Golden Age Gym: reasons for entry, permanence and satisfaction among participating older adults

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Abstract – Fitness facilities are being implemented in many public parks and older adults have benefited from the promotion of exercise at these sites. The objective of this study was to describe the perception of older adults participating in the Golden Age Gym program (Programa Academia da Melhor Idade - AMI) in the city of Joinville, Santa Catarina, Brazil, in terms of the reasons to enter and remain in this program, satisfaction, and suggestions regarding the services provided. A total of 163 older adults (117 women and 46 men) participating in 15 AMIs installed in public places in Joinville were interviewed. Data were collected by semi-structured interview. Descriptive statistics and thematic content analysis were used for quantitative and qualitative data, respectively. Intrinsic motivation was the predominant factor for the entry and permanence of older adults in the AMIs, particularly the pursuit of health (entry) and perceived benefits of exercise (permanence). The encouragement of others was the main extrinsic motivational factor for entry and socialization was the main reason to remain in the AMIs. The participants were satisfied with the service provided and with the infrastructure, but suggest improvements such as an increase in the number of fitness activities, training of instructors, installation of public restrooms, drinking fountains, and covered facilities. It was concluded that older people mainly present intrinsic motivations to enter and remain in the AMIs. The majority older adults is satisfied, but recommend improvement of human resources and infrastructure that would permit the implementation of new strategies designed to promote exercise in public places and to attend a larger number of users.

Key words: Motivation; Older adults; Program evaluation.

Resumo – Academias da saúde vêm sendo implantadas em diversos parques públicos e a população idosa tem sido beneficiada com a promoção de exercícios físicos (EF) nesses locais. O estudo teve como objetivo descrever a percepção dos idosos do Programa Academia da Melhor Idade (AMI), no município de Joinville - Santa Catarina (SC), quanto à motivação para o ingresso e permanência, satisfação e sugestões dos serviços prestados. Foram entrevistados 163 idosos (117 mulheres e 46 homens) participantes de 15 AMIs instaladas em praças públicas de Joinville. A coleta de dados se deu por meio de uma entrevista semi-estruturada. Utilizaram-se estatística descritiva para os dados quantitativos e análise de conteúdo temática para os dados qualitativos. A motivação intrínseca foi preponderante no ingresso e permanência dos idosos nas AMIs, destacando-se a busca por saúde (ingresso) e a percepção dos benefícios que a prática de EF proporciona (permanência). O incentivo de terceiros foi o principal fator de motivação extrínseco para o ingresso e a sociabilização, principal motivo para a permanência. Os idosos estão satisfeitos com o atendimento prestado e a infraestrutura, mas sugerem melhorias como: ampliação no número de atividades nas academias, capacitação dos monitores, instalação de banheiros públicos, bebedouros e cobertura. Concluiu-se que os idosos apresentam, principalmente, motivações intrínsecas para ingressar e permanecer nas AMIs. A maioria está satisfeita, mas recomenda melhorias em termos de recursos humanos e infraestrutura, a fim de subsidiar a implementação de novas estratégias para a promoção de EF em praças públicas e o atendimento a um maior número de usuários.

Palavras-chave: Avaliação de programas; Idoso; Motivação.
INTRODUCTION

On April 7th, 2011, the Brazilian Ministry of Health implemented the Health Fitness Program (Programa Academia da Saúde) within the public health system through Decree No. 719, which was designed to promote population health. Over the last 6 years, several Brazilian cities have installed Third Age Fitness Centers (Academias da Terceira Idade - ATI) in public parks and spaces. In 2007, the city of Joinville, Santa Catarina (SC), Brazil, created the Golden Age Gym program (Programa Academia da Melhor Idade - AMI), which is the result of a partnership between the Foundation for Sports, Leisure and Events (Fundação de Esportes, Lazer e Eventos - FELEJ) and a healthcare company, with the objective to improve the health, safety, motivation, and inclusion of older adults. Physical activity programs implemented in urban parks and public spaces in different Brazilian capitals have been studied. Knowledge of the motivational factors that lead individuals to perform physical exercise may contribute to the implementation of interventions designed to reduce the prevalence of physical inactivity and to facilitate the adherence of older adults to behaviors that permit active and healthy aging.

