study had an external driver for its defined age range, but the findings should be considered in the light of the study's inclusion criteria.

Future research recommendations

There are three main suggestions for future research that would expand the current knowledge base. First, it would be interesting to produce the same study, particularly a follow up study, 1-2 years after this study. This would highlight changes in experiences coming out of the pandemic, and a further review of the Super Agers Project to identify if changes have been made or if older adults not engaged are persuaded to become engaged. This would highlight how effective the project has been in maintaining physical activity engagement, empowerment of older adults, and building a strong social identity for the older adults involved.

Second, future research should focus specifically on either empowerment or social identity in the same study context, to build a deeper and more focused understanding of each theoretical concept and relation with engagement in group physical activity.

Third, an interesting evaluation would be examining the physical environment and the social environment, and how these may contribute to preferences for individual or group physical activity participation as an older adult. Carrying out this research in the same community, as well as different communities across the UK could bring to light how natural landscapes or the provision of services in a community influence the decision, enjoyment, and preference for engaging in different types of physical activity as an older adult.

Recommendations for Super Agers and Bridgend County Borough Council

Primarily, the council should consider increasing the advertising of classes and timetables in different formats. This will encourage older adults to develop self-seeking behaviours and engage in classes they think are valuable to them as an older adult. However, older adults cannot seek opportunities to be more active if these are not available. Making sure timetables are well advertised and accessible, using a variety of formats (not all older adults know how to use online technology), is effective for increasing engagement in group classes.

Additionally, providing older adults with more opportunities for using external feedback devices like pedometers, as well as providing education tools for these devices and for online technology, will likely benefit Super Agers' members. As the lockdowns have ended and physical support is available again, supporting these individuals with the tools found to be effective in monitoring progress and helping them to set their own challenges and goals seems to be important. This will enable these older adults to push themselves and feel more confident, therefore facilitating the development of an important mechanism for empowerment.

Supporting older adults in helping them pursue and start up their own activity session if the activity is currently not available, is another recommendation. Not only will the volunteering and responsibility involved empower older adults, but this also facilitates community empowerment. They can invite other members of the community to be active with them, thus influencing the wider population to take part in positive health behaviours. In return, Super Agers will gain more engaged members, and there will be more active older adults in the community.

Furthermore, there needs to be more chances for older adults' voices to be heard about what activities older adults in the community enjoy and feel would benefit them. Activities that are either

enjoyable or are perceived to benefit an individual physically so that they can complete other day to day tasks, are two essential factors to consider in developing activities and sessions. Making sure the environment is autonomy-supportive yet with appropriate guidance, with activities in which older adults are interested in developing skills, will be extremely effective for empowering them and will motivate them to be actively engaged in the community, through taking part in appropriate physical activity. This helps to raise their quality of life: they are taking part in activities that are valued by them, they are socialising and building networks, and improving their physical health.

Older adults already engaged in these activities feel like Super Agers has given them a 'new lease of life', reforming their identity after becoming retired. Allowing them to express and share their experiences with others encourages the development of a strong social identity, because it shows how valuable being a member of the group is. These individuals are active together and have created a special bond. Being part of Super Agers was beneficial for their mental health throughout the pandemic, particularly through friendships they have developed; The camaraderie identity is one that should be advertised and shared across the community.

Conclusion

All participants engaged in Super Agers felt a positive impact on psychological empowerment due to their participation in the group physical activity sessions. Specifically, this was experienced as group wide confidence, physical competence, physical functioning, motivation, and perceived control. For engaged participants who perceived to be given opportunities to take responsibility and volunteer to benefit their community, this facilitated and contributed towards becoming empowered.

Only older adults engaged in Super Agers activities showed developments in community empowerment and social identity, due to their active interaction with their social environment, and perception of appropriate mediating structures to facilitate their engagement. The positive impact on these individuals included self-regulation, the ability to encourage positive health behaviours on a wider level, and shared decision making for the benefit of the group. Those not engaged in any community physical activity showed no evidence of community empowerment, or social identity in the findings. These individuals lacked the shared experience of being physically active throughout the pandemic, an opportunity to learn new skills though online platforms, and missed out on social opportunities offered by taking part in a variety of physical activity outside of their regular walking routine. This therefore highlights the effectiveness and positive influence of Super Agers involvement in developing empowerment, community empowerment, and social identity.

Despite the benefits of the Super Agers project, for some participants engaged in Super Agers, COVID-19 debilitated social identity development, community empowerment, and active engagement. For example, this led to a decline in competence, physical activity levels, and empowerment, mostly for those with a preference for social exercise, and particularly older adults externally motivated through receiving instruction and guidance. However, those intrinsically motivated to be active found benefits from the pandemic in seeking opportunities to learn new skills such as online video conferencing software to continue online communication, as well as continuing online group physical activity if they had access.

However, COVID-19 created a barrier to other older adults who were not already engaged, preventing them from engaging with the community and Super Agers physical activity services during the pandemic. Participants not engaged were unable to join online classes due to exclusive access to links and passwords, as well as a limited capacity in in-person sessions when restrictions allowed. A finding that should be addressed as a concern both pre-and post-pandemic was the lack of advertising and awareness of any service providing physical activity sessions with the

community, including the Super Agers Project. This was a barrier for all participants, both those already engaged in Super Agers and those not engaged, as most participants highlighted that they did not know there were even classes available for older adults. Even those who were engaged were unaware of other classes outside of Tai Chi, that were provided by Super Agers.

All participants in the sample were active in some way or another (not engaged preferred walking, whereas those engaged walked outside of their Super Agers classes). This suggests that the effectiveness of physical activity participation of older adults is facilitated by accessibility to opportunities, community services and physical environments so that older adults can fulfil their individual needs: socialising, improving physical functioning, or for inherent satisfaction. Being involved in group physical activity improves physical activity levels and should be considered for an individual to benefit from being empowered and valued in a group setting.

As this qualitative study was completed during a pandemic, the findings are unique yet account for different circumstances older adults may face when attempting to take part in physical activity in a group. The findings add to the literature; they clearly identify unique features of empowerment and social identity experienced (or not) by this purposive sample of older adults in South Wales and highlight that being involved in group physical activity is effective, but only when there is appropriate support, advertisement, and accessibility. The study also highlights older adults having different preferences for their own physical activity engagement, which may not involve being part of a group.

References

Ajzen, I. (1991). The theory of planned behaviour. *Organizational behavior and human decision processes*, *50*(2), 179-211.

Amineh, R. J., & Asl, H. D. (2015). Review of constructivism and social constructivism. *Journal of Social Sciences, Literature and Languages*, *1*(1), 9-16.

Antonucci, T., Ashton-Miller, J., Brant, J., Falk, E., Halter, J., Hamdemir, L., Konrath, S., Lee, J., McCullough, W., Persad, C., Seydel, R., Smith, J., & Webster, N. (2012). The right to move: a multidisciplinary lifespan conceptual framework. *Current Gerontology and Geriatrics Research,* 1-11.

APA Dictionary of Psychology. Dictionary.apa.org. (2022). Retrieved 12 May 2022, from https://dictionary.apa.org/individual-differences.

Arifin, S. R. M. (2018). Ethical considerations in qualitative study. *International Journal of Care Scholars*, *1*(2), 30-33.

Aroni, S. (1999). On Issues Concerning Research in the University Setting. *Architectural Science Review*, *42*(2), 117-120. https://doi.org/10.1080/00038628.1999.9696863

Bae, S. (2020). The association between health-related factors, physical and mental diseases, social activities, and cognitive function in elderly Koreans: a population-based cross-sectional study. *Japanese Psychogeriatric Society, 20,* 654-662.

Bandura, A., Ross, D., & Ross, S. A. (1963). Vicarious reinforcement and imitative learning. *The Journal of abnormal and social psychology*, *67*(6), 601.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review*, *84*(2), 191-215. https://doi.org/10.1037/0033-295x.84.2.191

Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current directions in psychological science*, *9*(3), 75-78.

Bauman, A., Merom, D., Bull, F., Buchner, D., & Fiatarone Singh, M. (2016). Updating the evidence for physical activity: summative reviews of the epidemiological evidence, prevalence, and interventions to promote "active aging". *The gerontologist, 56,* 268-280.

Belcher, V., Fried, T., Agostini, J., & Tinetti, M. (2006). Views of older adults on patient participation in medication-related decision making. *Journal of general internal medicine, 21,* 298.

Berry, T., Strachan, S., & Verkooijen, K. (2014). The relationship between exercise schema and identity. *International Journal of Sport and Exercise Psychology*, *12*(1), 49-63.

Bethancourt, H., Rosenberg, D., Beatty, T., Arterburn, D. (2014). Barriers to and facilitators of physical activity program use among older adults. *Clinical Medicine & Research, 12,* 10-20.

Blondell, S., Hammersley-Mather, R., & Veerman, J. (2014). Does physical activity prevent cognitive decline and dementia?: A systematic review and meta-analysis of longitudinal studies. *BMC public health*, *14*(1), 1-12.

Boulton, E., Horne, E., Todd, C. (2017). Multiple influences on participating in physical activity in older age: developing a social ecological approach. *The Authors Health Expectations, 21,* 239-248.

Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P.M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA Handbook of Research Methods in Psychology* (Vol. 2., pp. 57-71). Washington, DC: American Psychological Association.

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. Qualitative Research in Sport, Exercise and Health, 11(4), 589–597. https://doi.org/10.1080/2159676X.2019.1628806

Braun, V., & Clarke, V. (2021). Can I use TA? Should I use TA? Should I not use TA? Comparing reflexive thematic analysis and other pattern-based qualitative analytic approaches. Counselling and Psychotherapy Research, 21(1), 37–47. DOI: https://doi.org/10.1002/capr.12360

Braun, V., Clarke, V., & Weate, P. (2016). Using thematic analysis in sport and exercise research. In B. Smith & A. C. Sparkes (Eds.), Routledge handbook of qualitative research in sport and exercise (pp. 191–205). Routledge.

Bredland, E., Söderström, S., & Kjersti, V. (2018). Challenges and motivators to physical activity faced by retired men when ageing: a qualitative study. *BMC Public Health, 18,* 627.

Brewer, M. (1991). The social self: On being the same and different at the same time. *Personality and social psychology bulletin*, *17*(5), 475-482.

Caillouet, K., & Cosio-Lima, L. (2019). Association of health empowerment and handgrip strength with intention to participate in physical activity among community-dwelling older adults. *Experimental Gerontology, 121,* 99-105.

Caspersen, C. J., Powell, K. E., & Christenson, G. M. (1985). Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. *Public health reports, 100*(2), 126–131.

How much physical activity do older adults need?. CDC. (2022). Retrieved 15 May 2022, from https://www.cdc.gov/physicalactivity/basics/older_adults/index.htm.

Chang, A., Fritschi, C., & Kim, M. (2013). Sedentary behaviour, physical activity, and psychological health of Korean older adults with hypertension. Effect of an empowerment intervention. *Research in Gerontological Nursing, 6*, 81-88.

Charmaz, K. (2004). Premises, Principles, and Practices in Qualitative Research: Revisiting the Foundations. *Qualitative Health Research*, *14*(7), 976-993. https://doi.org/10.1177/1049732304266795

Chase, J. (2015). Interventions to increase physical activity among older adults: a meta-analysis. *The Gerontologist, 55*, 706-718.

Chodzko-Zajko, W., Proctor, D., Fiatarone Singh, M., Minson, C., Nigg, C., Salem, G., & Skinner, J. (2009). *American College of Sports Medicine,* 1510-1530.

Conger, J., & Kanungo, R. (1988). The empowerment process: integrating theory and practice. *Academy of management review, 13,* 471-482.

Cordier, R., & Wilson, N. (2013). Community-based men's sheds: promoting male health, wellbeing, and social inclusion in an international context. *Health Promotion International, 29*, 483-493.

Curran, K., Drust, B., Murphy, R., Pringle, A., & Richardson, D. (2016). The challenge and impact of engaging hard-to-reach populations in regular physical activity and health behaviours: an examination of an English premier league 'football in the community' men's health programme. *Royal Society for Public Health,* 14-22.

