Preferences and attitudes towards physical activity in adults 65+ years in Australia

Physical Activity Attitudes, Preferences, and Experiences of Regionally-Based Australia
Adults Aged 65 Years and Older

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Abstract

An understanding of physical activity attitudes and preferences in older adults is important for informing physical activity interventions targeting this age group. Six focus groups were conducted with 46 adults aged 65 years and older to explore participants' preferences and attitudes towards physical activity. Content analysis revealed that participants mainly preferred incidental activities such as gardening and household chores rather than planned exercise, however leisure time walking was also mentioned frequently. While participants valued the physical and mental health benefits of physical activity, they reported being restricted by poor physical health, extreme weather and fear of injury. Participants were interested in organised exercise groups and physical activity programs tailored to their existing physical health. The majority of participants preferred to be active with others. The findings from this study are useful in for informing future interventions specifically tailored to the needs of older adults in Australia.

Keywords: active aging; benefits; barriers, motivation, exercise

Preferences and attitudes towards physical activity in older adults in Australia

Increasing physical activity is important for improving both health and quality of life for older adults (65+ years) (Broekhuizen et al., 2016; Lee et al., 2012). Regular physical activity can reduce the risk of chronic disease, falls, depression and dementia in older adults (Ahlskog et al., 2011; Brown et al., 2012). It is estimated that older adults who are physically active have a 41% lower risk of mortality over a 10-year period than inactive older adults (Brown et al., 2012). However, only one quarter of older adults are meeting the Australian physical activity guidelines of participating in 30 minutes of moderate to vigorous physical activity on most days (Australian Bureau of Statistics, 2015b; Australian Government Department of Health, 2014). Australia's ageing population is placing a rising burden on the health care system as the number of people aged 65+ years is projected to more than double by 2040 (Australian Bureau of Statistics, 2012). Given the high rate of chronic diseases in older adults and the health benefits that physical activity can have, it is important to promote physical activity in this age group.

Research suggests that a range of social, environmental and individual factors impact on the ability or likelihood of individuals of all ages participating in physical activity (Bauman et al., 2012). Efforts to change behaviour are more likely to be successful when these factors are addressed (Bauman et al., 2012). Social factors associated with physical activity include active friends and family, community physical activity programs and access to social support networks (Lindsay Smith et al., 2017). Environmental factors include comfortable weather, access to parks, sporting grounds and tracks, safety and connectivity of streets (Bauman et al., 2012; Cerin et al., 2017; Heath et al., 2006) and individual factors include knowledge, self-efficacy and positive attitudes (perceived benefits and barriers) in relation to physical activity (Bauman et al., 2012). Due to unique health, economic and social characteristics of older adults, they are likely to have different factors that most strongly

affect their physical activity levels (Australian Bureau of Statistics, 2013, 2015a, 2016).

For older adults, there is strong evidence that social support is important for increasing physical activity and maintaining an active lifestyle (Burton, Khan & Brown, 2012; Lindsay Smith et al., 2017). A systematic review found that social support, particularly from family, was associated with higher physical activity in older adults (Lindsay Smith et al., 2017), and other research suggests that social support is more important for older compared to younger adults (Belanger, Townsend & Foster, 2011). In line with younger and middle aged adults (Bauman et al., 2012), environmental factors play an important role in older adults' physical activity (Cerin et al., 2017). A systematic review identified residential density, walkability, access to destinations and services and availability of outdoor green spaces as important environmental factors associated with walking in older adults (Carlson et al., 2012; Cerin et al., 2017).

When looking at individual factors, older adults report that the benefits they value from physical activity is that it aids in maintaining mobility and improves physical and mental health (Greenwood-Hickman, Renz & Rosenberg, 2016; Witcher et al., 2016). However, older adults also report many barriers to physical activity including fear of injury, health limitations and lack of motivation (Biedenweg et al., 2014; Greenwood-Hickman et al., 2016; Lees et al., 2005; Witcher et al., 2016). Lack of time, unadaptable environments, fatigue and negative affect have also been identified as barriers to physical activity in older adults (Greenwood-Hickman et al., 2016; Lees et al., 2005). Although there is some overlap of benefits and barriers in younger and older adults, older adults tend to more frequently identify health barriers whilst younger adults more frequently identify lack of time as a barrier (Belanger et al., 2011). Despite these studies, more research is needed to investigate the physical activity attitudes of older adults in Australia including the social and environmental factors that they perceive as influencing their activity levels.

