

ORIGINAL RESEARCH

Perceptions, Gym Participation, and Motivators for Physical **Activity in Older Ontario Males**

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Abstract

Sedentary behavior increases the risk of high blood pressure, obesity, and of particular concern in the elderly, a loss of muscle mass and decline in cognitive performance. Numerous risk factors are predictive of mortality rates in the elderly, including lack of moderate or vigorous exercise. The purpose of this study was to examine the perceptions of physical activity and exercise, participation and perceptions of traditional gyms, as well as motivators to be physically active in older males (65+ years) in Southern Ontario. The first phase involved focus group sessions with adults aged 18 years and up, representing 13 diverse groups from rural and urban communities in Southwestern Ontario, Canada. Based on the responses from Phase I, a survey questionnaire was created to validate the findings of the focus group interviews. The surveys were distributed to the same community groups where the focus group data were collected. Results revealed the 18-34 and 35-64 age groups, and older males generally make the same associations with exercise or physical activity. "Better health" was chosen the most often as the number one ranked motivator by the older males (36%), with "Longevity" and "Feeling good and happier afterwards" tied for second (16% each). The older male population from Southern Ontario viewed exercise as "planned, structured, regimented, routine, and repetitive" (50%), a "stress reliever" (53%), and achieving a real sense of accomplishment and happiness post workout (54%). The top three descriptors associated with lifestyle physical activities are walking (80%), taking the stairs (65%), and gardening, raking leaves, shoveling snow and other yardwork activities (62%). In addition, the older Southern Ontario adult population are comfortable enough with the gym culture but would prefer to focus on physical activity outside the gym setting. Moreover, the older males also ranked the affective motivator, "feeling good and happier afterwards" in their top two motivators to be physically active. Family members, health and wellness experts, and

the medical community must be responsible in focusing on each older person's needs to become more physically active, realizing that most older adults prefer lifestyle physical activity.

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Introduction

The need for physical activity (PA) does not end in later adult life. There is mounting evidence that PA in the older population can extend one's lifespan, increase active independent living and improve one's overall quality of life. Sedentary behavior increases the risk of high blood pressure, obesity, and of particular concern in the elderly, a loss of muscle mass [1,2] and decline in cognitive performance [3]. Numerous risk factors are predictive of mortality rates in the elderly, including lack of moderate or vigorous exercise [1]. The American Medical Association recommends that adults should partake in at least 150-300 minutes a week of moderate intensity exercise or 75-150 minutes of vigorous exercise, as well as strengthening activities 2 or more days per week. Older adults are recommended to perform exercises that include balance, aerobic and strengthening activities with the recommended duration following the standard recommendations for adults [4]. An eight-year longitudinal study concluded that for every 15 minutes of PA up to 100 minutes per day there was a 4% decrease in mortality rates of adults older than 65 [5]. It was also found that men were more likely than women to regularly achieve the recommended amount of PA due to the fact that they have more leisure time that is often spent performing



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golf, tennis, and recreational games [5]. Retired women have expressed that they felt that exercise was a luxury in their younger years due to having so many other responsibilities, and that by the time they were retired they felt as if they had passed their window of opportunity to begin. Men, however, believed that exercise was a necessity and once retired they viewed PA as a leisure activity that could be done in a social setting [6]. When leisure time PA was taken into account, men consistently achieved more PA than women in all age groups. Previous studies have estimated that 21 to 47% of men above the age of 60 achieve the recommended amount of PA [5].

A recent survey found that males in Ontario and South Carolina of all ages prefer to engage in natural, leisure PA rather than traditional formal exercise [7]. In contrast, females did not feel as strongly about PA being easier to incorporate into their routines, due to the responsibilities of raising children, household chores, etc. Interestingly, older males from South Carolina still enjoyed going to the gym (88%) and felt that this was a necessary part of taking care of themselves (65%).

The reasons for not being physically active can be numerous. In one study conducted in Germany, those that were insufficiently active were asked to list the barriers they felt they were facing [8]. The major barriers identified were poor health (57%), lack of company (38%), lack of interest (37%), lack of opportunities (16%), fear of injury (18%) and lack of time (14%). Poor current health appears to be a common barrier to being physically active. Thus, strategies to promote and increase PA in the elderly need to consider this barrier and how to address it. With the lifespan of individuals increasing, it is imperative that as a society we work to improve PA with increasing age. Such intervention strategies have begun to take place in areas. One such aspect is to increase the availability of parks for older adults with the goal of allowing for independence and creating safe spaces for them where physical activity is easily attainable. The ability of a park to senior adults could allow for physiological and psychological benefits and improve overall quality of life of older adults. Creating a safe space where older adults can feel safe and protected while also being able to be physically active could increase PA throughout the elderly population [9].