Within this context, different theoretical constructs of motivation have been developed to elucidate exercise-related behavior. The self-determination theory has been used to understand intrinsic and extrinsic motivation or even amotivated responses during exercise. In addition to understanding these reasons, it is equally important to analyze the satisfaction of older adults with the program in which they participate in order to evaluate routines and to improve clinical outcomes. According to Vaitsman and Andrade, in view of the increasing costs of health services, assessment is an important element that favors policy reforms and spending restraints, improving the quality and efficiency of services. It is therefore important to identify the extent of satisfaction of older adults with the AMI program and to list suggestions for service improvement, which would effectively interfere with the results and improve participant adherence.

With respect to ATIs, called AMIs in Joinville, few studies have investigated their utilization, specifically motivational factors that influence the practice of exercise among older adults, as well as their satisfaction and suggestions regarding the services provided. Therefore, the objective of the present study was to describe the perception of older adults in terms of the motivation for entry and permanence in the Joinville AMI program, satisfaction, and suggestions regarding the services provided.

METHODOLOGICAL PROCEDURES

Joinville (SC) has developed various projects and actions for health promotion. One of these measures was the implementation of the AMI program whose objective is to establish physical activity facilities in public parks and spaces, monitored by a multidisciplinary team, in order to promote...
health among older adults\textsuperscript{15}. These gyms are the result of a partnership between the municipality, a healthcare company, and the university. In this partnership, the company provides the equipment, the university provides students from the Physical Education course to work in the gyms, and the town hall provides the space, administers the services and remunerates the students by granting fellowships.

The present descriptive study was approved by the Ethics Committee of Universidade da Região de Joinville (Permit No. 149/2010) and was conducted in the 15 AMIs where instructors perform activities with older adults on days and times pre-defined by the FELEJ. The 15 AMIs do not attend all neighborhoods since Joinville has approximately 43 neighborhoods according to the Urban Research and Planning report\textsuperscript{16}. The AMIs are implemented according to the request of the population during participatory budgeting meetings of the municipality, as well as the release of funds granted by the sponsor. As the gyms are installed in the municipality, new instructors are hired.

The activities performed do not follow the same method in all AMIs. Each AMI has 10 exercise apparatuses (skiing, walking and horseback riding simulator, surf, stretcher, leg press, multi-exerciser, double diagonal rotation, vertical rotation, and seated rowing). In addition to these activities, the instructors develop stretching and walking exercises and some older adults participate in other activities outside the AMI, such as cycling, walking and dances for the elderly.

The population of this study involved older adults attending the 15 AMIs in the municipality of Joinville. The sample consisted of 163 subjects obtained by intentional sampling. Included in the study were subjects of both genders aged 60 years or older, who had participated in the AMI program for at least 6 months, were present in the gym on the days of the interviews, and voluntarily agreed to participate in the study.

The data were collected by an undergraduate fellow, by the instructors, and by the coordinator of the AMI program. The instructors did not collect data at the gym where they worked. Data were collected from the older adults at the AMI by individual semi-structured interview between August and December 2010. The interview consisted of four open-ended questions about the reasons for entry and permanence in the AMI and suggestions regarding the infrastructure and services provided. In addition, there were two closed questions rated on a Likert-type scale (excellent, good, regular, poor, and very poor) about the level of satisfaction regarding the infrastructure and service provided by the instructors.