Dacey, M., Baltzell, A., & Zaichkowsky, L. (2008). Older adults' intrinsic and extrinsic motivation toward physical activity. *American journal of health behavior*, *32*(6), 570-582.

DeCoster, V. A., & George, L. (2005). An empowerment approach for elders living with diabetes: A pilot study of a community-based self-help group—The diabetes club. *Educational Gerontology*, *31*(9), 699-713.

Dikaios, E., Sekhon, H., Allard, A., Vacaflor, B., Goodman, A., Dwyer, E., ... & Bukhari, S. N. (2020). Connecting during COVID-19: a protocol of a volunteer-based telehealth program for supporting older adults' health. *Frontiers in psychiatry*, *11*, 1289.

Dionigi, R., Horton, S., & Bellamy, J. (2011). Meanings of aging among older Canadian women of varying physical activity levels. *Journal of Leisure Sciences, 33,* 402-419.

Dionigi, R. (2015). Stereotypes of aging: their effects on the health of older adults. *Journal of Geriatrics.*

Faria, M., & Faria, M., & Lozano, S. (2020). Aging and health literacy: site of proximity to the community. DOI: 10.1007/978-3-030-41494-8_32.

Fine, G., Denzin, N., & Lincoln, Y. (1995). Handbook of Qualitative Research. *Contemporary Sociology*, *24*(3), 416. https://doi.org/10.2307/2076550

Finlay, L., & Gough, B. (Eds.). (2008). *Reflexivity: A practical guide for researchers in health and social sciences*: John Wiley & Sons.

Fleig, L., Pomp, S., Schwarzer, R., Lippke, S. (2013). Promoting exercise maintenance: how interventions with booster sessions improve long-term rehabilitation outcomes. *Rehabilitation Psychology, 58,* 323-333.

Franco, M., Tong, A., Howard, K., Sherrington, C., Ferreira, P., Pinto, R., & Ferreira, M. (2015). Older people's perspectives on participation in physical activity: a systematic review and thematic synthesis of qualitative literature. *British Journal of Sports Medicine, 49*, 1268-1276.

Frosch, D., & Kaplan, R. (1999). Shared decision making in clinical medicine: past research and future directions. *American Journal of Preventive medicine, 17,* 285-294.

Galli, N., & Vealey, R. (2008). "Bouncing Back" from Adversity: Athletes' Experiences of Resilience. *The Sport Psychologist*, *22*(3), 316-335. https://doi.org/10.1123/tsp.22.3.316

Garry, J., Diamond, J., & Whitley, T. (2002). Physical Activity Curricula in Medical Schools. *Academic Medicine*, *77*(8), 818-820. https://doi.org/10.1097/00001888-200208000-00011

Gellert, P., Ziegelmann, J., Warner, L., & Schwarzer, R. (2011). Physical activity   intervention in older adults: does a participating partner make a difference? *European Journal of Ageing, 8,* 211. DOI: https://doi.org/10.1007/s10433-011-0193-5

Ghafouri, R., & Ofoghi, S. (2016). Trustworthiness and rigor in qualitative research. *International Journal of Advanced Biotechnology and Research*, *7*(4), 1914-1922.

Gibbs, G. (1988). *Learning by doing: A guide to teaching and learning methods*. London: Further Education Unit.

Gitlin, L., Winter, L., Dennis, M., Hodgson, N., Hauck, W. (2010). A biobehavioral home-based intervention and the well-being of patients with dementia and their caregivers: the COPE randomized trial. *American Journal of Medicine Association* 304, 983-991.

Guterman, S. (2006). Specialty Hospitals: A Problem Or A Symptom?. *Health Affairs*, *25*(1), 95-105. https://doi.org/10.1377/hlthaff.25.1.95

Haggis, C., Sims-Gould, J., Winters, M., Gutteridge, K., & McKay, H. (2013). Sustained impact of community-based physical activity interventions: key elements for success. *BMC Public Health, 13,* 892.

Hamer, M., & Stamatakis, E. (2013). Screen-based sedentary behaviour, physical activity, and muscle strength in the English longitudinal study of ageing. *PloS one*, 8.

Hardcastle, S., & Taylor, A. (2005). Finding and exercise identity in an older body: "it's redefining yourself and working out who you are". *Psychology of Sport and Exercise, 6,* 173-188.

Hartley, S., & Yeowell, G. (2015). Older adults' perceptions of adherence to community physical activity groups. *Ageing & Society*, *35*(8), 1635-1656.

Harvey, J. A., Chastin, S. F., & Skelton, D. A. (2013). Prevalence of sedentary behaviour in older adults: a systematic review. *International journal of environmental research and public health*, *10*(12), 6645–6661. DOI: https://doi.org/10.3390/ijerph10126645

Harwood, C., & Knight, C. (2009). Stress in youth sport: A developmental investigation of tennis parents. *Psychology of sport and exercise*, *10*(4), 447-456.

Hawley-Hague, H., Horne, M., Campbell, M., Demack, S., Skelton, D., & Todd, C. (2013). Multiple levels of influence on older adults' attendance and adherence to community exercise classes. *The Gerontologist, 54,* 599-610.

Hill, D., Brown, G., Lambert, T., Mackintosh, K., Knight, C., & Gorczynski, P. (2021). Factors Perceived to Affect the Wellbeing and Mental Health of Coaches and Practitioners Working Within Elite Sport. *American Psychological Association*, 10, 504–518

Hogg, M. A., & Abrams, D. (1988). *Social identifications: A social psychology of intergroup relations and group processes*. Taylor & Francis/Routledge.

Hogg, M., Abrams, D., Otten, S., & Hinkle, S. (2004). The social identity perspective: intergroup relations, self-conception, and small groups. *Small Group Research, 35,* 246-276.

Houlihan, B., Brody, M., Everhart-Skeels, S., Pernigotti, D., Burnett, S., Zazula, J., Green, C., Hasiotis, S., Belliveau, T., Seetharama, S., Rosenblum, D., Jette, A. (2017). Randomised trial of a peer-led, telephone-based empowerment intervention for persons with chronic spinal cord injury improves health self-management. *Archives of Physical Medicine and Rehabilitation, 98,* 1067-1076.

Hudson, J., Day, M., Oliver, E. (2015). A 'new life' story or 'delaying the inevitable'? exploring older people's narratives during exercise uptake. *Psychology of Sport and Exercise, 16,* 112-120.

Hwang, T. J., Rabheru, K., Peisah, C., Reichman, W., & Ikeda, M. (2020). Loneliness and social isolation during the COVID-19 pandemic. *International psychogeriatrics*, *32*(10), 1217–1220. https://doi.org/10.1017/S1041610220000988

Joshi, S. (2020). Assessing the impact of COVID-19 lockdown on physical activity and psychological status in individuals of various age groups using google forms.

Kalfoss, M. (2016). Gender differences in attitudes to ageing among Norwegian older adults. *Open Journal of Nursing, 6*, 255-266.

Kari, N., & Michels, P. (1991). The Lazarus project: the politics of empowerment. *American Journal of Occupational Therapy, 45,* 719-725.

Kasmel, A., & Andersen, P. (2011). Measurement of community empowerment in three community programs in Rapla (Estonia). *International Journal of Environmental Research and Public Health, 8,* 799-817.

Katula, J., Sipe, M., Rejeski, W., & Focht, B. (2006). Strength training in older adults: An empowering intervention. *American College of Sports Medicine, 38,* 106-111.

Katsumata, Y., Arai, A., Tomimori, M., Ishida, K., Lee, R., & Tamashiro, H. (2011). Fear of falling and falls self-efficacy and their relationship to higher-level competence among community-dwelling senior men and women in Japan. *Geriatrics Gerontology, 11,* 282-289.

Kilpatrick, M., Hebert, E., & Jacobsen, D. (2002). Physical motivation: a practitioner's guide to self-determination theory. *Journal of Physical education, Recreation & Dance, 73*, 36-41.

Kim, B. (2001). *Social Constructivism*. In M. Orey (Ed.), Emerging perspectives on learning, teaching, and technology. Retrieved from: "http://epltt.coe.uga.edu/index.php?title=Social_Constructivism"

Kim, M. (2014). Doing social constructivist research means making empathetic and aesthetic connections with participants. *European Early Childhood   Education Research Journal, DOI:* http://dx.doi.org/10.1080/1350293X.2014.947835

Kim, A., Park, S., Kim, S., & Fontes-Comber, A. (2020). Psychological and social outcomes of sport participation for older adults: a systematic review. *Ageing & Society, 40,* 1529-1549.

King, A., Haskell, W., Young, D., Oka, R., & Stefanick, M. (1995). Long term effects of varying intensities and formats of physical activity on participation rates, fitness, and lipoproteins in men and women aged 50-65 years. *Circulation,* 91, 2596-2604.

King, A., Rejeski, J., & Buchner, D. (1998). Physical activity interventions targeting older adults: a critical review and recommendations. *American Journal of Preventive Medicine, 15*, 316-333.

Kitto, S., Chesters, J., & Grbich, C. (2008). Quality in qualitative research. *Medical Journal Of Australia*, *188*(4), 243-246. https://doi.org/10.5694/j.1326-5377.2008.tb01595.x

Knight, C., Haslam, S., & Haslam, C. (2010). In home or at home? How collective decision making in a new care facility enhances social interaction and wellbeing amongst older adults. *Ageing and Society, 30,* 1393.

Kosteli, M., Williams, S., & Cumming, J. (2016). Investigating the psychosocial determinants of physical activity in older adults: a qualitative approach. *Psychology and Health, 31*, 730-749.

Labonte, R., & Robertson, A. (1996). Delivering the goods, showing our stuff: The case for a constructivist paradigm for health promotion research and practice. *Health Education Quarterly, 23,* 431-447.

Lachman, M., Lipsitz, L., Lubben, J., Castaneda-Sceppa, C., & Jette, A. (2018). When adults don't exercise behavioural strategies to increase physical activity in sedentary middle-aged and older adults. *Innovation in Aging, 2,* 1-12.

Laverack, G., & Wallerstein, N. (2001). Measuring community empowerment: a fresh look at organisational domains. *Health Promotion International, 16*, 179-185.

Lapidot-Lefler, N., & Barak, A. (2015). The benign online disinhibition effect: Could situational factors induce self-disclosure and prosocial behaviors? *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, *9*(2).

Levinger, P., Panisset, M., Dunn, J., Haines, T., Dow, B., Bachelor, F., Biddle, S., Duque, G., & Hill, K. (2020). Exercise intervention outdoor project in the community for older people-Results from the ENJOY senior exercise park project translation research protocol. *BMC Geriatrics,* 20, 446.

Li, W., Chen, Y., Yang, R., & Tsauo, J. (2008). Effects of exercise programmes on quality of life in osteoporotic and osteopenic postmenopausal women: a systematic review and meta-analysis. *Clinical rehabilitation, 23,* 888-896.

Liffiton, J., Horton, S., & Baker, J. (2012). Successful ageing: how does physical activity influence engagement with life? *European Review of Aging and Physical Activity, 9,* 103-108.

Lincoln, Y., & Guba, E. (1994). RSVP: We are pleased to accept your invitation. *Evaluation Practice*, *15*(2), 179-192. https://doi.org/10.1016/0886-1633(94)90008-6

Lizzo, R., & Liechty, T. (2020). The Hogwarts running club and sense of community: A netnography of a virtual community. *Leisure Sciences,* DOI:10.1080/01490400.2020.1755751

Löckenhoff, C., De Fruyt, F., Terracciano, A., McCrae, R., De Bolle, M., & Costa, P. et al. (2009). Perceptions of aging across 26 cultures and their culture-level associates. *Psychology And Aging*, *24*(4), 941-954. https://doi.org/10.1037/a0016901

Magnus, E. (2022). The time-geographic diary method in studies of everyday life. In K. Ellegård, *Time Geography in the Global Context* (pp. 135-154). Routledge. Retrieved 12 May 2022, from.

Maier, H., & Klumb, P. (2005). Social participation and survival at older ages: is the effect driven by activity content or context? *European Journal of Aging, 2,* 31-39.