The purpose of this study was to examine the perceptions of PA and exercise, participation and perceptions of traditional gyms, as well as motivators to be physically active in older males (65+ years) in Southern Ontario.

Methods

The methodological details used in this study have been presented in numerous previous publications [7,10,11]. The data presented here focuses on the responses of the elderly males and has not previously been published. For the sake of completeness and comparisons, the responses of males below the age of 65 is also shown; this data has previously been published [7,12-14].

In brief, the study was conducted in two phases. The first phase involved focus group sessions with the goal of generating a survey questionnaire to be applied in the second phase. Clearance was obtained from the University of Guelph Research Ethics Board. Adults aged 18 years and up, representing 13 diverse groups from rural and urban communities in Southwestern Ontario, Canada were invited to participate in this study. Participants were: (i) 18 years of age or older, (ii) A resident of either the City of Guelph or the Counties of Wellington and Dufferin, and (iii) A member of one of the 13 community groups in the study. The exclusion criteria were anyone with health conditions that precluded him or her from exercising.

In Phase I, focus group facilitated discussions included 6-12 participants in each group. All efforts were made to create a comfortable atmosphere to facilitate a relaxed discussion; conversations were not recorded. The same, trained investigator facilitated each focus group discussion following the same procedure. Overall, the conversations were navigated to explore underlying factors for the overall lack of PA or exercise found in the Canadian adult population.

Based on the responses from Phase I, a survey questionnaire was created to validate the findings of the focus group interviews. The surveys were distributed to the same community groups where the focus group data were collected. Survey administration was scheduled at a convenient time and location suitable for each group with the objective of obtaining as many participants as possible. Participation in the focus group discussions was not required for completion of the survey.

Results

Participants were asked to associate numerous phrases, such as "enjoyable, fun, rewarding", "stress reliever", etc., with either traditional exercise or physical activity. The associations of various phrases with exercise are shown in Table 1, and the associations of various phrases with PA are shown in Table 2. Overall, the responses of the older males are quite similar to the younger and middle aged males. That is, older males generally make the same associations with exercise ("planned, structured, regimented..."; "stress reliever"; "I'm happy and feel like I've accomplished something"), or PA ("walking" "gardening, raking leaves ..."; "cleaning the house..."). Interestingly, younger males tended to associate weightlifting with PA, while middle aged and older males did not.

The responses below (Table 3 and Table 4) indicate participants' level of participation in traditional gyms,

 Table 1: Male responses to survey questions related to the association of descriptive statements with exercise rather than physical activity.

| | Ages 18-34 ^{2A 2B} | Ages 35-64 ^{3A 3B} | Ages 65 and older ^{4A4B} |
|--|-----------------------------|-----------------------------|-----------------------------------|
| Enjoyable, fun, rewarding | Male 43% | Male 49% | Male 44% |
| Painful, tiring, boring | Male 43% | Male 44% | Male 34% |
| 150 minutes of moderate to vigorous activity per week | Male 38% | Male 16% | Male 36% |
| Planned, structured, regimented, routine, repetitive | Male 76% | Male 53% | Male 50% |
| Not rewarding, an obligation, a chore | Male 14% | Male 33% | Male 22% |
| Stress reliever | Male 67% | Male 53% | Male 53% |
| I'm happy and feel like I've accomplished something afterwards | Male 62% | Male 42% | Male 54% |
| Difficult to overcome inertia to achieve | Male 38% | Male 42% | Male 32% |
| Impractical, takes too long | Male 24% | Male 33% | Male 18% |
| Sweating, hard work, requires maximal intensity | Male 52% | Male 31% | Male 18% |

Numbers represent the percentage of total respondents answering "Yes" to the question.

Male

^{2A}N ages 18-34= 21; ^{3A}N ages 35-64= 45; ^{4A}N ages 65 and above = 125

Table 2: Male responses to survey questions related to the association of certain activities with physical activity rather than exercise.

| | Ages 18-34 ^{2A 2B} | Ages 35-64 ^{3A 3B} | Ages 65 and older ^{4A 4B} |
|---|-----------------------------|-----------------------------|------------------------------------|
| Treadmill, stepper, elliptical, bike | Male 43% | Male 22% | Male 34% |
| Group fitness classes (step bench, spinning, yoga, etc.) | Male 33% | Male 4% | Male 18% |
| Walking | Male 71% | Male 76% | Male 80% |
| Playing with children | Male 38% | Male 53% | Male 29% |
| Taking the stairs | Male 67% | Male 56% | Male 65% |
| Jogging, cycling, swimming laps | Male 57% | Male 22% | Male 36% |
| Gardening, raking leaves, shoveling snow and other yardwork | Male 52% | Male 76% | Male 62% |
| Weightlifting | Male 52% | Male 11% | Male 22% |
| Walking the dog | Male 52% | Male 47% | Male 34% |
| Cleaning the house or washing the car | Male 57% | Male 62% | Male 45% |

Numbers represent the percentage of total respondents answering "Yes" to the question.

