# 68 - PERFIL DE IDOSOS PRATICANTES DE EXERCÍCIO FÍSICO EM ITAIPAVA

VIVIANE PEIXOTO DE CASTRO NETTO TATIANA GOMES SATIRO FERNANDO PETROCELLI DE AZEREDO Universidade Estácio de Sá, Petrópolis, RJ, Brasil

doi:10.16887/89.a1.68

#### INTRODUCTION

Human aging comprises a universal, dynamic and irreversible process that has varied influences. According to the World Health Organization (WHO), the number of people over 60 will reach 2 billion by 2050, representing one-fifth of the world's population. According to data provided by the same institution, in 2016 Brazil had the fifth largest elderly population in the world, and by 2030 the number of older people will exceed the total of children between 0 and 14 years. With the aging of the population, the demand for specialized professionals to attend this public and the studies in the area also grows. It is a fact that aging brings with it numerous changes in an organism. Several scientific and religious theories discuss aging, and there is no consensus on the absolute truth of each, but we can say that aging happens from conception and lasts until death (TAYLOR & JOHNSON, 2015) wich, according to Kenny (1985) apud Taylor & Johnson (2015), occurs when "function decline occurs to the point where it becomes impossible to maintain an internal environment compatible with cellular life".

From the social point of view, Debert (1999) considers that old age has been seen and treated differently, according to historical periods, social, cultural, economic and political structure of each people, and that the values intrinsic to the representation that a society has of old age are responsible for actions that enable or not the protection and social inclusion of their elderly and also the quality of relationships established with them. According to Bandura (1986), a competent functioning of the individual involves beliefs about their self-efficacy, which refers to the individual's judgment about their ability to organize and perform courses of action necessary to achieve certain types of performance. There is abundant research data that shows that self-efficacy beliefs are important determinants of physical and intellectual performance, as well as subjective well-being in senility and senescence (Neri 2001). This view of self-efficacy may become impaired in the elderly because they are commonly seen as incapable. The factors reported show the importance of knowing the reasons that lead to the physical, psychological and social well-being of the elderly. Del Prette and Dell Prette (1999) relate quality of life to the issue of social relations as factors of mental health and development, as well as Capitanini (2000), who also emphasizes the importance of social relationships for physical and mental well-being in old age. According to the author, although the tendency is for solitude to increase in old age, this process can be avoided, an idea shared by Freire (2000), who says that old age does not necessarily imply sickness and remoteness, since the elderly have the potential for change and many unexplored reserves. The aforementioned author also argues that the ability to interact socially is fundamental for the elderly to conquer and maintain their networks of social support. ensuring a higher quality of life. According to Neri (2001), the maintenance of social relations with the spouse, with the relatives and mainly with friends of the same generation, favors the psychological and social well-being of the elderly, and the relationships among elderly friends are particularly beneficial, because they occur by free choice, thus being more functional to the affective needs of those involved.

Bolsanello (1986, p. 762) apud Costa (2012) emphasizes that "the primary goal of care for the elderly should be to maintain it as an integral part of society." It is known that there is an association between loneliness and depression, recognizing their synergistic action in reducing the elderly's well-being. According to Moraes et al (2007), only 30 to 35% of depressive individuals respond to psychotropic drugs. In the last 30 years, several studies have suggested the efficacy of physical exercises in the prevention or reduction of depressive symptoms (TSUTSUMI et al., 1998; MORTAZAVI et al., 2012). An exercise program for the third age should be aimed at improving the individual's physical capacity, reducing the physiological deterioration of the organism, maximizing social contact and reducing psychological problems such as anxiety and depression (CHEN et al., 1992 - apud MATSUDO, 2001). Sighn and collaborators found that anaerobic exercise significantly reduced the depression levels of those surveyed. Results suggest that the higher the intensity of training, the lower the rates of depression. A study by Blumenthal et al (1999) compared the efficacy of 3x weekly aerobic training with antidepressant treatment. At the end of 16 weeks of intervention, those who only underwent training had symptom reduction similar to those who used only medications or combined antidepressant with exercise. The National Institute for Health Care and Excellence (NICE) in 2010 included physical activity as a strategy for exercise, recommending low-intensity activities with a frequency of 3x a week and 45-60 minutes duration per session.