Mattioli, A., Sciomer, S., Cocchi, C., & Maffei, S. (2020). "Quarantine during COVID-19 outbreak changes in diet and physical activity increase the risk of cardiovascular disease". *Nutrition, Metabolism & Cardiovascular Diseases*, DOI: https://doi.org/10.1016/j.numecd.2020.05.020

Maula, A., LaFond, N., Orton, E., Iliffe, S., Audsley, S., Vedhara, K., & Kendrick, D. (2019). Use it or lose it: a qualitative study of the maintenance of physical activity in older adults. *BMC Geriatrics, 19,* 349.

McClelland, D. C. (1975). *Power: The inner experience.* Irvington.

McMellon, C. A., & Schiffman, L. G. (2002). Cybersenior empowerment: How some older individuals are taking control of their lives. *Journal of Applied Gerontology*, *21*(2), 157-175.

Mendes de Leon, C. (2005). Social engagement and successful aging. *European Journal of Aging, 2,* 64-66.

Meyrick, J. (2006). What is Good Qualitative Research?. *Journal Of Health Psychology*, *11*(5), 799-808. https://doi.org/10.1177/1359105306066643

Milne. H., Wallman, K., Guilfoyle, A., Gordon, S., & Courneya, K. (2008). Self-Determination Theory and Physical Activity among Breast Cancer Survivors. *Journal of Sport & Exercise Psychology*, *30*(1), 23–38. DOI: https://doi.org/10.1123/jsep.30.1.23

Mitchell, M. (2011). A reflection on the emotional potential of qualitative interviewing. *British Journal of Midwifery, 19*(10), 653-657.

Morse, J., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification Strategies for Establishing Reliability and Validity in Qualitative Research. *International Journal Of Qualitative Methods*, *1*(2), 13-22. https://doi.org/10.1177/160940690200100202

Nario-Redmond, M., Biernat, M., Eidelman, S., & Palenske, D. (2004). The social and personal identities scale: a measure of the differential importance ascribed to social and personal self-categorisations. *Self and Identity, 3*, 143-175.

National Institute of Aging. (2019). Social isolation, loneliness in older people pose health risks. Retrieved from URL: https://www.nia.nih.gov/news/social- isolation-loneliness-older-people-pose-health-risks.

Netz, Y., Wu, M., Becker, B., & Tenenbaum, G. (2005). Physical activity and psychological well-being in advanced age: a meta-analysis of intervention studies. *Psychology and Ageing, 20,* 272-284.

Nikolajsen, H., Richardson, E. V., Sandal, L. F., Juul-Kristensen, B., & Troelsen, J. (2021). Fitness for all: how do non-disabled people respond to inclusive fitness centres? *BMC Sports Science, Medicine, and Rehabilitation*, *13*(1), 1-12.

Nithyashri, J., & Kulanthaivel, G. (2012). Classification of human age based on Neural Network using FG-NET Aging database and Wavelets. *Fourth International Conference on Advanced Computing,* p 1-5, DOI: 10.1109/ICoAC.2012.6416855.

Nutbeam. D., & Muscat, D. (2021). Health Promotion Glossary 2021. *Law, Probability & Risk: A Journal of Reasoning Under Uncertainty.*, *36*(6), 1578–1598. https://doi.org/10.1093/heapro/daaa157

Nyman. (2019). Which behaviour techniques are effective in promoting physical   activity among older people with dementia? A call for research into three   unexplored avenues. *Journal of Aging and Physical Activity, 27,* 441-445.

Ornelas, J. (1997). Community psychology: Origins, fundamentals, and areas of intervention. *Psychological analysis*, *15* (3), 375-388.

Park, C., & Park, Y. (2013). Validity and reliability of Korean version of health empowerment scale (K-HES) for older adults. *Asian Nursing Research, 7,* 142-148.

Peeter, J. (2012). Social work and sustainable development: towards a social-ecological practice model. *Journal of Social Intervention: Theory and   Practice, 21,* 5-26.

Pibernik-Okanovic, M., Prasek, M., Poljicanin-Filipovic, T., Pavlic-Renar, I., & Metelko, Z. (2004). Effects of an empowerment-based psychosocial intervention on quality of life and metabolic control in type 2 diabetic patients. *Patient education and counselling*, *52*(2), 193–199. DOI: https://doi.org/10.1016/s0738-3991(03)00038-7

Cassandra Phoenix, C. (2017). Physical Activity and Ageing. In P. J, M. L & W. M, *The Routledge Handbook of Physical Activity Policy and Practice*. Routledge.

Piggin, J. (2020). What Is Physical Activity? A Holistic Definition for Teachers, Researchers and Policy Makers. *Frontiers In Sports And Active Living*, *2*. https://doi.org/10.3389/fspor.2020.00072

Pistrui, D., Fahed-Sreih, J., Huang, W., & Welsch, H. (2008). Entrepreneurial led family business development in post-war Lebanon. In *United States Association for Small Business and Entrepreneurship. Conference Proceedings* (p. 847). United States Association for Small Business and Entrepreneurship.

Rahiem, M. (2020). The Emergency Remote Learning Experience of University   Students in Indonesia amidst the COVID-19 Crisis. *International Journal of Learning, Teaching and Educational Research*, 19, 1-26.

Rahman, R., Hudson, J., Thøgersen-Ntoumani, C., & Doust, J. (2015). Motivational processes and well-being in cardiac rehabilitation: a self-determination theory perspective. *Psychology, health & medicine, 20,* 518-529.

Rappaport, J. (1987). Terms of empowerment/exemplars of prevention: toward a   theory for community psychology. *American Journal of Community   Psychology, 15,* 121-148.

Rasmussen, R., Overgaard, C., BØggild, H., & Thomsen, L. (2018). An explorative evaluation study of the mechanisms underlying a community-based fitness centre in Denmark- why do residents participate and keep up healthy activities? *Health and Social Care Community, 26,* 898-907.

Rejeski, W., & Focht, B. (2002). Aging and physical disability: on integrating group and individual counselling with the promotion of physical activity. *American College of Sports Medicine, 30,* 166-170.

Rissel C. (1994). Empowerment: the holy grail of health promotion? *Health promotion international, 9*, 39-47.

Robinson, J. (2020). "Using focus groups". In *Handbook of Qualitative research in education.* Cheltenham, UK: Edward Elgar Publishing.
DOI: https://doi.org/10.4337/9781788977159.00040

Ryan, R., & Deci, E. (2000). Intrinsic and extrinsic motivation: Classic definitions and new directions. *Contemporary Education Psychology, 25,* 54-67.

Sak, G., Rothenfluh, F., & Schulz, P. (2017). Assessing the predictive power of psychological empowerment and health literacy for older patient's participation in health care: a cross-sectional population-based study. *BMC Geriatrics, 17,* 59.

Sandelowski, M. (2000). Focus on research methods: Whatever happened to qualitative description? *Research in Nursing and Health, 23,* 334-340.

Sandelowski M. (2010). What's in a name? Qualitative description revisited. *Research in nursing & health*, *33*(1), 77–84. https://doi.org/10.1002/nur.20362

Shaghaghi, A., Bhopal, R. S., & Sheikh, A. (2011). Approaches to Recruiting 'Hard-To-Reach' Populations into Re-search: A Review of the Literature. *Health promotion perspectives*, *1*(2), 86–94. https://doi.org/10.5681/hpp.2011.009

Schermuly, C., Büsch, V., & Graßmann, C. (2017). Psychological empowerment, psychological and physical strain, and the desired retirement age. *Personnel Review, 46,* 950-969.

Schinke, R., Smith, B., & McGannon, K. (2013). Pathways for community research in sport and physical activity: criteria for consideration. *Qualitative Research In Sport, Exercise And Health*, *5*(3), 460-468. doi: 10.1080/2159676x.2013.846274

Schoonenboom, J., Tattershall, C., Miao, Y., Stefanov, K., & Aleksieva-Petrova. (2006). The role of competence assessment in the different stages of competence development. *Handbook on information technologies for education and training*, 317-341.

Shearer, N., & Reed, P. (2004). Empowerment: reformulation of a non-rogerian concept. *Nursing Science Quarterly, 17,* 253-259.

Shearer, N., Fleury, J., Ward, K., & O'Brien, A. (2012). Empowering interventions for older adults. *Western Journal of Nursing Research, 34,* 24-51.

Shin, D., Kim, C., & Choi, Y. (2016). Effects of an empowerment program for self-management among rural older adults with hypertension in South Korea. *Australian Journal of Rural Health, 24*, 213-219.

Silveira, S. L., Richardson, E. V., & Motl, R. W. (2021). Informing the design of exercise programs for persons with multiple sclerosis who use wheelchairs: a qualitative inquiry of perceived components. *Disability and rehabilitation*, *43*(13), 1838-1848.

Smith, N., Littlejohns, L. B., & Roy, D. (2003). *Measuring community capacity: State of the field review and recommendations for future research*. Health Canada.
Smith, B., & McGannon, K. R. (2018). Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. *International review of sport and exercise psychology*, *11*(1), 101-121.

Smith, B., & Sparkes, A. (2017). *Routledge Handbook of Qualitative Research in sport and exercise.* Abingdon, OX.

Smith, B., & Sparkes, A. (2009). Narrative analysis and sport and exercise psychology: understanding lives in diverse ways. *Psychology of Sport and Exercise, 10,* 279-288.

Sommers-Flanagan, J., & Sommers-Flanagan, R. (2018). *Counseling and psychotherapy theories in context and practice: Skills, strategies, and techniques*. John Wiley & Sons.

Son, J., Nimrod, G., West, S., Janke, M., Liechty, T., & Naar, J. (2021). Promoting older adults' physical activity and social well-being during COVID-19. *Leisure Sciences, 43,* 287-294.

Sparkes, A. C., & Smith, B. (2014). *Qualitative research methods in sport, exercise and health: From process to product.* Routledge/Taylor & Francis Group.

Spreitzer, G (1995). Psychological empowerment in the workplace: dimensions, measurement, and validation. *Academy of Management Journal, 38,* 1442-1465.

Spreitzer, G. (1996). Social structural characteristics of psychological empowerment. *Academy of Management Journal*, *39*, 483.

Stets, J., & Burke, P. (2000). Identity theory and social identity theory. *Social Psychology Quarterly,* 224-237.

Stevens, M., Rees, T., Coffee, P., Steffens, N., Haslam, S., & Polman, R. (2017). A social identity approach to understanding and promoting physical activity. *Journal of Sports Medicine, 47,* 1911-1918.

Stevenson, H., & Burke, M. (1992). Bureaucratic logic in new social movement   clothing: the limits of health promotion research. *Canadian Journal of Public   Health, 83*, 47-53.

Stokols, D. (1996). Translating social ecological theory into guidelines for community health promotion. *American Journal of Health Promotion, 10*, 282-298.

Strachan, S., Brawley, L., Spink, K., & Glazebrook, K. (2010). Older adults' physically active identity: relationships between social cognitions, physical   activity, and satisfaction with life. *Psychology of Sport and Exercise, 11,* 114-121.

Stretcher, V., DeVellis, M., Becker, M., & Rosenstock, I. (1986). Self-efficacy and the health belief model. *Health Education Quarterly*, *13*, 73-92.

Swift, H., & Chasteen, A. (2021). Ageism in the time of COVID-19. *Group Processes & Intergroup Relation.*

Swift, C., & Levin., G. (1987). Empowerment: an emerging mental health technology. *Journal of primary prevention, 8,* 71-94.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. *The social psychology of intergroup relations,* 33, 47.

Tarrant, M., & Butler, K. (2011). Effects of self-categorization on orientation towards health. *British Journal of Social Psychology*, *50*(1), 121-139

Taylor, A., Cable, N., Faulkner, G., Hillsdon, M., Narici, M., & Van Der Bij, A. (2004). Physical activity and older adults: a review of health benefits and the effectiveness of interventions. *Journal of Sport Science, 22*.

Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. In W. Rogers, & C. Willig (Eds.), *The SAGE Handbook of Qualitative Research in Psychology* (2nd ed., pp. 17-37). London: SAGE Publications.