Programs targeting older adults' physical activity must have a solid understanding of their unique preferences for physical activity. Some qualitative studies have identified productive activities, slow paced activities and low-cost group programs that can be done with friends as popular choices for older adults (Biedenweg et al., 2014; Witcher et al., 2016). A study by van Uffelen, Khan and Burton (2017) explored motivating factors for older adults to engage in physical activity included health and wellbeing and feeling good. Context preferences included low cost, close to home and outside group options important for older adults. Other studies have identified that older adults are less likely to enjoy competitive and fast-paced team sports compared to younger adults (Alley et al., 2017; Burton et al., 2012).

There is limited research exploring the physical activity preferences and attitudes of older adults in Australia. A better understanding of older adults' preferred physical activities and what social, environmental and individual factors are key benefits and barriers for older adults' physical activity is needed to inform the development of more effective physical activity interventions for older adults. Therefore, the aim of the current study is to explore older Australian adults' preferences and attitudes, including benefits and barriers, towards physical activity.

Method

Participants

Participants were older adults residing in regional towns in Central Queensland, Australia. Eligibility included engaging in less than 150 minutes of moderate physical activity per week and over the age of 65 years. Households in the region were contacted through landline telephone by the population research laboratory through random digit dialling of local telephone numbers. If eligible (65+ years), the respondents were invited to participate in a focus group study at a University campus. Interested participants were emailed or posted an information sheet explaining more details about the study and available

group times. They then contacted the researchers to sign up and participate in a group that aligned with their availability. This study received approval before data collection (H16/02-028) and written consent was received from all participants prior to focus group commencement.

Measures

At the start of each focus group, a brief hard copy survey was administered to the participants to collect demographic information including age, height, weight, education, employment status, household income and physical activity level. The focus group was guided by a semi-structured script entailing six questions which explored 1) current physical activity participation, 2) perceived importance of physical activity, 3) physical activity benefits, 4) barriers to being active, 5) preferences to increase physical activity and 6) perceived supports for being active.

Procedure

Six focus groups were held at a University campus in regional Queensland, Australia in April 2016. The duration of each focus group was 1.5-2 hours. Discussions were held around a large table and refreshments were provided to participants. First participants were given a hard copy of the consent form, the information sheet and the demographic survey to complete. All completed forms were collected from participants before the start of the focus group discussions. Discussions were facilitated by two researchers. One read out the scripted questions whilst the other took notes of key statements and who stated them so they could later be matched to participants' gender and age. Both facilitators prompted everyone to participate in the discussions. The discussions were audiotaped and transcribed by an independent transcribing service.

Analyses

Content analysis was used to examine older adults' preferences and attitudes towards physical activity. The six-step process of analysis proposed by Braun and Clarke (2006) was followed: (1) familiarisation with data; (2) generating initial codes; (3) searching for themes; (4) reviewing themes; (5) defining and naming themes and (6) producing the report. The themes were drawn from the six questions asked of focus group participants. Responses within each theme were identified from the focus group discussion and coded as subthemes. PS and SJA coded the focus groups between them and both coders coded focus group 5 (16 % of data) for inter-reliability assessment. Results demonstrated 86% agreement for themes and 77% for subthemes. Inter-rater reliability (Kappa) for theme was .86, $p < .001$ and for topic was .77, $p < .001$ indicating very good and good reliability, respectively (Altman, 1991).

Results

Participants

The sample consisted of 46 participants: 12 males (26.1%) and 34 females (73.9%). The majority of the sample was retired (89.9%) and average age of the sample was 72.3 ± 4.52 years. The average number of days per week where the participants engaged in over 30 minutes of moderate to vigorous physical activity was 4.2 ± 2.48 days. Nearly three quarters (73.3 %) reported they would like to increase their physical activity.