The responses to the open-ended questions were classified by thematic content analysis\textsuperscript{17}. The motivational factors identified in this analysis were defined as extrinsic or intrinsic according to the classification proposed by Ryan and Deci\textsuperscript{12}. Descriptive statistics (simple and relative frequency) was used for analysis of the responses to open-ended (categorical/nominal variables) and closed (ordinal variables) questions.
RESULTS

The mean age of the 163 older adults interviewed was 67.22 ± 5.87 years. Regarding sociodemographic characteristics, most subjects were married (58.5%), had incomplete elementary school (71.9%), were retired (55.0%), and had an income of 1 or 2 minimum wages (41.5%).

As can be seen in Table 1, the majority older adults (66.8%) performing exercise was motivated to participate in the AMIs because of intrinsic factors. The pursuit of health was the most important factor (90.8%) and was due to prevention (48.0%), need because of a specific disease (22.0%), or the understanding of the importance of exercise (31.0%). The AMIs were also reported as a possibility of leisure (4.6%), distraction, and spending time. Some subjects joined the program voluntarily (4.6%) and only one participant (0.9%) reported the fact that the activities were free of charge to be a motivational factor.

With respect to extrinsic factors (33.2%), the encouragement of other people (children, friends or neighbors) was the main reason to join the program (29.6%).

Table 1. Intrinsic and extrinsic motivational factors of older adults to enter the Golden Age Gym program (Programa Academia da Melhor Idade) of the city of Joinville (SC).

<table>
<thead>
<tr>
<th>Reasons to enter</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic factors</td>
<td>109</td>
<td>66.8</td>
</tr>
<tr>
<td>Pursuit of health</td>
<td>99</td>
<td>90.8</td>
</tr>
<tr>
<td>Leisure</td>
<td>5</td>
<td>4.6</td>
</tr>
<tr>
<td>Voluntary</td>
<td>5</td>
<td>4.6</td>
</tr>
<tr>
<td>Free of charge</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Extrinsic factors</td>
<td>54</td>
<td>33.2</td>
</tr>
<tr>
<td>Encouragement of others</td>
<td>16</td>
<td>29.6</td>
</tr>
<tr>
<td>Medical indication</td>
<td>15</td>
<td>27.8</td>
</tr>
<tr>
<td>Socialization</td>
<td>13</td>
<td>24.1</td>
</tr>
<tr>
<td>Different environment</td>
<td>10</td>
<td>18.5</td>
</tr>
</tbody>
</table>

n = absolute frequency; % = percentage; ¥ = the participants could indicate one or more motivational factors to enter the program.

Regarding intrinsic motivational factors to remain in the program (73.3%), perceived benefits were reported by the majority of older adults (45.4%). Extrinsic factors (26.7%) included the importance of socialization (72.7%), the presence of instructors during exercise (18.2%), and a different environment (9.1%) (Table 2).

The majority of older adults was satisfied with the services provided (excellent: 54.0%; good: 37.4%) (Table 3). The main suggestions reported were different practice times (n = 20) and an increase in the number of activities offered (n = 13), such as activities outside the park, home care, and localized gymnastics. Among the older adults interviewed, 121 did not report suggestions to improve the service provided.
Table 2. Intrinsic and extrinsic motivational factors of older adults to remain the Golden Age Gym program (Programa Academia da Melhor Idade) of the city of Joinville (SC).

<table>
<thead>
<tr>
<th>Reasons to remain¹</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic factors</td>
<td>119</td>
<td>73.3</td>
</tr>
<tr>
<td>Perceived benefits</td>
<td>54</td>
<td>45.4</td>
</tr>
<tr>
<td>Feeling good</td>
<td>32</td>
<td>26.9</td>
</tr>
<tr>
<td>Liking exercise</td>
<td>27</td>
<td>22.7</td>
</tr>
<tr>
<td>Leisure</td>
<td>6</td>
<td>5.0</td>
</tr>
<tr>
<td>Extrinsic factors</td>
<td>44</td>
<td>26.7</td>
</tr>
<tr>
<td>Socialization</td>
<td>32</td>
<td>22.7</td>
</tr>
<tr>
<td>Instructor</td>
<td>8</td>
<td>18.2</td>
</tr>
<tr>
<td>Different environment</td>
<td>4</td>
<td>9.1</td>
</tr>
</tbody>
</table>

n = absolute frequency; % = percentage; ¹ = the participants could indicate one or more motivational factors to remain in the program.