Thivel, D., & Duclos, M. (2018). Inactive runners or sedentary active individuals?. *Journal Of Sports Sciences*, *37*(1), 1-2. https://doi.org/10.1080/02640414.2018.1477420

Thomas, K., & Velthouse, B. (1990). Cognitive elements of empowerment: an 'interpretive' model of intrinsic task motivation. *Academy of management review, 15,* 666-681.

Thompson, S. C., & Schlehofer, M. M. (2008). Perceived control. *Health Behaviour Constructs: Theory, Measurement, and Research. DOI: dccps.cancer.gov/brp/constructs/perceived_control/pc5. html*.

Torre, D. (1986). *Empowerment: structured conceptualisation and instrument development.* [PhD, Cornell University].

Townsend, N., Wickramasinghe, K., Williams, J., Bhatnagar, P., & Rayner, M. (2015). Physical activity statistics 2015.

Tracy, S. (2010). Qualitative quality: Eight "Big-Tent" Criteria for Excellent Qualitative Research. *Qualitative Inquiry, 16,* 837-851.

Tremblay, M., Aubert, S., Barnes, J., Saunders, T., Carson, V., & Latimer-Cheung, A. et al. (2017). Sedentary Behavior Research Network (SBRN) – Terminology Consensus Project process and outcome. *International Journal Of Behavioral Nutrition And Physical Activity*, *14*(1). https://doi.org/10.1186/s12966-017-0525-8

Vahia, I., Blazer, D., Smith, G., Karp, J., Steffens, D., Forester, B., Tampi, R., Agronin, M., Jeste, D., & Reynolds, C. (2020). COVID-19, mental health, and ageing: a need for new knowledge to bridge science and service. *American Journal of Geriatric Psychiatry, 28,* 695-697.

Wallerstein, N. (1992). Powerless, empowerment, and health: implications for health promotion programs. *American Journal of Health Promotion, 6,* 197-205.

Weiler, R., Chew, S., Coombs, N., Hamer, M., & Stamatakis, E. (2012). Physical activity education in the undergraduate curricula of all UK medical schools. Are tomorrow's doctors equipped to follow clinical guidelines?. *British Journal Of Sports Medicine*, *46*(14), 1024-1026. doi: 10.1136/bjsports-2012-091380

Whaley, D., & Ebbeck, V. (2002). Self-schemata and exercise identity in older adults. *Journal of Aging and Physical Activity, 10,* 245-259.

World Health Organization. (2002). Active ageing: a policy framework. World Health Organization. https://apps.who.int/iris/handle/10665/67215

World Health Organization. Office of World Health Reporting. (2002). The World health report : 2002 : reducing risks, promoting healthy life : overview. World Health Organization. https://apps.who.int/iris/handle/10665/67454

World Health Organization. (2021). Physical activity fact sheet. World Health Organization. https://apps.who.int/iris/handle/10665/346252.

First International Conference on Health Promotion, Ottawa, 21 November 1986. World Health Organisation (2022). Retrieved 12 May 2022, from https://www.who.int/teams/health-promotion/enhanced-wellbeing/seventh-global-conference/community-empowerment.

Ageing. World Health Organisation (2022). Retrieved 12 May 2022, from https://www.who.int/health-topics/ageing#tab=tab_1.

Yi, X., Pope, Z., Gao, Z., Wang, S., Pan, F., Yan, J., Liu, M., Wu, P., Xu, J., & Wang, R. (2016). Associations between individual and environmental factors and habitual physical activity among older Chinese adults: a social-ecological perspective. *Journal of Sport and Health Science, 5,* 315-321.

Zimmerman, M., Israel, B., Schulz, A., & Checkoway, B. (1992). Further explorations in empowerment theory: an empirical analysis of psychological empowerment. *American Journal of Community Psychology, 20,* 707-727.

Zimmerman, M. (1995). Psychological empowerment: issues and illustrations. *American Journal of Community Psychology, 23,* 581-599.

Zimmerman, M., & Rappaport, J. (1988). Citizen participation, perceived control, and psychological empowerment. *American Journal of Community Psychology, 16,* 725-750.

Zumeta, L., Oriol X., Telletxea, S., Amutio, A., & Basabe, N. (2016). Collective efficacy in sports and physical activities: perceived emotional synchrony and shared flow. *Frontiers in Psychology, 6,* 1960.

Appendices

<u>Appendix 1. Ethical approval form</u>

APPLICATION FOR ETHICAL COMMITTEE APPROVAL OF A RESEARCH PROJECT

All research with human participants, or on data derived from research with human participants that is not publicly available, undertaken by staff or students linked with A-STEM or the College of Engineering more widely must be approved by the College of Engineering Research Ethics Committee or NHS REC. Your application must be saved as: [applicant first name] _ [applicant last name] _[date of submission], if you submit more than one application suffix the subsequent file name with a letter e.g. John_Smith_01-01-1905a. Failure to assign the correct file name will result in the application being returned to sender. Amendment documents 'file name' must include your previous approval number: [applicant first name] _ [applicant last name] _[approval_number: ########] e.g. e.g. John_Smith_approval_number:JS222929. Failure to assign the correct file format will result in the application being returned to sender.

RESEARCH MAY ONLY COMMENCE ONCE 'FULL-ETHICAL APPROVAL' HAS BEEN OBTAINED AND AN APPROVAL NUMBER HAS BEEN ISSUED

The researcher(s) should complete the form, with clear plain English and with as much detail as will be necessary for the committee members to make an ethical decision (failure will result in the application being returned to sender). If a student researcher is the main applicant, the form should be completed in consultation with the project supervisor. If the applicant is a student, both the supervisor and student will need to sign the form. The completed form should be submitted electronically to coe-researchethics@swansea.ac.uk by the 1st of the month that you wish the application to be reviewed.

Applicants will be informed of the Committee's decision via an email containing an official College of Engineering Ethics Committee Decision letter, to the applicant/supervisor.

1. TITLE OF PROJECT
Building communities and changing identities: qualitative evaluation of the impact of the Super Agers project on older adults and community social dynamics.

2. DATE OF PROJECT COMMENCEMENT AND PROPOSED DURATION OF THE STUDY
13th July 2020 - 31st June 2021

3. NAMES AND STATUS OF THE RESEARCH TEAM
State the names of research group members including the supervisor(s), if applicable. If this includes students, state the status of the student(s) in the group i.e., undergraduate, postgraduate, staff or other (please specify). State clearly, which team member is the principal investigator.
Miss Kimberley Farrugia (Postgraduate research student; Principal investigator) Dr. Joanne Hudson (Staff, Primary Academic Supervisor) Dr. Denise Hill (Staff, Secondary Academic supervisor)

4. RATIONALE AND REFERENCES
Describe in no more than 300 words the background to the proposed project. Please use language suitable for a lay audience.
The physical and psychosocial benefits of regular physical activity (PA) for older adults within a social setting, are well-established (e.g., Bauman et al., 2016). However, physical inactivity is a global concern, with older adults representing one of the least physically active subgroups within society, which in turn, can increase the strain on the NHS (Taylor et al., 2004). Therefore, responding to this public health concern, The Super Agers Project (delivered by Bridgend County Borough Council) provides PA interventions and social support for older adults in Cwm Taf Morgannwg community; focusing on enhancing empowerment and social identity through engagement within community activities, to facilitate sustainable community behavioural change. There is support for empowerment as a driving force for sustainable PA behaviours, through the development of self-regulation, decision-making skills, self-efficacy, and competence (Conger & Kanungo, 1988; Zimmerman, 1995; Torre, 1986). The person-environment interaction is another important component of PA behaviour, as once a group of individuals becomes psychologically empowered, there is a sense of shared decision-making, and development of community empowerment. As a result, individuals are more likely to be motivated to maintain active engagement in community PA with others (Sak et al., 2017). However, there is some debate regarding the constructs of psychological and community empowerment, due to their complex multi-dimensional nature and ambiguous definitions (Rissel, 1994). Evidence also suggests, that for a positive social environment, having a strong social identity (through community engagement) is important for driving sustainable community behaviours. Social identity refers to a person's knowledge that they belong to a social category or group (Hogg & Abrams, 1988), by developing a "sense of who they are", based on this group membership (Mcleod, 2008). The proposed project intends to address the limited knowledge around the link between empowerment and social identity, as well as their role in enhancing PA in older adults and contribute towards future sustainable PA interventions. The findings may also fuel future recommendations for actively involving those not engaged within the community, to further

improve PA behaviours and self-regulation, as a collective group of older adults. The study also intends to investigate any lasting impacts of COVID-19 restrictions on social dynamics within the community, especially as little is known about the effects of a period of quarantine and a pandemic on community dynamics, social interaction, and PA behaviours (Mattioli et al., 2020).

5. OBJECTIVES

State the objectives of the project, i.e., one or more precise statements of what the project is designed to achieve.

This research is going to be carried out in the context of the Super Agers Project. This is a collaborative project aiming to increase older adults' mobilisation, led by Bridgend County Borough Council, and funded by Public Health Wales Healthy and Active Fund.

OVERALL AIMS

The first aim of this project is to explore how the Super Agers Project is impacting on psychological and community empowerment, and social identity for those engaged in the project activities.

The second aim is to explore factors that influence the success of the Super Agers project as it attempts to enhance empowerment and social identity for older adults in the community, to help them increase and maintain physical activity.

OBJECTIVES

1. Examine how COVID-19 and its restrictions have impacted on sustainability of physical activity, mobilisation, empowerment level, perception of social identity and the community's social dynamics.

2. Identify a sustainable procedure to engage hard to reach sectors of the population eligible for the Super Agers Project.

3. Investigate whether there is a directional link between empowerment and social identity and how this influences involvement in the Super Agers Project.

4. Use qualitative methods to highlight the features of empowerment and social identity between those engaged, hard to reach, and not engaged on the Super Agers project.

6.1 STUDY DESIGN

Outline the chosen study design (e.g., cross-sectional, longitudinal, intervention, RCT, questionnaire etc)

A mixed-longitudinal, qualitative, and narrative approach will be adopted, with the use of diary entries, semi-structured interviews and focus groups for data collection.

6.2. STUDY DESIGN

- *state the number and characteristics of study participants*
- *state the inclusion criteria for participants*
- *state the exclusion criteria for participants and identify any requirements for health screening*
- *state whether the study will involve vulnerable populations (i.e., young, elderly etc.)*
- *state the requirements/commitments expected of the participants (e.g., time, exertion level etc)*

Participants will include 10-15 older adults within the Cwm Taf Morgannwg community, with a mix of males and females.

INCLUSION CRITERIA:
Must be at least 50 years old
Physically vulnerable (frail) adults are eligible for participation.
Eligibility includes older adults socially isolating due to COVID-19 shielding
Older adults who are eligible and have been approached to engage in Super Agers project but who are not yet participating.
Older adults engaged with the Super Agers project
Older adults within the community of Cwm Taf Morgannwg

EXCLUSION CRITERIA:
Participants will be excluded from the project if they:
Are not living in the Cwm Taf Morgannwg community
Are younger than 50 years of age
Is not part of the Super Agers (SA) project / or have not been contacted to participate?

6.3. PARTICIPANT RECRUITMENT How and where will participants be recruited? How will you ensure that these methods of recruitment do not compromise the ability of the research participant to freely consent to and withdraw from the study?

Individual participants will not be contacted directly for purposes of recruitment by members of the research team, nor will the gatekeeper (SA project lead) know who has and has not contacted the researcher for participation in the study. In addition, the participants' right to withdraw at any point will be emphasised.

Participants will be contacted through the SA project lead on the primary researcher's behalf. Any interested participants will be provided with the primary researcher's contact details to contact them should they wish to participate in the study. The study requirements will then be introduced to the participants by the lead researcher who will provide them with consent forms and an information sheet about the study (see below). These will be distributed via email due to COVID restrictions of providing in-person briefings.

6.4 DATA COLLECTION METHODS
- describe all the data collection/experimental procedures to be undertaken
- state any dietary/food supplementation that will be given to participants and provide full details in Section 6.5
- state the inclusion of participant information and consent forms (and assent forms where necessary in appendices
- Where you are asking research participants to undertake physical activity consider appropriate health screening processes. Note that the ACSM have updated their guidelines in a consensus statement dated 2015.