Types of Physical Activity. The discussions tended to focus on incidental activity that participants did as part of their everyday tasks: "*Cleaning, washing, gardening*" (Female 72). The participants mentioned a wide range of specific types of physical activity that they were participating in. The most common was gardening: "*I garden every day, morning and night*" (Female, 71). Some participants mentioned that improving their home motivated them to garden: "*It's nice to live in nice surroundings, so if your garden is tidy and all that sort of thing I find it automatically makes you feel better*" (Female 82). The second most common activity was leisure time walking: "*I walk every afternoon and take an elderly neighbour who*

has a lot of health problems and walks on a wheelie walker” (Female, 73). The third most common was housework: *“I do all the housework but I don’t walk”* (Female, 71). Incidental walking was mentioned by some participants as physical activity they were engaged in *“I walk a lot when I shop”* (Female, 72). Some participants mentioned walking with the dog as a motivator for walking. *“I walk with quite a few people in the morning with the dog. The dogs have fun and the people walk around and chat”* (Female, 70). *“I do walking every day because I have an energetic dog. We actually walk twice a day, morning and evening, morning for longer, and he keeps me going”* (Female, 70). Few participants mentioned planned or structured exercise: *“I’ve just finished doing a ten thousand walk team challenge”* (Female, 67). A small number of participants also mentioned the following activities: golf, exercises at home, stretching exercises, community exercise and walking groups, volunteering, yoga, Tai Chi, church activities, travel, sewing and child minding.

Physical Activity Benefits. The discussion about physical activity benefits focused on health. Some participants said fear of illness motivated them to be active: *“I think if you have a health scare of some sort that motivates you if you get over that health scare”* (Female 70). Others said that wanting to maintain their health motivated them to be active: *“You’ve got to keep walking, you’ve got to keep doing. Either you use it or lose it”* (Male 80). Many participants also said that physical activity helped them to feel good. *“It’s very important to me because I feel better through doing it and so ah that’s pretty important to feel good”* (Male, 77); *“I enjoy it and I know if I don’t do it I don’t feel as great about myself”* (Female, 75). *“You just feel so much better and you know ready to start the day”* (Female, 70). Some participants mentioned the benefits of physical activity for their mental health: *“Helps my mind stay active and it helps me to relax, just that time walking along, relaxing, it’s really good”* (Female, 70) and some participants mentioned the importance of physical activity for movement, balance and maintaining function: *“I think it’s important to keep moving”*

(Female, 77) and *“physical activity keeps your body nimble and able to move and go on is important. I just praise the fact that I had movability on my side”* (Female, 75). A small number of participants mentioned social interaction as a benefit of physical activity: *“I need social interaction... when we retire and are on our own we need still that social activity”* (Female, 73). Other benefits mentioned by a small number of participants included weight loss, improved energy and rehabilitation.

Barriers to Physical Activity. The most discussed barrier to physical activity was physical health problems. These included physical illness, pain, injury, operations and joint problems: *“Most people in our age group have got considerable arthritis in their joints and all that, as much as they’d all love to work it’s too torturous”* (Male, 74). *“I’ve got bad knees, so ah that’s a big deterrent you know, and my shoulder I hurt in an accident”* (Female, 84). A small number of participants said that past injuries or a fear of injury resulting from physical activity is a barrier for them to being active: *“I have problems in all my joints because of an active sporting life”* (Female, 71). Extreme weather was the second most discussed barrier: *“We were walking but then the humidity hit us. That brought a stop to it, and I just do general stuff around the house”* (Female, 69). *“It’s just been too muggy and too hot and that’s a major problem in this area, cause the further north you go, it’s just too hot to do it”* (Female, 70). *“I just can’t handle the sun”* (Female, 78). Some participants mentioned lack of motivation as a barrier to physical activity: *“I used to do six km a day when I worked and you’d think once you retire you’d have more time but I think motivation is the problem”* (Male, 66). Other less common barriers included physical environment (e.g. steep hills, safety concerns) and lack of time.

Increasing physical activity. Many participants were interested in exercise groups, and some specified that they would prefer exercise groups with people their own age: *“I’d probably get involved in group activities, people more your own age”* (Male, 74).