Male

 ^{2A}N ages 18-34= 21; ^{3A}N ages 35-65= 45; ^{4A}N ages 65 and above = 125

Table 3: Male responses to survey questions related to gym participation.

| | Ages 18-34 ^{2A 2B} | Ages 35-64 ^{3A 3B} | Ages 65 and older ^{4A 4B} |
|---|-----------------------------|-----------------------------|------------------------------------|
| Are you a gym member? | Male 57% | Male 16% | Male 21% |
| If yes, is going to the gym a necessary part of life in order to take care of yourself? | Male 43% | Male 11% | Male 18% |
| If yes, do you enjoy the activities you do (treadmill, weights, group fitness classes, etc.)? | Male 67% | Male 9% | Male 18% |
| If yes, is getting started (inertia) a problem? | Male 33% | Male 0% | Male 10% |

Numbers represent the percentage of total respondents answering "Yes" to the question.

Male

^{2A}N ages 18-34= 21; ^{3A}N ages 35-65= 42-45; ^{4A}N ages 65 and above = 118-120

and their feelings towards the gym environment. Clearly, in this Southern Ontario group of males, the level of participation declines markedly in the older males compared to the younger. Older males also did not view going to the gym as being necessary, or particularly enjoyable. Interestingly, older males did not have negative associations with the gym such as being intimidating, disconnected, vulnerable or embarrassed. This was similar to the other male age groups. Older males, did, however, indicate a clear preference for

| Table 4: Male responses to survey questions related to perception of the gym environment. |
|---|
|---|

| | Ages 18-34 ^{2A 2B} | Ages 35-64 ^{3A 3B} | Ages 65 and older ^{4A 4B} |
|--|-----------------------------|-----------------------------|------------------------------------|
| I think there is a negative culture in the gym with too much concern over physical appearance | Male 2.95 | Male 3.74 | Male 3.03 |
| I prefer physical activities (walking, hiking, raking leaves, playing with children, etc.) outside the gym environment | Male 3.24 | Male 4.18 | Male 3.97 |
| Using the equipment in the gym can be intimidating | Male 3.33 | Male 3.26 | Male 2.93 |
| I feel judged in a gym environment | Male 2.62 | Male 3.26 | Male 2.62 |
| The gym environment is intimidating | Male 2.95 | Male 3.26 | Male 2.59 |
| I feel a disconnect with "fit" gym members because they are so far ahead of me | Male 2.86 | Male 3.08 | Male 2.52 |
| The gym makes me feel vulnerable and exposed | Male 2.29 | Male 2.87 | Male 2.41 |
| I am too embarrassed to go to the gym | Male 1.86 | Male 2.41 | Male 2.14 |
| I don't want to join a gym because I associate it with exercise | Male 1.62 | Male 2.71 | Male 2.38 |

Numbers represent the mean Likert scale response to each question using the scale 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree.

Male

^{2A}N ages 18-34= 21; ^{3A}N ages 35-65= 37-39; ^{4A}N ages 65 and above = 92-110

 Table 5: Male responses to survey questions of motivational factors for physical activity.

| | Ages 18-34 | Ages 35-64 | Ages 65 and older |
|-----|--|--|---|
| #1. | Male (1) (15/21 participants responded. 71%) | Male (4) (30/46 participants responded. 65%) | Male (4) (78/134 participants responded. 58%) |
| #2. | Male (4) (15/21 participants responded. 71%) | Male (1) (25/46 participants responded. 54%) | Male (1) (67/134 participants responded. 50%) |
| #3. | Male (8) (12/21 participants responded. 57%) | Male (5) (21/46 participants responded. 46%) | Male (2) (58/134 participants responded. 43%) |
| #4. | Male (3) (11/21 participants responded. 52%) | Male (7) (21/46 participants responded. 46%) | Male (5) (62/134 participants responded. 46%) |
| #5. | Male (2) (10/21 participants responded. 48%) | Male (2) (15/46 participants responded. 33%) | Male (7) (46/134 participants responded. 34%) |

The motivators to engage in physical activity are ranked using a 1-5 scale, 1= being the least motivational and 5= being the greatest motivator. The rankings that received the highest score once summed are shown in () as well as the percent of respondents who chose that particular ranking.