Data will be collected via individual video call or telephone call for interviews due to COVID-19 lockdown and safety restrictions. Diaries will be completed remotely via a Word document sent to participants via email.

The study design is qualitative and mixed-longitudinal due to carrying out open-ended diaries for a 4-week period, individual semi-structured interviews, and a focus group.

DIARIES

Diary entries will include a schedule of 6 questions for participants to answer every Monday-Friday. They can then expand their answer beyond the questions provided, should they wish to. These will explore empowerment and social identity using theoretical frameworks and scales adapted into open-ended questions to produce qualitative data, related to the SA project and understandable to older adults (Zimmerman, 1995; Conger & Kanungo, 1988; Speitzer, 1995; Nario-Redmond, Biernat, Eidelman, & Palenske, 2004). To emphasise, the empirical scales and measures used will only be a framework to guide the development of study questions and will not be administered in full.

For those engaged in the SA project, there will be 6 questions to answer in the morning. These will be prospective, preferably before they take part in any SA activities. Another set of 6 questions will be answered in the evening. This will be more of a reflexive account of the day, relating to a change in empowerment or identity over time. The participants will be required to fill in these diary questions consecutively for 4 weeks (MONDAY-FRIDAY).

INTERVIEWS

Individual semi-structured interviews will be used to expand on Diary entries. Participants will be invited to interview after they have sent their diaries back to the SA primary researcher. Each interview will be individualised and based on the diary entries made by that participant; thus, no standard interview schedule will be used but the issues discussed will be those addressed in the diaries (empowerment, social identity, activity, community and so on).

FOCUS GROUP

All participants will be invited to attend an online focus group where they will have the opportunity to provide shared experiences and discuss views on social dynamics both before and during the pandemic. (It is important to note that all participants will also need to attend an individual interview as well as complete the diaries. This is so we have individual accounts as well as emerging and different information once they discuss as a group).

The focus group will begin with a prompt of 6 questions, focusing on similar issues raised in diaries and interviews. However, even though there is a skeleton to what should ideally be discussed (i.e social dynamics, community views and stereotypes, discussion about the Super Agers project and any benefits or concerns they may want to discuss), the participants are free to take the focus group discussion in a direction that they feel is worth discussing.

It is important to note that permission will be obtained before voice recording the interviews and further transcribing verbatim.

Time required to take part in study:
Diaries: 15 mins per diary entry (5 days a week for 4 weeks).
Interviews: 1 hour
Focus group: 1 hour

Diary schedules and interview schedules can be found in APPENDIX

6.5 DATA ANALYSIS TECHNIQUES
- briefly describe the techniques that will be used to analyse the data

Qualitative Analysis

Thematic analysis will be used to identify themes within the raw data collected from diaries, interviews and focus groups (Braun & Clarke, 2012). An inductive approach to theme development and coding will be used, and this will therefore be an iterative approach through repeated engagement with the data. Emergent themes in a hierarchical structure will be developed as an outcome of the coding process (Terry, Hayfield, Clarke, & Braun, 2017).

6.6. STORAGE AND DISPOSAL OF DATA AND SAMPLES
- describe the procedures to be undertaken for the storage and disposal of data and samples
- identify the people who will have the responsibility for the storage and disposal of data and samples
- identify the people who will have access to the data and samples
- state the period for which the raw data will be retained on study completion (normally 5 years, or end of award. But data should not be retained for longer than is necessary for the purposes of the research project)
- Please confirm that where data is being stored away from Swansea University (for example on cloud-based services) that procedures are still in line with GDPR legislation

All data and consent forms will be in electronic form and will be stored on a password-secure computer owned by Kimberley Farrugia with each participant identified by a number rather than by name.

The data will only be accessible by Kimberley Farrugia, Dr Hudson, and Dr Hill.

All participants will be made aware that the data will be kept confidential and will be provided with their allocated participant number to use if they wish to withdraw their data.
Data will be held for a maximum period of 5 years (following Swansea University requirements) after the completion of the research project. Upon completion of the 5-year period, anonymous electronic data files will be deleted.

The audio recordings from the interviews will be made on a password-protected device and transferred to a password-protected computer owned by the lead researcher. Upon transfer, the raw recordings of interviews will be deleted and destroyed. Recordings will be used for transcription and any personal information will be excluded when results of the project are disseminated.

6.7 HOW DO YOU PROPOSE TO ENSURE PARTICIPANT CONFIDENTIALITY AND ANONYMITY?

Participants' diary, interview and focus group data, such as relevant quotes will remain anonymous by taking out information that is specific to the individual (such as name).

As previously discussed in section 6.6, participants, SA project lead and the secondary researchers will not know who is taking part in the study due to the use of number identifiers. Within the focus

group, there will be an agreement and expectation that information will not be shared outside that meeting.

All participants will be reminded before any of the data collection processes, as well as in the information sheet, that their data will remain confidential, and their identity will not be revealed during completion or dissemination of project.

Interviews will take place online with only the interviewer and participant present, and the recruitment process ensures anonymity (see above).

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7. LOCATION OF THE PREMISES WHERE THE RESEARCH WILL BE CONDUCTED
- list the location(s) where the data collection and analysis will be carried out
- identify the person who will be present to supervise the research at that location
- If a first aider is relevant, please specify the first aider and confirm that they possess the first aid qualifications appropriate for this form of research

Data collection will be carried out using a Word document emailed to participants for diaries, video call for interviews and via Zoom for the focus group. (If participants prefer writing on pen and paper, there is also an opportunity for them to print the diary and then scan it back to the primary researcher).

All data collection will be carried out remotely. All participants will complete data collection in their own homes.

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8. POTENTIAL PARTICIPANT RISKS OR DISCOMFORTS FOR THE ENTIRE PROTOCOL (not mentioned above in section 6.8)
- identify any potential physical risk or discomfort that participants might experience because of participation in the study
- identify any potential psychological risk or discomfort that participants might experience because of participation in the study
- Identify the referral process/care pathway if any untoward events occur

Psychological risks

There is minimal risk to participants during this study. However, it is acknowledged that participants may feel uncomfortable reporting their emotions and perceptions of their experiences with ageing. They might also feel slightly uncomfortable writing down their emotions regarding their experience engaged on the Super Agers Project. However, participants will be reassured prior to interviews that their data will be anonymous and no one else apart from the researchers mentioned will see their raw data. Their involvement in the study will not be known to anyone outside the lead researcher (see above). Participants will also be told that they are able to remove themselves from the research project at any time. Any data that they have provided to the research team will also be destroyed if this is what the participant desires. It is anticipated that the likelihood of any participants experiencing any distress is extremely low, and, if this is experienced, its severity will be low.

If the participant experiences distress, the interviewer (primary researcher) will follow the procedures on the *management of distressed participants during interviews* (attached below). This procedure includes stopping the interview immediately; deciding whether the participant can continue the study; provide an opportunity for the participant to talk; contacting the supervisor; and providing details for local counselling (this can be found on www.ageuk.org). The SA project lead will also provide further information to the researcher to obtain specific support networks linked

with Bridgend County Council should a participant experience such distress and have a need for local support.

9.1. HOW WILL INFORMED CONSENT BE SOUGHT?
Will any organisations be used to access the sample population?
Will parental/coach/teacher consent be required? If so, please specify which and how this will be obtained and recorded?

Consent will be sought via email confirmation or verbal (recorded) consent. This means there will be evidence of their consent to take part in the project.

Each participant will receive an information sheet, and an opportunity for questions via email or verbally will be offered. The purpose and nature of the study will be reiterated before the interviews begin.

9.2 INFORMATION SHEETS AND CONSENT/ASSENT FORMS

Please ensure that your forms are written in clear, simple language enabling research participants to fully understand the project.

Have you included a participant information sheet for the participants of the study?
YES (APPENDIX 1)
Have you included a parental/guardian information sheet for the parents/guardians of the study?
N/A
Have you included a participant consent (or assent) form for the participants in the study? YES (APPENDIX 2)
Have you included a parental/guardian consent form for the participants of the study? N/A

10. IF YOUR PROPOSED RESEARCH IS WITH VULNERABLE POPULATIONS (E.G., CHILDREN), HAS AN UP-TO-DATE DISCLOSURE AND BARRING SERVICE (DBS) CHECK (PREVIOUSLY CRB) IF UK, OR EQUIVALENT NON-UK, CLEARANCE BEEN REQUESTED AND/OR OBTAINED FOR ALL RELEVANT RESEARCHERS?

If appropriate, please provide a list below including the name of the researcher and confirming that they have an up-to-date DBS check. Please also confirm the type of check (i.e., basic/enhanced).

N/A

11. HUMAN TISSUE SAMPLES

Does your research involve the collection or storage of human tissue samples? If yes, give details of sample collection, anonymisation, storage (including location) and disposal.
Please note that college ethics committee approval is not currently sufficient to comply with legislation for the storage of HTA relevant material. If the sample you intent to collect is listed as a relevant material (https://www.hta.gov.uk/policies/list-materials-considered-be-'relevant-material'-under-human-tissue-act-2004), seek NHS approval.

N/A

12. COVID-19 DECLARATION

- Confirm that you have considered the latest (date of submission) UK government COVID-19 guidance and restrictions.
- State how you are accounting for the UK government COVID-19 guidance and restrictions in your proposed application, specifically relating the participant – researcher interaction and equipment hygiene.

Latest UK government advice: https://www.gov.uk/guidance/coronavirus-covid-19-information-for-the-public

I confirm I have considered the latest guidance in my research.
-Instead of face-to-face interviews with the participants, all data collection will be carried out remotely online and I will not be personally meeting any participants.

13. APPLICANT DECLARATION

Please read the following declarations carefully and provide details below of any ways in which your project deviates from these. Having done this, each research member listed in section 2 is required to sign where indicated (unless otherwise stated).

I have ensured that there will be no active deception of participants or the ethics committee
I have ensured that no data will be personally identifiable
I have ensured that no participant should suffer any undue physical or psychological discomfort (unless specified and justified in methodology)
I certify that there will be no administration of potentially harmful drugs, medicines, or foodstuffs (unless specified and justified in methodology)
I certify that the participants will not experience any potentially unpleasant stimulation or deprivation (unless specified and justified in methodology)
I have attached a local Risk Assessment Form
If a student applicant, I certify that any ethical considerations raised by this proposal have been discussed in detail with my supervisor
I certify that the above statements are true

Lead applicant signature (on behalf of all co-applicants)   Date: 30/10/2020
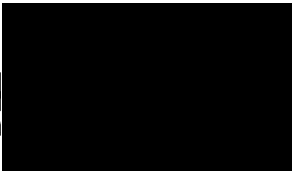
Where submitted electronically the committee will accept the lead supervisor/researcher's email of the application as confirmation that both they and other researchers on the project have discussed and are happy to adhere to the above.

14. IF STUDENT APPLICANT, SUPERVISOR'S APPROVAL (if applicable)

Supervisor's signature:…

……………………………………Date:…28/10/20……………………….

Appendix 2. Participant information sheet
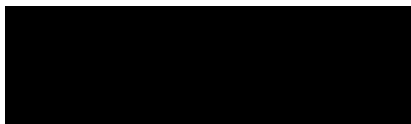
PARTICIPANT INFORMATION SHEET

Project Title:
Building communities and changing identities: A qualitative evaluation of the impact of the Super Agers project on older adults and community social dynamics.

Contact Details:
Project lead:
Kimberley Farrugia: ██████████████

Contact Supervisor:
Dr. Joanne Hudson: ████████████████████████.

1. Invitation Paragraph

I would like to invite you to take part in a Welsh Government Funded research project, led by Kimberley Farrugia (Postgraduate Research Student, Swansea University).

I have been asked by Bridgend Council to conduct research on the experiences of those engaged with the Super Agers project compared to those who have chosen not to take part.

2. What is the purpose of the study?

The purpose is to identify the differences and similarities in the experiences of those who are engaged on the Super Agers Project compared to those have chosen not to take part. We want to see how we can adjust the pathways and processes for engagement so that we reach all the community, even those who are 'hard to reach'. We want to find out how people are engaging with the Super Agers project, and the benefits of engaging. Equally, we want to find out the reasons why some people are not involved in the project.