Table 3. Satisfaction of older adults with the service provided by the Golden Age Gym program (Programa Academia da Melhor Idade) of the city of Joinville (SC).

<table>
<thead>
<tr>
<th>Level of satisfaction</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>88</td>
<td>54.0</td>
</tr>
<tr>
<td>Good</td>
<td>61</td>
<td>37.4</td>
</tr>
<tr>
<td>Regular</td>
<td>4</td>
<td>2.5</td>
</tr>
<tr>
<td>Poor</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Very poor</td>
<td>4</td>
<td>2.5</td>
</tr>
<tr>
<td>Did not answer</td>
<td>5</td>
<td>3.1</td>
</tr>
</tbody>
</table>

n = absolute frequency; % = percentage.

When asked about the infrastructure of the facilities (Table 4), the majority of older adults was satisfied (excellent: 36.2%; good: 59.5%).

The main suggestions to improve the infrastructure of the AMIs were the installation of different equipment (n = 42) and covered facilities (n = 32). Sixty of the older adults interviewed did not make any suggestions regarding infrastructure improvement.

Table 4. Satisfaction of older adults with the infrastructure of the Golden Age Gym program (Programa Academia da Melhor Idade) of the city of Joinville (SC).

<table>
<thead>
<tr>
<th>Level of satisfaction</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>59</td>
<td>36.2</td>
</tr>
<tr>
<td>Good</td>
<td>97</td>
<td>59.5</td>
</tr>
<tr>
<td>Regular</td>
<td>5</td>
<td>3.1</td>
</tr>
<tr>
<td>Poor</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>Very poor</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

n = absolute frequency; % = percentage.

DISCUSSION

In the present study, intrinsic motivation was a predominant factor for older adults to enter and remain in the AMIs, particularly the pursuit of
health (entry) and perceived benefits of exercise (permanence). The encouragement of other people was the main extrinsic motivational factor to enter the program and socialization was the main factor to remain in the program. In general, the older adults were satisfied with the service and infrastructure, but suggested improvements such as an increase in the number of activities offered, training of instructors, installation of public restrooms, drinking fountains, and covered facilities.

These results should be analyzed with caution since they may have been influenced by some limitations of the study. The reasons to enter and remain in the program may differ between genders and age groups; however, the objective of this study was to perform a comprehensive analysis of the topic without distinction between the gender and age of older adults participating in the AMI program. However, the results obtained are important to increase the knowledge of this topic and to contribute to future studies using other designs.

Several studies have been conducted to identify barriers and facilitators to performing regular physical activity in older adults. Facilitators include the health benefits of physical activity, liking physical activity, socialization, medical indication, presence of an instructor, the opportunity to leave home, support from parents and/or friends, and residential proximity to exercise facilities.

The pursuit of health (90.8%) was the main reason to enter the AMI program in the present study. Studies involving older adults participating in regular exercise programs also found health improvement and maintenance to be the main factor of adherence. In the study of Freitas et al. which investigated the reasons of 120 older adults to enter and remain in two exercise programs offered in public places in Recife (PE), 100% of the participants joined the programs for health reasons (improvement and maintenance), in agreement with the present findings.

A transcultural study conducted by Cerri and Simões that included 29 older adults from Fort Collins (Colorado, USA) and 43 older adults from the Brazilian town of Piracicaba (São Paulo) investigated the reasons of these individuals to enter public (USA) and private (Brazil) water aerobics programs. The study showed that 76% of the North-American older adults adhered to the programs to “keep healthy”. In contrast, most Brazilian participants (58%) reported to have started the program because of medical recommendations. This was also the second most important intrinsic factor (27.8%) to enter the AMI program in the present study.