Saad (1990, p.4) apud Statute of the Elderly (2005), understands that "the individual happens to be seen as old when it begins to depend on third parties for the fulfillment of their basic needs or routine tasks." For Tribess and Virtuoso (2005) apud Civinsk et al (2011), the decrease in the levels of physical activity of the elderly contributes significantly to the reduction of functional aptitude and manifestation of several diseases in this population, bringing the loss of health and fitness functional physics. Civinsk also mentions that the exercises bring physical, social and psychological benefits to the elderly population. The author states that by regularly exercising older people tend to lower their triglyceride levels, blood pressure, body fat and increase HDL cholesterol, insulin sensitivity and muscle mass. Velasco (2006, p.111) apud Civinsk (2011) affirms that practicing daily physical exercises - mainly aerobic, impact, weight and resistance exercises - in moderate intensity, will guarantee independence in the life of the elderly. The aerobic training becomes very important for the elderly, since they have their reduced aerobic capacity due to the gradual decline of the maximum VO2, which can be caused by pathological, physiological and social reasons, arising the need of the practice and physical exercises of form methodical and systematic. Studies have shown that sedentary elders who underwent a biannual aerobic exercise program were able to improve the effectiveness of oxygen delivery to the muscles to levels close to that of people in their 20s or 30s(GUPTA 2009, p:77 apud SILVA 2012, p:15).

All living individuals will grow old, it is an unavoidable process. However old age occurs in a heterogeneous way and depends on several factors, which may be intrinsic, such as the individual genetic constitution, or extrinsic, that refer to the environmental exposures that the individual has suffered, such as: diet type, sedentary lifestyle, pollution, among others. Physical exercise does not usually affect primary aging, which depicts the natural physiological wear that occurs over the years in

## FIEP BULLETIN

an organism, but the opposite occurs in secondary aging, which is closely linked to pathologies and environmental factors. Physiological changes due to age cause decrease of hormonal secretions, muscular atrophies and reductions in bone density (FLECK & KRAEMER, 2017; TAYLOR & JOHNSON, 2015). In women, physiological changes bring additional problems, since the decrease in estrogen levels, a hallmark of menoupause, contributes to loss of strength, muscle density and bone mineral density. According to Fleck & Kraemer (2017), periodized resistance training using high loads seems to be important for optimizing the end points of estrogen target tissues in women. In addition, there is also a drop in testosterone levels, which occurs in men and women, but the concentration of this hormone is between 20 and 40 times lower in female subjects. Knowing that this hormone interferes with anabolic signaling and its scarcity decreases the response of the organism in a variety of physiological targets (such as skeletal muscle and motor neurons), it is extremely necessary to engage this population in physical exercises, mainly before 22 years of age. Age, where the woman is still able to raise blood levels of testosterone with strength training (Fleck & Kraemer, 2017 p.354).

Numerous bodily changes occur especially after 70 years of age. The Italian Longitudinal Study on Ageing (ILSA) with non-institutionalized elderly people and the project SABE (Saúde e Bem-Estar do Idoso), in the Brazilian population, corroborate that over the years there has been a trend towards changes in body composition, with reduction of muscle mass and redistribution of fat, more perceptions around 75 years and in the more fragile elderly, causing detrimental effects on the quality of survival population. Faced with so much evidence is undeniable the importance of engaging the elderly in regular physical exercise programs, especially those that also generate social interaction. Leisure activities and group living together contribute to maintaining the biopsychosocial balance of the elderly, alleviating possible environmental and social conflicts. In this way, physical, intellectual and leisure activity must be associated in the search for a healthy aging (PENNA & SANTO, 2006).

### JUSTIFICATION OF THE STUDY

The issue of the elderly should be studied and thought out, as global aging is a fast-moving process. Older people need to be taken into account in their physical and social aspects so that they can feel integrated in society, having respect, importance and acceptance preserved.

Currently the elderly population is concerned not only with longevity, but also with quality of life. Many older people, with the ease of access to information and widespread media disclosure, have realized that the secret to quality longevity is based on healthy habits, of which physical activity is a prime factor.