3. Why have I been chosen?

You have been chosen due to being invited to take part in the Super Agers Project scheme.

4. What will happen to me if I take part?

You will first be sent over (either via email or hard copy) a set of questions- almost like a diary- to complete in the morning and in the evening of each weekday for a 4-week period. These questions are open-ended and relate to your experiences of being engaged on the Super Agers project or in your everyday life if not taking part in Super Agers.

You will then be asked to attend an informal interview (over video or telephone) to discuss more deeply if there was anything you found interesting while writing your diary.

Finally, you will be invited to complete a focus group (via video/conference call) to share your experiences and highlight anything you raised in your diaries. This will involve a group of older people from your community.

In terms of data collection, completion of diaries and focus group would be the most important aspect, so if you have other competing priorities, the individual interview could potentially remain optional. However,
an ideal situation would be for you to complete the diaries, interview and focus group.

5. What are the possible disadvantages of taking part?

There are no foreseeable disadvantages, however, we are asking for a commitment of your time. As an example, the diaries will take a maximum of 30 MINUTES to complete each day, the interview will last 1 HOUR maximum, and the Focus group will last 1 HOUR maximum. However, all the data collection will take place remotely.

You need to be reassured, that taking part is your choice and you are free to withdraw from the study at any point.

Please be assured that as your involvement in the study will only be known to the lead researcher, and your data will be confidential, that your involvement in the project will not have bearing on your time on the Super Agers Project.

6. What are the possible benefits of taking part?

From participating in the study, not only will we get a deeper understanding of the Super Agers project and its outcomes, but we can also provide and develop evidence-based recommendations to ensure more individuals are able to benefit from taking part in social engagement and physical activity within their community.

7. Will my taking part in the study be kept confidential?

Yes, any information you provide will be kept strictly confidential. Participants' names will not be given in any reports of the findings, and personal information will not be linked in any way to your data. The Data Protection Act (2018) will be applied as below. You will be given a numerical identifier as a participant in the study so researchers and Super Agers project staff will have no knowledge of who has, and who has not, consented to participate. Again, it is important to stress that your involvement in the study will not be known to anyone else.

8. What if I have any questions?

Further information can be obtained from the researcher contact stated above. The project has been approved by the College of Engineering Research Ethics Committee at Swansea University. If you have any questions regarding this, any complaint, or concerns about the ethics and governance of this research please contact the Chair of the College of Engineering Research Ethics Committee, Swansea University: coe-researchethics@swansea.ac.uk. The institutional contact for reporting cases of research conduct is Registrar & Chief Operating Officer Mr Andrew Rhodes. Email: researchmisconduct@swansea.ac.uk. Further details are available at the Swansea University webpages for Research Integrity. http://www.swansea.ac.uk/research/researchintegrity/.

9) What do I do next if I am happy to take part in the project…

Please contact the lead researcher and complete the consent form below!

Please feel free to read further Data Protection information provided below.

Data Protection and Confidentiality
Your data will be processed in accordance with the Data Protection Act 2018 and the General Data Protection Regulation 2016 (GDPR). All information collected about you will be kept strictly confidential. Your data will only be viewed by the researcher/research team.

All electronic data will be stored on a password-protected computer file on the postgraduate's laptop. All paper records will be stored in a locked filing cabinet in Engineering East A109, Bay Campus. Your consent information will be kept separately from your responses to minimise risk in the event of a data breach.

Please note that the data we will collect for our study will be made anonymous, once all data has been collected, thus it will not be possible to identify and remove your data later, should you decide to withdraw from the study. Therefore, if at the end of this research you decide to have your data withdrawn, please let us know before you leave.

Please note that if data is being collected online, once the data has been submitted online you will be unable to withdraw your information.

Data Protection Privacy Notice
The data controller for this project will be Swansea University. The University Data Protection Officer provides oversight of university activities involving the processing of personal data and can be contacted at the Vice Chancellors Office.

Your personal data will be processed for the purposes outlined in this information sheet. Standard ethical procedures will involve you providing your consent to participate in this study by completing the consent form that has been provided to you.

The legal basis that we will rely on to process your personal data will be processing is necessary for the performance of a task carried out in the public interest. This public interest justification is approved by the College of Engineering Research Ethics Committee, Swansea University.

The legal basis that we will rely on to process special categories of data will be processing is necessary for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes.

How long will your information be held?
We will hold any personal data and special categories of data for 5 years. Data will then be securely deleted but retaining it for 5 years will enable us to return to the data, should any queries arise.

What are your rights?
You have a right to access your personal information, to object to the processing of your personal information, to rectify, to erase, to restrict and to port your personal information. Please visit the University Data Protection webpages for further information in relation to your rights.

Any requests or objections should be made in writing to the University Data Protection Officer: -

University Compliance Officer (FOI/DP)
Vice-Chancellor's Office
Swansea University
Singleton Park
Swansea
SA2 8PP
Email: dataprotection@swansea.ac.uk

How to make a complaint
If you are unhappy with the way in which your personal data has been processed, you may in the first instance contact the University Data Protection Officer using the contact details above.

If you remain dissatisfied, then you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at: -

Information Commissioner's Office,
Wycliffe House,
Water Lane,
Wilmslow,
Cheshire,
SK9 5AF
www.ico.org.uk

Appendix 3. Participant consent form

PARTICIPANT CONSENT FORM

Building communities and changing identities: A qualitative evaluation of the impact of the Super Agers project on older adults and community social dynamics.

Contact Details:
Project lead: Kimberley Farrugia

███████████████████

Supervisor contact: Dr. Joanne Hudson

███████████████████

Please initial box

I confirm that I have read and understood the information sheet dated//20 (version number ……………………) for the above study and have had the opportunity to ask questions.

☐

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected.

☐

I understand that sections of any of data obtained may be looked at by responsible individuals from the Swansea University or from regulatory authorities where it is relevant to my taking part research. I give permission for these individuals to have access these records.

☐

I understand that data I provide may be used in reports and academic publications in anonymous fashion

☐

I agree to take part in the above study.

☐

_____   _____   _____
Name of Participant   Date   Signature

_____   _____   _____
Name of Person taking consent   Date   Signature

_____   _____   _____
Researcher   Date   Signature

PARTICIPANT DISTRESS
Procedures to follow in the event of participant distress during Interviews/Focus Groups

Prior to the interview:
Prior to conducting interviews, pilot interviews will be conducted in liaison with the supervisor. These interviews will provide the researcher with an opportunity to identify any questions that might lead to distress and where appropriate, take steps to rephrase or change these questions.

Before conducting the first formal interview, the student will meet with their supervisor to discuss to procedures that are in place in case a participant becomes distressed during an interview. The supervisor will also ensure the student feels prepared for the interview. The supervisor must be satisfied that the researcher is competent in conducting interviews before giving approval for the commencement of data collection.

Students will inform their supervisor where and when they are completing all interviews and in turn the supervisor will ensure the student has a means of contacting them when they are conducting interviews.

During the interview:
At the beginning of the interview the student will remind the participant that they can stop the interview at any time, that they can choose not to answer questions, and that there are no right or wrong answers to questions (so there is no fear of 'saying the wrong thing').

Once the interview begins, the researcher will be required to be aware of any potential indications of distress (e.g., withdrawing, visible upset, declining to answer numerous questions, shifting in seat, looking away from the interviewer, asking for the interview to end) and should air on the side of caution in all instances. If there is even the slightest indication that participants might be distressed students must immediately follow the procedure below:

The recording will be immediately stopped, and the participant will be asked if they are ok. At this point the participant will be asked if they want to take a break/end the interview/continue talking – the participant's decision will be final. If the participant decides to take a break and continue with the interview, confirmation will be sought that the participant is comfortable continuing, and they will be reminded there is no penalty for withdrawing.

If the participant wishes to continue but remains distressed, the interviewer will make the decision to draw the interview to an end. At this point, the interviewer will commit to providing the participant with an opportunity to talk and ensure the participant is not visibly distressed when leaving the interview.

If the participant remains distressed and the researcher does not feel capable of managing the situation, they will contact their respective supervisor who will be always available during interviews by phone contact. Depending on the situation, the supervisor will either provide guidance to the student, speak directly to the participant over the phone, or make attempts to go and meet with the researcher and the participant.

If the participant has become distressed at any point in the interview, the student will ensure the participant has the contact details of the rest of the research team and remind them that they are free to contact any member of the research team if there is anything further, they would like to discuss.

The interviewer will also offer to provide the participants with a list of local contacts (e.g., counselling services, sport psychology services) if they would like them.

Following the interview, the student will debrief the interview with their supervisor and (if necessary) other senior members of the research team. A written record of the incident and the procedures followed will be made.

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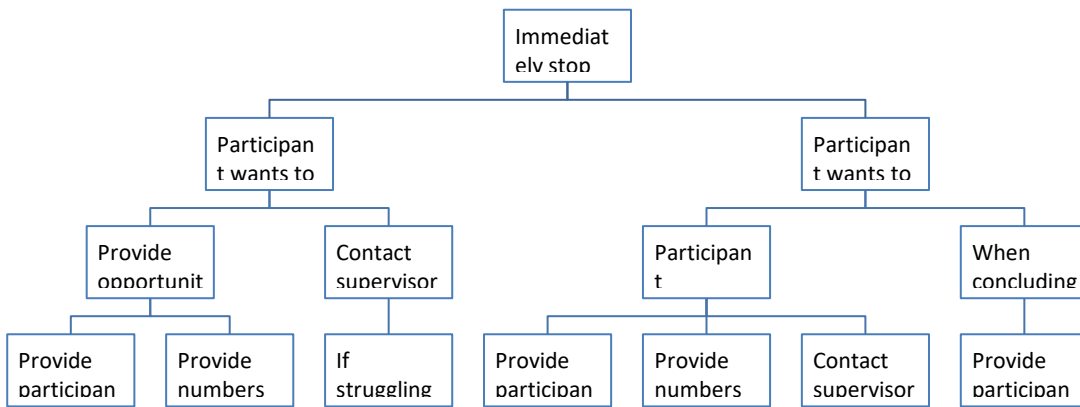
If participant has become distressed at any point you must debrief with supervisor and write up the steps that were taken throughout to manage the situation.

Name: _____

Age: _____

The area you live in: _____

What **Super Agers Activity** do you take part in each week? :
_____

What other activities do you take part in within the community? (e.g., Walking, choir, church, Tai Chi etc .,)

Any information you offer in the following diary will remain confidential.

PLEASE COMPLETE:

3 DIARY ENTRIES PER WEEK
1. Start of the week
2. Middle of the week
3. Weekend

FOR 4 WEEKS

Please feel free to either write on this sheet or on another piece of paper.

PLEASE FEEL FREE TO ADD ANY OTHER COMMENTS YOU THINK ARE RELEVANT ON EXTRA PAPER- Have you had any interesting experiences?

WEEK 1

DIARY ENTRY 1:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include, whether you attended a Super Agers Activity or another community activity

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

TASK 2:
1. *What did you enjoy doing the most today? and briefly identify why it was enjoyable*

_____
_____
_____
_____
_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
_____
_____
_____
_____
_____

3. *Was there anything important to you that happened today? [If so, what, and why?]*

_____
_____
_____

_____
_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

How good I felt about myself today	My involvement within the community	What motivated me to carry out the activities I did today	Socialising with others	

_____
_____
_____
_____
_____
_____
_____
_____

DIARY ENTRY 2:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a Super Agers Activity or another community activity today

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

TASK 2:

1. *What did you enjoy doing the most today?* and briefly identify why it was enjoyable

_____
_____
_____
_____
_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today?* [If so, what, and why?]

_____
_____
_____
_____
_____
_____

3. *If you took part in a community activity this week, what was your experience during it? Was it mostly positive or negative?*
(If there is another lockdown whilst completing this diary: Could you write about your feelings when you last attended a session?)