Participants discussed the benefits of organised exercise groups, including people to hold you accountable, meeting others and encouragement. Many participants were also interested in personalised physical activity programs tailored to their needs. Some participants specified that tailored programs are ideal as they limit risk of injury resulting from exercise and increase their confidence that the activity they are doing is appropriate for them: “*And probably a program tailored to your own shortcomings like you’ve got bad knees so you don’t try to jump*” (Female 70). Others said they would like tailored information on whether or not they are doing enough activity. Some participants discussed trying options that have a low risk of injury such as swimming, water aerobics and using a cross trainer and others mentioned gardening and walking. Although some participants said they would just continue to do more of what they were currently doing, others said they would prefer to try new activities to keep themselves interested.

Types of physical activity support. There was a general consensus that being active with others was the best type of support. “*Somebody else to walk with*” (Female 76), “*Just knowing your group’s there*” (Female 71), “*I motivate her and she motivates me*” (Female 70). Participants discussed enjoying the social interaction from being active with others and a small number said they would prefer to be active with others for safety reasons. Conversely, some participants said they prefer to be active alone. These participants discussed factors such as avoiding competition and not wanting to follow schedules as the benefits for being active alone. The importance of self-motivation was also mentioned frequently: “*I’m not sure that there’s anything in my case that would help me because it’s all inside of me, it’s all self-motivation*” (Male, 77) and “*I’m driven*” (Male, 75). When discussing who participants preferred to be active with, friends (commonly neighbours) were identified frequently. Organised group activities, family and health professionals were also identified by some participants as preferred activity partners.

Discussion

The aim of this study was to explore preferences and attitudes that older adults in Australia have towards physical activity. Participants discussed a wide variety of physical activities that they currently participate in. In line with previous research (Witcher et al., 2016), the discussion focused on incidental activity that participants did as part of their everyday tasks. This finding may reflect that participants' prior experiences of physical activity was through work. Participants may not be as familiar with structured leisure-time exercise, as it's become more popular recently, in response to increasing sedentary jobs (Witcher et al., 2016). Gardening, walking and housework were discussed frequently as activities participants engaged in. It is important to provide interventions that are matched to older adults' preferences for being active (King et al., 2005; Short, Vandelanotte & Duncan, 2014); therefore interventions should consider encouraging inactive older adults to engage in these popular activities. Local government and policy makers should also ensure that neighbourhood environments and resources support older adults in participating in these activities. For example, local government should aim to make communities safe, walkable and aesthetically pleasing to facilitate walking in older adults (Barnett et al., 2017).

Although the most commonly mentioned activities (i.e. gardening, walking and housework) were slow paced, they may still reflect activity performed at a moderate intensity in older adults due to their lower maximum heart rate (Taraldsen et al., 2012; Tournier & Postal, 2014). However, some participants mentioned travel, sewing and volunteering as types of physical activity they engage in. These activities are unlikely to raise participants' heart rates to the level of moderate or even light intensity activity (Caspersen, Powell & Christenson, 1985). These results are in line with past research which found older adults to be more likely to prefer slow paced activities compared to younger adults (Alley et al., 2017; Belanger et al., 2011). Interventions may therefore need to raise awareness for older adults

that the recommendations are for at least 30 minutes of moderate intensity activity (i.e. quickened breathing and feeling warm) on most days (Australian Government Department of Health, 2014). However, light activity still had health benefits and is much better than none at all (Buman et al., 2010).

Similar to previous research in older adults internationally and in urban Australia, physical and mental health benefits were common motivators for being active (Greenwood-Hickman et al., 2016; van Uffelen et al., 2017; Witcher et al., 2016). Some participants were fearful of disease whilst others wanted to maintain their health and lifestyle. These findings indicate that future interventions should remind older adults that physical activity reduces risk of disease and helps to manage existing diseases, but also provide positively framed messages about maintaining good health so they can keep doing the things they enjoy (Snyder & Hamilton, 2002). Interventions could also focus on activities which are particularly beneficial for improving physical and mental health in older adults such as tai chi to reduce anxiety and risk of falls (Abbott & Lavretsky, 2013).