Perceived benefits was the main reason (45.4%) reported by the older adults to remain in the AMI program, a finding highlighting the pursuit of health as a positive motivational factor.

With respect to extrinsic factors, socialization was an important motivational factor of older adults to adhere (24.1%) and remain (72.7%) in the AMI program. Similar results have been reported in other studies.

Eiras et al. identified the reasons for adherence to and maintenance of physical activity in 14 older adults from Curitiba (PR) in two different
contexts: 9 subjects performed self-guided walking and 5 subjects participated in the guided program “Seniors in Motion” (Idoso em Movimento). The results indicated “sociability” as one of the reasons for adherence to and maintenance of exercise. Similarly, Meurer et al.24, studying 111 older adults performing exercise within the “Floripa Ativa” program in Florianópolis (SC), found that the older adults have high self-esteem and feel motivated as a result of the participation in the exercise program, especially in the dimensions of health and sociability.

In the study of Freitas et al.18, the reason “to build new friendships” related to the permanence of older adults in two exercise programs in Recife (PE) was reported by 47.5% of the participants. Gomes and Zazá25 investigated the main reasons for adherence to physical activity among 40 older women participating in two different companionship groups in the state of Minas Gerais. A frequently cited reason was “to increase social contact” (85%). The agreement between the results of these different studies supports the view that social networks serve as protective factors and for the maintenance of health27. The perception of these benefits by older adults leads them to remain in the social activities to which they adhered.

The older adults participating in the AMIs also cited the fact of “feeling good” (26.9%) as a motivational factor to remain in the program. Freitas et al.18, evaluating the importance of the environment for permanence of older adults in physical activity programs, identified the feeling of well-being (60%) and easy access to the place of physical activity (50%) as very important factors.

Cohen et al.27, who investigated the contribution of public parks to physical activity and leisure in Los Angeles (USA), found that few older adults use these spaces. The places most frequently used by this population were those providing specific activities for older adults. The authors suggested that adequate spaces for this population should be built in public parks to encourage the adherence to physical activity. The proposal of the AMI program is in accordance with this premise and was planned to attend to the needs of the elderly population15.

Hallal et al.4 evaluated interventions for physical activity promotion offered by the town hall of Curitiba (PR). A total of 120 adults, including 33 seniors, participated in the study; of these, 50% showed a high level of satisfaction with the activities offered by the programs and with the personnel. Regarding the latter, 61% of the participants were satisfied with the information and instructions provided and 55.6% were satisfied with the infrastructure and safety of the facilities.

Another study conducted in the city of Natal (RN) investigated whether a public park attended to the needs of its users in terms of leisure and physical activity28. The results showed that all users considered the park a place of leisure and the reasons for its use were physical activity and socialization. The users also suggested to increase the number of garbage bins and police surveillance and to improve infrastructure maintenance. In addition, covered facilities were suggested due to the long period of rain
in the region and the days of strong sun, which prevent older adults from performing exercise in these environments. In the studies of Eiras et al.\textsuperscript{22} and Silva et al.\textsuperscript{4}, climatic factors (rain and strong sun) were reported to be strong negative indicators (barriers) of physical activity in outdoor spaces.

\textbf{CONCLUSIONS}

This study showed that intrinsic motivation was the predominant factor for entry and permanence of older adults in the AMI program, particularly the pursuit of health and perceived benefits of exercise, demonstrating how much older adults are concerned with their well-being, autonomy and independence. Extrinsic factors included the encouragement of others, socialization and medical indication, in agreement with studies on older adults in which these factors were important for the adoption of physical activity.

The older adults were satisfied with the service provided and with the infrastructure, but suggested improvements. These data will provide an important basis to improve the AMI programs in Joinville, as well as to implement physical activity programs and health promotion interventions that enable active and healthy aging among older adults from the municipality and from other cities that intend to adhere to this work.

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\textbf{REFERENCES}