_____
_____
_____
_____

_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

What made me get up and do the things I did	Being active and exercising	How in control of my day I felt	Socialising with other Super Agers

_____
_____
_____
_____
_____
_____
_____
_____

DIARY ENTRY 3:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a Super Agers Activity or another community activity

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

TASK 2:

1. *What did you enjoy doing the most today?* and briefly identify why it was enjoyable

_____
_____
_____
_____
_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
_____
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_____
_____
_____

3. *If you took part in a community activity today, what was your experience during it? Was it mostly positive or negative?*
(If there is another lockdown whilst completing this diary: Could you write about your feelings when you last attended a session?)

_____
_____
_____
_____

_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

View of myself	How independent I was today	Mixing with other Super Agers	How confident I felt today	_____
				_____
				_____

_____
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WEEK 2

DIARY ENTRY 1:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a Super Agers Activity or another community activity

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

			148	

TASK 2:

1. *What did you enjoy doing the most today?* and briefly identify why it was enjoyable

_____
_____
_____
_____
_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
_____
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_____

3. *Was there anything important to you that happened today? [If so, what, and why?]*

_____
_____
_____
_____
_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

How good I felt about myself today	What motivated me to carry out the activities I did today	How positive or negative I am feeling about the future	Socialising with other Super Agers

_____
_____
_____
_____
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_____

DIARY ENTRY 2:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a Super Agers Activity or another community activity

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

			150	

TASK 2:

1. *What did you enjoy doing the most today?* and briefly identify why it was enjoyable

_____
_____
_____
_____
_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
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_____

3. *Was there anything important to you that happened today? [If so, what, and why?]*

_____
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4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

How good I felt about myself today	What motivated me to carry out the activities I did today	How positive or negative I am feeling about the future	Socialising with other Super Agers

_____
_____
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DIARY ENTRY 3:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a Super Agers Activity or another community activity

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

			152	

TASK 2:

1. *What did you enjoy doing the most today? and briefly identify why it was enjoyable*

_____
_____
_____
_____
_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
_____
_____
_____
_____
_____

3. *Was there anything important to you that happened today? [If so, what, and why?]*

_____
_____
_____
_____
_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

View of myself	My involvement in the community	Mixing with other Super Agers	What motivated me to get through the day	_____ _____

_____
_____
_____
_____
_____
_____
_____
_____

WEEK 3:

DIARY ENTRY 1:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a Super Agers Activity or another community activity

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

			154	

1. *What did you enjoy doing the most today? and briefly identify why it was enjoyable*

_____
_____
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_____
_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
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_____

3. *Was there anything important to you that happened today? [If so, what, and why?]*

_____
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_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

What made me get up and do the things I did	What did I notice about the things other people said or did	How I feel about getting older	Socialising with other Super Agers

_____
_____
_____
_____
_____
_____
_____
_____

DIARY ENTRY 2:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a Super Agers Activity or another community activity

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	What I did	WITH WHO	WHERE	How has COVID affected this activity?

TASK 2:

1. *What did you enjoy doing the most today?* and briefly identify why it was enjoyable

_____
_____
_____
_____
_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
_____
_____
_____
_____
_____

3. *Was there anything important to you that happened today? [If so, what, and why?]*

_____
_____

_____
_____
_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

How I saw myself today	How Super Agers has impacted on my goals	How a community activity impact on the rest of my day	Socialising with other Super Agers

_____
_____
_____
_____
_____
_____
_____
_____

DIARY ENTRY 3:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a Super Agers Activity or another community activity

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

TASK 2:

1. *What did you enjoy doing the most today?* and briefly identify why it was enjoyable

_____
_____
_____
_____
_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
_____
_____
_____
_____
_____

3. *If you took part in a community activity today, what was your experience during it? Was it mostly positive or negative?*

_____
_____
_____
_____
_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

Socialising with others	How excited I felt about doing tasks today	How I felt in myself	My wellbeing	

_____
_____
_____
_____
_____
_____
_____
_____

WEEK 4:

DIARY ENTRY 1:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a Super Agers Activity or another community activity

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

TASK 2:

1. *What did you enjoy doing the most today?* and briefly identify why it was enjoyable

_____
_____
_____
_____
_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
_____
_____
_____
_____
_____

3. *If you took part in a community activity today, what was your experience during it? Was it mostly positive or negative?*

_____
_____
_____
_____
_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

Meaning of Super Agers to me	Getting out and about	How confident I felt in my abilities	How aware of my actions I was	_____

_____
_____
_____
_____
_____
_____
_____
_____

DIARY ENTRY 2:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a Super Agers Activity or another community activity

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	What I did	WITH WHO	WHERE	How has COVID affected this activity?

TASK 2:

1. *What did you enjoy doing the most today?* *and briefly identify why it was enjoyable*

_____
_____
_____
_____
_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
_____
_____
_____
_____
_____

3. *Was there anything important to you that happened today? [If so, what, and why?]*

_____
_____
_____
_____
_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

How I saw myself today	How the activities I took part in affected the rest of my day	Learning new skills	Socialising with other Super Agers	_____

_____
_____
_____
_____

_____
_____
_____
_____

DIARY ENTRY 3:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a Super Agers Activity or another community activity

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

TASK 2:
1. *What did you enjoy doing the most today?* and briefly identify why it was enjoyable

_____
_____
_____

_____
_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today?* [If so, what, and why?]
_____
_____
_____
_____
_____
_____

3. *If you took part in a community activity today, what was your experience during it? Was it mostly positive or negative?*
_____
_____
_____
_____
_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

How excited I felt about doing tasks today	How I felt in myself	Socialising with others	My physical abilities

_____
_____
_____
_____
_____
_____
_____
_____

Name:

Age:

The area you live in:

What type of activities do you take part in within the community?: (e.g., walking, choir, church etc.,)

Any information you offer in the following diary will remain confidential.

PLEASE COMPLETE:

3 DIARY ENTRIES PER WEEK
1. Start of the week
2. Middle of the week
3. Weekend

FOR 4 WEEKS
(Feel free to fill in the weeks/days that are suitable to you, don't feel obliged to carry this out consecutively!)

Please feel free to either write in the **lines provided** or **on another piece of paper** if you want to write more!

WEEK 1

DIARY ENTRY 1:

What day of the week are you completing this on?

TASK 1: Please fill in the table by listing the things you did today

Feel free to include if you attended a community activity today

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?
6am				

TASK 2:
1. *What did you enjoy doing the most today? and briefly identify why it was enjoyable*

_____
_____
_____
_____

2. *Was there anything that stood out to you- Was there anything that you were excited about, or nervous about, when you woke up today? [if so, what, and why?]*

_____
_____
_____

_____
_____
_____

3. *Was there anything important to you that happened today? [If so, what, and why?]*
_____
_____
_____
_____
_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

_____

Something made me get out and about today	I was active and exercising	I was doing activities with others around me	I set goals or was working towards goals

_____
_____

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DIARY ENTRY 2:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include if you attended a community activity today

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

TASK 2:
1. *What did you enjoy doing the most today? and briefly identify why it was enjoyable*

_____
_____
_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
_____
_____
_____
_____
_____

3. *If you took part in a community activity today, what was your experience during it? Was it mostly positive or negative?*

_____
_____

_____
_____
_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

How good I felt about myself today	My involvement within the community today	What motivated me to carry out the different things I did today	My thoughts on learning new skills today

_____

_____

_____

Socialising with others	How confident I felt today	What others said about getting older	Feeling valued

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

DIARY ENTRY 3:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a community activity

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

1. *What did you enjoy doing the most today? and briefly identify why it was enjoyable*

_____
_____
_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____

_____

_____

3. *If you took part in a community activity today, what was your experience during it? Was it mostly positive or negative?* _____

_____

_____

_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

How good I felt about myself today	My involvement within the community today	What motivated me to carry out the different things I did today	My thoughts on learning new skills today

_____

_____

_____

_____

_____

_____

WEEK 2

DIARY ENTRY 1:

What day of the week are you completing this on? SUNDAY

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a community activity

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

TASK 2:

1. *What did you enjoy doing the most today? and briefly identify why it was enjoyable*

_____
_____
_____
_____
_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
_____
_____
_____
_____
_____

3. *Was there anything important to you that happened today?*
-Furlough

_____
_____
_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

How good I felt about myself today	What motivated me to carry out the activities you did today	How positive or negative I felt about the future	Socialising with others

_____

_____

_____

_____

_____

_____

DIARY ENTRY 2:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a community activity today

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

TASK 2:

1. *What did you enjoy doing the most today? and briefly identify why it was enjoyable*

_____

_____

_____

_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____

_____

_____

3. *Was there anything important to you that happened today? [If so, what, and why?]*

_____

_____

_____

_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

How good I felt about myself today	What motivated me to carry out the activities you did today	Socialising	Learning new tasks

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

DIARY ENTRY 3:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a community activity today

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

TASK 2:

1. *What did you enjoy doing the most today? and briefly identify why it was enjoyable*

_____
_____

_____
_____

_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
_____

_____
_____

_____
_____

3. *Was there anything important to you that happened today? [If so, what, and why?]*

_____

_____

_____

_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

I set some goals today relating to my fitness	I was independent today	Things that pushed me to stay active	My view of ageing is either positive or negative

_____

_____

_____

_____

_____

_____

_____

_____

WEEK 3

DIARY ENTRY 1:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a community activity today

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

TASK 2:

1. *What did you enjoy doing the most today? and briefly identify why it was enjoyable*

_____
_____

_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
_____

_____
_____

3. *If you took part in a community activity today, what was your experience during it? Was it mostly positive or negative?*

_____
_____

_____
_____

_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

How reliant on people I was today	I was active and exercising	How I saw myself today	What made me get out and about today

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

DIARY ENTRY 2:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a community activity today

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

TASK 2:

1. *What did you enjoy doing the most today? and briefly identify why it was enjoyable*

_____
_____

_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
_____

_____
_____

3. *Was there anything important to you that happened today? [If so, what, and why?]*

_____
_____

_____
_____

_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

Feeling part of a wider group	Your personal involvement within the community	What motivated you to carry out the activities you did today	How good you felt about yourself today

_____
_____

_____
_____

_____

_____

_____

_____

_____

_____

DIARY ENTRY 3:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a community activity

*Time doesn't have to be specific if you can't remember! (Just put
AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

TASK 2:

1. *What did you enjoy doing the most today? and briefly identify why it was enjoyable*

_____

_____

_____

_____

_____

_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____

_____

_____

_____

_____

_____

3. *If you took part in a community activity today, what was your experience during it? Was it mostly positive or negative?*

_____

_____

_____

_____

_____

_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

Belief in my abilities	How independent I was today	What others said about getting older	How aware of my actions I was

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

WEEK 4

DIARY ENTRY 1:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a community activity today

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

TASK 2:

1. *What did you enjoy doing the most today? and briefly identify why it was enjoyable*

_____
_____
_____
_____
_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
_____

_____
_____

_____
_____

3. *Was there anything important to you that happened today? [If so, what, and why?]*

_____
_____

_____
_____

_____
_____

4. *Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.*

What made you get out and about today	Being active and exercising	How you see yourself today	Your goals compared to others

_____
_____

_____
_____

_____
_____

_____
_____

_____
_____

DIARY ENTRY 2:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a community activity today

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

TASK 2:

1. *What did you enjoy doing the most today? and briefly identify why it was enjoyable*

_____
_____

_____
_____

_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
_____

_____
_____

_____
_____

3. *If you took part in a community activity today, what was your experience during it? Was it mostly positive or negative?*

_____
_____

_____

_____

_____

_____

4. Please circle any of the boxes below that seem particularly relevant for you today
(either positive or negative), and feel free to add a brief comment about it. If none were
relevant, please just skip this question.

What motivates me	Feeling part of a wider group	Mixing with others	My wellbeing

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

DIARY ENTRY 3:

What day of the week are you completing this on? _____

TASK 1: Please fill in the table by listing the things you did today

Feel free to include whether you attended a community activity today

*Time doesn't have to be specific if you can't remember! (Just put AM or PM if this is
the case)

TIME	WHAT I DID	WITH WHO	WHERE	How has COVID affected this activity today?

