

WEIR, PATTI

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The relationship between sport, physical activity, and social engagement: A profile of Canadian seniors

Project Summary

Models of successful aging (SA) encourage a continued engagement with life, which research literature refers to as a diverse set of activities including productive (e.g., housework), social (e.g., visiting friends), passive (e.g., reading), and active leisure (e.g., playing a sport) pursuits. It is widely accepted that engaging in life promotes a more meaningful and healthy aging process. However, despite the wide range of published literature, very little is known about the role of active leisure/physical activity in the maintenance of engagement, and thus successful aging. Similarly, literature remains sparse regarding the patterns of change that exist among engagement profiles throughout the decades of older adulthood. Therefore, the current research project develops our understanding of these concepts by examining the relationships between engagement and functional health, and by exploring “how” and “why” engagement patterns change during older adulthood.

Research methods

In Part 1 of this research project, 287 English speaking older adults (age range: 55-90 years; \bar{M} age: 68.7 ± 8.09 years; males, $n = 110$; females, $n = 177$) participated. Participants completed a questionnaire that surveyed: a) how often they participated in productive (e.g., cooking), social (e.g., visiting with friends), passive (e.g., reading), and active leisure (e.g., walking for fitness) activities over a seven-day recall period (0, 1-3, 4-6, or 7 times), b) their level of physical function (“have no difficulty” to “not able to do”) on a series of seven tasks (e.g., walk 0.8 km, climb a flight of stairs without resting, lift or carry a weight over 4.54 kg etc.), and c) their level of cognitive function on four tasks (e.g., find the right word when talking, remember where you put something, etc.). Two measures of frequency were quantified. First, within each category of engagement the percentage of activities participated in was calculated. Second, each of the 29 activities was grouped into either a high, moderate, or low activity frequency category based on the coefficient of variation calculated across all participants. Hierarchical regression was used to assess the impact of frequency of participation on physical and cognitive function.

Part 2 of this research project included 54 community dwelling older adults (age range = 65-97 years; \bar{M} age: 79.17 years; 21 males) separated by decade of life (65-74 years: $n = 21$; 75-84 years: $n = 21$; 85+ years = 12). All participants completed two questionnaires in order to quantify ‘past’ and ‘present’ engagement in 30 engagement activities (e.g., reading) through the use of a four point Likert scale (1 – *never* to 4 – *often*). Differences in activity participation by decade of life and across a five-year time frame were determined through a series of mixed design ANOVAs. To determine ‘why’ engagement changed during older adulthood, (6) focus groups and (16) semi-structured interviews were completed with a subsample ($n = 42$) of participants from each decade of life (65-74 years: $n = 17$; 75-84 years: $n = 17$; 85+ years = 8). Textual data was

inductively analyzed allowing for the emergence of themes through the constant comparison of participant quotes.

Research results

Part 1

- The engagement category with the highest percentage of activities participated in was social, and the engagement category with the lowest percentage of activities participated in was active-leisure
- Despite the low participation, active-leisure activities were the only significant predictor of improved physical function
- The high frequency activities were comprised primarily of passive-leisure, productive, and active-leisure activities (e.g., computer use, gardening/light housework, walking for fitness)
- Participation in high frequency activities predicted improved physical and cognitive function

These findings suggest that accounting for the frequency of participation is important in establishing a relationship between different types of engagement and function. They also highlight that high levels of participation in a wide variety of activities over the course of the week is important for maintaining and improving function. Looking at engagement in terms of frequency adds to the literature by showing that the specific activity might not be important, rather the overall frequency of participation.

Part 2

- Participation in specific productive activities (volunteer work, care for others, employment, home repairs, and heavy housework), as well as overall participation in active-leisure activities, decreased over a five-year time frame in older adulthood
- Participation in social and passive-leisure activities was maintained throughout older adulthood
- Engagement profiles during older adulthood reflected: (1) the individual's health and physical functioning, (2) the death of one's spouse/social contacts, (3) a sense of freedom associated with older age, (4) one's desire to participate, and (5) external factors such as family role, finances, and the availability of direct support

These findings contribute to the literature, as limited knowledge currently exists pertaining to the time-use patterns of older adults. It is suggested that decreases in productive and active-leisure activities may result from factors such as decreased health or conflicting external circumstances, while the maintenance of social and passive-leisure activities may be a function of one's desire and freedom to participate in one's activities of choice. Taken together, exploring activity patterns during older adulthood provides a further understanding of the role 'engagement' plays in the overall process of successful aging.

Policy implications

These findings highlight the importance of community organizations offering a wide variety of programming and engagement options for older adults as a greater frequency of participation in *any* activity may surpass the benefit of participation in a *specific* activity. Therefore, if a range of activities is available, older adults may increase the frequency in which they engage in activity, as they can utilize their freedom of time and choice to participate in an activity in which they desire, and are physically capable of completing. However, it remains important that community organizations create opportunities for active-leisure participation in older adulthood as such engagement contributes to the maintenance of physical functioning and is highly valued by

older adults. As such, it is suggested to collaborate with older adults to identify active-leisure activities that may garner continued participation. For example, by capitalizing on the maintained social engagement profile of older adults (as identified in 'Part 2' of this research study), community organizations are suggested to target pre-existing social groups as a means to foster the desire to participate in active-leisure pursuits (i.e., a walking group).

Next steps

Through an understanding of the patterns of engagement profiles during older adulthood, as well as the importance of overall activity frequency, especially in active-leisure pursuits, this research project has set the foundation for the development of a community intervention framework focused on providing opportunities for active-leisure participation within community neighborhoods. Interventions will seek to capitalize on the value older adults place on maintaining social engagement, by providing opportunities to pre-existing social groups to participate in active-leisure activities (i.e., urban pole walking). In addition, future work will seek to identify active-leisure preferences among older adults and make such options available in community neighborhoods. Identifying such preferences is of importance as this research project provided evidence that older adults will use their resources (i.e., time) to participate in activities in which they desire. Thus, future interventions must focus on offering desirable active-leisure activities in order to encourage older adults to maintain their past level of engagement in such health-promoting activities.

Key stakeholders and benefits

- Provincial Ministries of Health Promotion, Sport and Physical Activity
- Health Canada
- Sport Canada
- Provincial and National Associations for Aging and Gerontology
- Municipal bodies responsible for health promotion, sport, and physical activity