In line with previous research (Greenwood-Hickman et al., 2016; Jenkin et al., 2017; Witcher et al., 2016), health issues and pain were mentioned most frequently as a barrier to participating in physical activity. This was mainly existing health problems such as illness, pain and surgery. This differs to physical activity barriers of younger adults who more commonly report time constraints than health issues (Belanger et al., 2011). These age differences may be due to the increasing incidence of chronic disease in older adults (Australian Bureau of Statistics, 2015b), and increased leisure time in retirement (Stenholm et al., 2016). Similar to the findings of Witcher et al. (2016), some participants also discussed the fear of injury from physical activity. It is therefore extremely important to help older adults find other forms of physical activity they are able to participate in despite their chronic health conditions. For example, this could be to start with brief sessions of low intensity

walking, and building up from there. Older adults may also need encouragement that activity can help manage some health problems such as diabetes or cardiovascular disease (Lee et al., 2012).

Extreme weather conditions (e.g. heat and sun) was the next most common barrier to physical activity, which was not unexpected as the participants reside in Central Queensland, which is a hot and humid sub-tropical climate. A focus group conducted by Lees et al. (2005) also identified weather as a physical activity barrier among older adults residing in Rhode Island, US which is conversely a cold environment. Therefore, local government and policy makers should ensure that older adults have access to facilities and programs that allow them to be active even when the weather is uncomfortable such as water aerobics classes and walking groups in shopping malls. Interventions should also encourage older adults to think of back-up activities they can do indoors if the weather is too unpleasant to do their usual activities (Bélanger-Gravel, Godin & Amireault, 2013).

Organised group exercise programs and programs with tailored physical activity advice were older adults' two most common preferences to increase physical activity in this study. Past research in urban Australia has identified older adults' interest in organised group programs (van Uffelen et al., 2017) and both organised exercise programs and tailored programs have been shown to be effective at increasing physical activity in older adults (Ammann et al., 2012; Mouton & Cloes, 2015). The results indicated that older adults preferred personally tailored exercise programs, tailored to their specific health conditions (which were identified as a major barrier to engaging in physical activity). Therefore physical activity interventions should incorporate group programs that participants can do with others, as well as provide personalised physical activity options and information based on existing illness or physical restrictions (Ammann et al., 2012). This may help them to feel more confident that they can safely be active, and overcome their health barriers to being active.

Being active with others was identified as the most common type of support for physical activity. This is similar to past research identifying social support as a correlate to higher physical activity, and a particularly important correlate in older adults (Belanger et al., 2011; Burton et al., 2012; Lindsay Smith et al., 2017). The systematic review by Lindsay Smith et al. (2017) found that social support from family was more important than friends; however the participants in our study mainly discussed social support from friends and neighbours. It is, therefore, important that physical activity interventions encourage older adults to engage with existing social networks, as well as promote and incorporate new connections through social activities, (e.g. organised group activities, clubs with shared interests).

Strengths and Limitations

This study qualitatively explored attitudes and preferences for physical activity in older Australians through focus group discussions. The results are important for interventions aiming to increase physical activity participation in this population. Strengths of the study include the qualitative data providing rich detailed information that explains the complexity around meeting the physical activity needs of older Australians. Further, high inter-rater reliability was confirmed and the gender balance reflects that of the population for this age group (Australian Bureau of Statistics, 2015c). One of the limitations of the study was that the focus groups were not stratified by gender, age group or meeting physical activity guidelines. This would have enabled a more in depth exploration of the differences between genders, those meeting the guidelines and those that were not, as well as comparing adults 65-79 years versus 80+ years.

Conclusion

This study identified physical activity preferences and attitudes of a group of older adults in Australia. Participants mainly preferred incidental activities such as gardening and

household chores rather than planned exercise. Walking was also discussed as a frequent activity. Participants value the physical and mental health benefits of physical activity, but reported feeling restricted by poor physical health. Participants were interested in organised exercise groups and physical activity programs tailored to their existing physical health conditions. Results suggest that physical activity interventions targeting older adults should promote gardening and walking, promote activities that can be done with others, highlight the physical and mental health benefits of physical activity and help older adults to find activities appropriate for their existing health conditions.

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