TASK 2:

1. *What did you enjoy doing the most today? and briefly identify why it was enjoyable*

_____
_____

_____
_____

_____
_____

2. *Was there anything you were excited about, or nervous about, when you woke up today? [If so, what, and why?]*

_____
_____

_____
_____

_____
_____

3. *Was there anything important to you that happened today? [If so, what, and why?]*

_____
_____

_____
_____

_____
_____

4. Please circle any of the boxes below that seem particularly relevant for you today (either positive or negative), and feel free to add a brief comment about it. If none were relevant, please just skip this question.

Socialising with others	Your independence	How good you felt about yourself today	How aware of your actions you were

_____
_____
_____
_____

Appendix 5a. Interview schedule template engaged in Super Agers

Knowledge on super agers

-How much do you know about Super Agers project?

-Do you feel like they support you, particularly throughout COVID?

-Do you know what support is available from them?

-Do you feel like more awareness should be raised about Super Agers and their activities? –

-How did you hear about Ady? –

-What has your experience with Super Agers been?

-How do you feel about them supporting you by trying to get you more engaged online?

For example, learning how to use the computer for online activities, becoming knowledgeable in socialising with others in these community activities online?

Empowerment

View of your control over the activities you took part in.

How confident you felt before and after the Super Agers activity

Support networks provided by Super Agers project

Feeling valued by other Super Agers

Mixing with other Super Agers

View of yourself

How positive or negative you are feeling about the future

Any goals you have set or are working towards

Your physical abilities

 If you received any feedback from Super Agers leaders

Being active and exercising

Socialising with other Super Agers

Thoughts on your physical development

Thoughts on how being part of Super Agers has impacted you

Thinking about your ability to do daily tasks before being involved in Super Agers

Thinking about your ability to do daily tasks before being involved in Super Agers

Taking on a role of leadership

Your experience with the Super Agers activity

Your ability to do daily tasks around the house

Your power to influence situations and issues within the community

Learning new skills

Freedom to make your own decisions for the day

How Super Agers has impacted on you

Your physical abilities

Your mindset

Your independence

Your power to influence situations and issues within the community

How you viewed the behaviour of other Super Agers

How Super Agers has impacted on you

Freedom to make your own decisions for the day

Your wellbeing

Your experience with the Super Agers activity

View of your control over the activities you took part in.

Social Identity

Feeling part of a wider group (Such as being a 'Super Ager')

Your view of ageing

How you viewed the behaviour of other Super Agers

Your goals compared to other Super Agers

Feeling part of a wider group (Such as being a 'Super Ager')

What you noticed about the things other people said or did

Appendix 5b. Interview schedule template not engaged in Super Agers

1. How do you spend your days

2. Has this changed because of COVID?

3. Why are you not involved with Super Agers?

Empowerment

4. What drives you to be active?

5. Do you feel independent in making choices and decision about your own health?

Self-esteem

6. What is your opinion of yourself (do you see yourself in a positive or negative light?). I am talking about self-esteem here

7. Has your self-esteem been affected by anything?

Control

8. How do you feel about being in control of your own actions and decisions, and potentially control over managing stresses you might encounter?

9. Do you feel like you are self-aware of what's available to you?

10. Can you function independently and ask your own questions?

Self-efficacy/Mastery/Competence

11. How do you feel with regards to your confidence in getting back on track to exercising and improving your health and any illnesses?

12. Therefore, can you explain a time where you felt you were increasingly able to carry out things around the house or while exercising?

QOL and wellbeing

13. How do you feel about your mental health and wellbeing?
(*By this, I mean feeling positive about the situation you are in, or in the future. I also mean your engagement in different activities and living with a purpose*).

Autonomy and freedom

14. How do you feel regarding your independence as an older adult? Has anything helped or hindered this?

15. How do you feel regarding being given the freedom to make your own decisions once super agers have provided you with the support and advice?

16. If you have attended any community activities, what has the atmosphere like which is created by those leading the activity and the other adults involved? (Autonomy-supportive or controlling environment?)

Community empowerment

17. Do you enjoy mixing with others in the community?

18. Do you feel like others in the community have shared goals for getting more active?

19. Do you agree with the behaviours and views of others in the community do (for example, being active, getting old, socialising)

20. What motivates you to do exercise and get out of the house? Or are you not motivated to exercise?

21. Would you find it helpful if you had someone to help encourage you to exercise and give feedback on your progress?

22. What are your thoughts on goal setting? Do you set yourself any goals? Do you know how to?

Appendix 6. Engaged focus group discussion schedule

FOCUS GROUP ENGAGED DISCUSSION SCHEDULE
RELATING TO SUPER AGERS ACTIVITES MORE SPECIFICALLY
Collaboration with Oliver Kempton.

1. How do you feel about your community?
-Do you feel valued?
-What makes you want to be involved?
-Views on being part of a group
-Do the activities make you feel more confident carrying out activities by yourself?

2. How do you feel super agers has impacted on you?
-Part of a group
-Social isolation

3. What were your previous experiences around being active and exercising before, during and after joining these community sessions?

4. Why did you decide to take part in the activities?
-Motivations for becoming involved
-Did lockdown and social distancing influence your decisions

5. Has super agers added to your confidence/autonomy/social support in any way?

6. What differences do you think the community activities providing exercise and physical activity made to you? As an individual and collectively?
Fitness
Wellbeing
Empowerment (self-efficacy, control, self-awareness, autonomy, self-determination, intrinsic/extrinsic motivation)
Socialising

5. Positive (or negative!) experience with community activities?

6. What worked/did not work with the face-to-face sessions, as well as the more online and technology focused activities?
Exercising at home
Technology

6. Socialising as a community?

7. How has COVID-19 impacted on your engagement and confidence in physical activity?

*Any feedback? Can any activities be done differently or be improved on in any way?

Adults attended: 7 PARTICIPANTS (2 female participants were not part of the diaries but attended super agers sessions. 1 male, 5 females).

Appendix 7. Not engaged focus group discussion.

1. How you feel about your community?
-do you feel valued?
-What makes you want to be involved?
-Views on being part of a group
-Do the activities make you feel more confident carrying out activities by yourself?
-What are your thoughts on others within the community? Are you particularly close?
Would you identify yourself with other members in the community as a collective?

2. Why do you take part in exercise, and how do you do this?

3. What do you think of any community sessions relating to group classes for exercise?
Has it been advertised enough?
Do you know of super agers?
What do you think of the name super agers?
Is there a reason for not engaging in any community activities?

4. How did you feel/what were your experiences around being active and exercising before, during and after lockdown/covid?
-How do you feel about the thought of doing exercise or group activity with people you might not know?

5. What are your thoughts on engaging regularly in PA? Do you see yourself as active and exercising?
-What helps you to stay motivated?
-Is there anything you feel you or the community is lacking in terms of socialising opportunities

6. How has covid impacted on your engagement in exercise by yourself and with others?

Appendix 8. Example of highlighted and labelled transcription

Yes, Bridgend.

You said Tai Chi, what made you want to get involved? Did you know Adie previously?

No, I got in touch with her through the Carers Centre, because I'd been stuck in with my dad and my mum. It had been a long time now (unclear 03.35). I wasn't seeing anybody and we had no contact with anybody and then we were both very ill. I think it was Covid but we weren't tested right at the beginning of it, so it was through April and half of May we were at, like, death's door with very few contacts. Even though I'm from this area, I grew up here, I've got a few contacts around here, a couple of mates kept us supplied with food, did us three shops.

P6Q7~ aware of SA through centre within Bridgend council. → Not had a chance to look for himself.

P6Q8 Socially isolated pre-covid → lack of support & social relationships outside living quarters

P6Q9 needed medical attention but was unable to access it.

That's amazing, yeah.

P6Q11 friends in community helped with COVID.

Which carried us through and the only going out I was doing was going down to get food from the shops after that and very little social contact with anybody. I had to abandon my previous life to come and look after my parents when they got ill.

Limited social P6Q10 contact

It has obviously been quite hard.

P6Q13 not building social relationships

Yeah, so I was looking for somewhere to go and something to do with myself which was any activity at all and they suggested that, so it was good. I'd never done Tai Chi before.

P6Q12 no leisure time limited balance

P6Q14 left previous work to care for parents full-time

→ no retirement.

How did you find it?

P6Q16 SA provided him with a new skill

↓P6Q15 SA helped with his personal development & wellbeing

It was great. It's the sort of thing I do anyway. I like stretching, exercising and keeping my body in line and upright (talk together 04.55).

already habitually active P6Q17.

Good.

Yeah, in my previous life… I'm six-foot-six so I'm tall so I have to watch my posture.

→P6Q18 awareness of PA maintenance for posture benefits.

Yeah, of course.

I spent a lot of time living in small spaces, caravans and stuff like that so quite keen to make sure I stay upright and keep moving.

→ P6Q19 spent fair amount of younger years with basic lifestyle

Well, nice to hear about what you've been through and things like that. So, just obviously, how's your dad at the moment?

He's okay.

Oh, good.

He's in dementia-land but he's okay; just memory loss.

P6Q20 Looking after dad with dementia.

Bless him.

P6Q21 still try to be sociable

But we still have conversations. We still have a laugh. I try and get him as active as he's willing to be but he's never been active. The whole time I've known him, I've never played football with him [laughs]. He's been sat in that chair for the last fifteen years, it seems

P6Q22 brings Dad PA

P6Q23 throughout childhood parents never been active.

Ah, bless him.

I try and make sure he gets up and moves and does things and give him some baked bean cans to swing around, which he enjoys sometimes.

P6Q24 first priority is caring for dad & getting him to be active in creative ways.

Are you shielding right now or are you just trying to just stay away from…

Well, there's very little to get involved in anyway.

P6Q25 lack of awareness of activities available during & out of lockdown

True.

The hazards are everywhere, potentially, and having him been that ill and me on and off, I'm unwell all the time anyway, I don't know what's going on with it. We keep ourselves apart from people, generally, like everybody else does, I suppose.

P6Q28 socially isolated.

P6Q29 both ill at the same time means lack of medical attention.

P6Q27 lack of self-awareness/mgt for medical

P6Q26 many negative perceptions of external env for older adult

Reference: SU874 – Gareth Wk 1

Appendix 9. Reflective account from primary researcher

Before looking into the importance of reflexivity on qualitative studies, I didn't realise how the study and process of data collection would change so much over time. Originally, the study in a pre-COVID setting, I would have attended Super Agers sessions, provide them with briefing and diaries in person. But I was having to call participants weekly, post diaries and conduct interviews over the phone. Some participants never even saw my face! With the face-to-face element eliminated, perhaps it was easier for them to disclose information, taking away the researcher-participant dynamic and the age difference. I also managed to build a rapport with them, and they emphasised that they enjoyed having someone to talk to regularly and looked forward to the next session. It almost became a social support system for them with weekly check-ins. Instead of a weekly reminder to write down their diary responses, it became a longer and more meaningful interaction when asking them the diary questions, rather than them answering the questions in a self-report style. Perhaps this may have changed the way these individuals answered the questions, taking away the self-report element. Lockdown impacted the process and relationship massively. When briefing each participant over the phone, participants enjoyed the conversation so much that it would often get lead away from the research questions, meaning I had to bring them back to the main purpose of the interviews!

Having not met any of the participants before, it took some time for them to trust me and to realise why I was asking for so much information from them. After the first couple of introductory phone calls, the conversations were much more at ease and participants were eager to share information they thought was valuable to my study.

Hallowell et al., (2005) highlighted the importance of maintaining a boundary of researcher-participant, as opposed to taking a counselling role. I may have overstepped this boundary at times, as COVID was completely unexpected to everyone at the time, for some of the participants, they were completely socially isolated. It was important to take into the account the emotions shown by participants, as participants felt so strongly about questions.

Appendix 10. Raw quote labels from an engaged participant.

P7Q90	FEMALE	Able to run errands while living alone.
P7Q91	FEMALE	Lockdown appreciate small journeys and getting outside.
P7Q92	FEMALE	Doesn't like idea of using zoom.
P7Q93	FEMALE	Never used zoom and wary about it.
P7Q94	FEMALE	Doesn't want to be seen if doing PA in a group.
P7Q95	FEMALE	Haven't learnt how to do it as hasn't had to use it.
P7Q96	FEMALE	Likes to self-indulge in getting external cleaner.