(1) Feeling good and happier afterwards; (2) Longevity; (3) Appearance; (4) Better health; (5) Losing or maintaining my weight; (6) Exercising with a friend or group; (7) Enjoying the feel of being physically active; (8) Seeing the rewards physically; (9) It is part of my job (i.e. If one is physically active at work); (10) Negative consequences of health (i.e. You or someone you know experience a heart attack, stroke, or suddenly died); (11) Other

more natural lifestyle activities to those performed in the gym.

The main motivators to exercise or be physically active are shown in Table 5 and Table 6. Table 5 ranks the motivators as determined by the percentage of respondents that chose that particular motivator as being one of their top 3 motivators. Table 6 indicates the percentage of participants that ranked a particular motivator as their top (first) choice. The two most consistently ranked motivators (Table 5) are essentially the same across all age groups; namely, "Feeling good and happier afterwards", and "Better health." Beyond these first two, differences emerged, although the middle aged and older males were quite similar, with "Longevity", "Losing or maintaining my weight", and "Enjoying the feel of being physically active" being ranked 3, 4 and 5. Not surprisingly, the older males ranked "Longevity" as their third most commonly chosen motivator. "Appearance" and "Seeing the rewards physically" was more important in the youngest group of males. Table 6 shows fairly similar results. "Better health" was chosen the most often as the number one ranked motivator by the older males (36%), with "Longevity" and "Feeling good and happier afterwards" tied for second (16% each). Interestingly, these three motivators were also the most commonly chosen as the number one ranked motivator in the youngest group of males, albeit with "Feeling good and happier afterwards" as the most consistently chosen. "Appearance" and "Seeing the rewards physically" was again ranked more highly by the youngest, but not the older males.

Discussion

Similar to the 18-34 and 35-64 age groups, the older

| | Ages 18-34 | Ages 35-64 | Ages 65 and older |
|---|-------------|--------------|-------------------|
| (1) Feeling good and happier | Male (5/15) | Male (8/25) | Male (11/67) |
| afterwards | (33%) | (32%) | (16%) |
| (2) Longevity | Male (2/10) | Male (3/15) | Male (9/58) |
| | (20%) | (20%) | (16%) |
| (3) Appearance | Male (2/11) | Male (0/15) | Male (1/29) |
| | (18%) | (0%) | (3%) |
| (4) Better health | Male (3/15) | Male (10/30) | Male (28/78) |
| | (20%) | (33%) | (36%) |
| (5) Losing or maintaining my | Male (1/8) | Male (3/21) | Male (7/62) |
| weight | (13%) | (14%) | (11%) |
| (6) Exercising with a friend or | Male (1/8) | Male (0/4) | Male (1/13) |
| group | (13%) | (0%) | (8%) |
| (7) Enjoying the feel of being | Male (0/7) | Male (2/21) | Male (2/46) |
| physically active | (0%) | (10%) | (4%) |
| (8) Seeing the rewards | Male (2/12) | Male (1/10) | Male (0/2) |
| physically | (17%) | (10%) | (0%) |
| (9) It is part of my job (i.e. If one | Male (0/3) | Male (5/7) | Male (0/22) |
| is physically active at work) | (0%) | (71%) | (0%) |
| (10) Negative consequences of | Male (0/1) | Male (2/13) | Male (2/22) |
| health (i.e. You or someone you know experience a heart attack, stroke, or suddenly died) | (0%) | (15%) | (9%) |
| (11) Other | Male (0/1) | Male (1/4) | Male (1/4) |
| | (0%) | (25%) | (25%) |

 Table 6: Number of male survey respondents that chose a motivator as first choice.

The number of respondents that chose the motivator as their #1 choice is shown divided by the respondents that entered a value of 1-5 for that motivator. The result is displayed as a percentage. (NOTE: the denominator represents the number of respondents who actually inputted a value of 1-5 and doesn't represent the total number of people in that category).

male population from Southern Ontario viewed exercise (as opposed to PA) as "planned, structured, regimented, routine, and repetitive" (50%), a "stress reliever" (53%), and achieving a real sense of accomplishment and happiness post workout (54%). This indicates that the adult male views are consistent across all age groups and that "exercise" in the minds of so many is specific to a more defined movement often in a more defined space. That said, the benefits of exercise are appreciated and recognized as feeling more relaxed, content, and happier afterwards. The post "work-out" benefits are widely established and acknowledged by all adult groups. It is interesting to mention that although not in the majority, approximately a third (34%) of all older male participants associated exercise as "painful, tiring, and boring" while 44% found it to be "enjoyable, fun, and rewarding." Clearly there is a segment of the older male Southern Ontario population that embraces more planned and structured movement; perhaps a retired lifestyle is more conducive to a greater positive attitude towards exercise versus lifestyle PA. One might also reflect on their personal relationship with exercise as a "love-hate" relationship. Although difficult to initiate movement (32%) but knowing "I'm happy and feel like I've accomplished something afterwards" can be a great reward post exercise. This combination was evident in all three age groups with the males.

For those adult Canadian males that are gym members (21%) and see the gym as a necessary part of their environment (18%) who enjoy activities traditionally performed at the gym such as the treadmill, weights, group fitness classes, (18%) can also struggle with initiating the energy towards getting to the gym to do what they enjoy. There is a need to address intervention strategies necessary to help those preferring a more structured PA lifestyle to develop more effective habits and routines to accomplish individual needs and objectives specific to critical goals for a healthier body. Planning ahead and prioritizing the next day towards exercise with a sense of resolve can certainly help yet there are potentially more factors that can factor into effective decision making in carrying on a consistent exercise program.

It is enlightening to note that the top three descriptors associated with lifestyle PA (versus exercise) activities are walking (80%), taking the stairs (65%), and gardening, raking leaves, shoveling snow

and other yardwork activities (62%). Each of these popular areas have physical health benefits [10,15,16] and can easily be incorporated into the course of the day while accomplishing every day routine tasks and responsibilities [7,17]. With 80% of the older male population from Southern Ontario choosing "walking" as the top descriptor for PA, more effort should be made to promote walking as a viable form of PA, especially among the elderly. Walking is the one PA that almost every adult can partake in. For example, individuals can choose to walk in their neighborhood with others or solo, brisk walk in a designated area such as the nearby high school or college track, local or regional park, or accumulate steps in and around the house or at work. Adults with dogs tend to be more physically active than those without dogs and since 34% of the 65 and up group valued "dog walking" as a viable form of PA, older individuals could be encouraged to own dogs.

Taking the stairs is a natural ways to improve general and fitness health daily. Although aging comes with increased risk of injuries and ailments, the 65 and older population should strive to take the stairs whether at home or in public. One can even simulate walking at an incline around or near the house if taking the stairs is painful on the joints. As adults become older, staying at home becomes of a reality for many, but this doesn't need to interfere with engagement in PA. Housework and chores can promote activity in a way that is meaningful and productive.

Older male responses to survey questions related to perception of the gym environment among older Southern Ontarians reflected a generally neutral perception of gym culture, including feelings such as vulnerability and embarrassment. This was also consistent with the 18-34 and 35-64 year-old age groups. Also similar to the younger and middle-aged participants, the older males preferred more lifestyle physical activities outside of the gym environment (3.97 on a Likert scale from 1-5). This is consistent with the overwhelming majority of adults preferring lifestyle PA over exercise in their everyday world. Basically, the older Southern Ontario adult population are comfortable enough with the gym culture but would prefer to focus on PA outside the gym setting. Once again, the academic, medical, and health professional communities need to increase their promotional and educational efforts on lifestyle PA for all age groups but particularly for the elderly.

Finally, it is not surprising that "better health" is a major motivator to engage in PA among the older Southern Ontarian males as the physical health benefits of PA have been made known for years. Similar to the younger and middle-aged male participants in the study, the older males also ranked the affective motivator, "feeling good and happier afterwards" in their top two motivators to be physically active. The state of being happy and enjoying the activity is critical for continued participation in PA and maintaining functional mobility, which can lead to improved longevity, ranked third overall among older males. It stands to reason that as adults age, they are more acutely aware of their life span. Lifestyle PA also serves an important means to boost physical and mental health throughout the lifetime. More efforts are necessary to include the older population in all PA strategies given and implemented within the public.

In conclusion, the older males from Southern Ontario were similar to their younger counterparts in terms of what they associated with exercise and PA, gym outlook and perception, and motivators to PA. Regardless, one size does not fit all when it comes to determining the best PA for each individual, including the older population. Because the aging population tends to become more dependent on others over time, family members, health and wellness experts, and the medical community must be responsible in focusing on each older person's needs to become more physically active, realizing that most older adults prefer lifestyle PA. If only 15-20% of the older population prefer a gym atmosphere and a traditional exercise program, health experts need to become more sensitive to the preferences of each person for a higher probability of participation and enjoyment in order to maximize success.

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