# RELÉVANCE

In conclusion, this study is important for all who work in the area of Physical Education, as well as for other professionals who are interested in working with the elderly, because knowing the preferences, characteristics and peculiarities of individuals leads us to offer a service of excellence aimed at the public target. With all the facts already mentioned, we know that the elderly are a great potential client.

### GOAL

This study aimed to investigate through a questionnaire the profile of elderly clients practicing physical exercises in the Itaipava region.

#### MATERIALS AND METHODS

The research components were 42 elderly, 25 men and 17 women, all over 60 years old and residents of the district of Itaipava in the city of Petrópolis. The subjects are regular practitioners of physical exercises in gym and outdoor and perform activities from 1 to 6 times a week in a systematic way for at least 3 months. In order to verify the profile of the interviewees, a questionnaire (APPENDIX I) was used, which according to Parasuraman (1991) apud Chagas (2000) "is only a set of questions, done to generate the necessary data to achieve the project objectives". We used open and closed questions, considering the following variables: age, sex, regular practice time, level of schooling, family income, practiced exercises, schedule of activities, weekly frequency, reasons for beginning exercise, marital status, health problems and the use or not of the services of a personal trainer. The questionnaire was validated (APPENDIX II) by three professors with a master's degree from Universidade Estácio de Sá do Campus Petrópolis. To start our research we visited the academies Exentric, Otimize, Acqua Sports Itaipava and Itaipava Sport Center, in addition to Clinic Bem Físio and the professional Tobias Dias Carvalho, Cref: 004364G-RJ, who provides services in the region as a personal trainer in outdoor activities. We also applied 4 questionnaires to elderly practitioners of exercises at the Third Age Academy of Itaipava Exhibition Park. We took a cover letter (APPENDIX III) from UNESA and presented our research to the professionals and establishments mentioned. We meet with the coordinators responsible for each company, where we introduce ourselves and explain them about the intentions of the research. All the subjects involved in the research received a consent term (APPENDIX IV), which informed them of the intentions of the study and affirmed that they could leave the research at any time if they so desired.

## DATAANALYSIS

For the analysis of the questionnaire data, we used percentage references. According to the survey, 42.9% of clients are between 60 and 65 years old. Other values found were: 21.4% between 66 and 70 years, 16.7% between 71 and 75 years, 11.9% between 76 and 80 years and 7.1% with 81 years or more. The individuals were randomly selected, and the research showed that there was a prevalence of males, totaling 61.9% of the participants, against 38.1% of females. In terms of educational level, 66.7% have completed higher education. 11.9% of the interviewees, had incomplete secondary education, and incomplete high school and elementary school presented the same values: 7.1%. Most individuals, 59.5%, receive 9 minimum wages or more. Other found percentages of family income were: 16.7% receiving from 7 to 8 minimum wages, 14.3% receiving from 5 to 6 minimum wages, 7.1% receiving from 3 to 4 wages and only 2.4% receiving from 1 to 2 minimum wages. According to the research, the most practiced activities among the subjects were bodybuilding with 57.1%, and walking with 52.4%. Other values found were: cycling 14.3%, water aerobics 9.5, pilates and swimming with the same percentage of 19%, tennis 7.1% and group gymnastics 9.5%. Other answers totaled 19% of the total with the following activities: Yoga, aerobic, street racing, spinning, soccer, squash and frescobol. Concerning the hours of practice, 81% of the respondents said they practiced their exercises in the morning, while only 14.3% said they would opt for the afternoon and 4.8% for the night shift. 54.8% practice physical exercises 3 to 4 times a week. They affirmed to maintain their practices of 5 to 6 days per week 31.0% and 14.3% of 1 to 2 times per week. Quality of life is the main motivation for the beginning of physical activity, which represented 83.3% of the total interviewees, followed by a medical indication with 21.4% of answers, aesthetics with 9.5% and social interaction with 2.4%. Other responses such as weight loss, pleasure and permanence in activities long practiced, totaled 7.1%. The predominant marital status was married, reaching 76.2% of the total, followed by a widow with 11.9%, single with 7.1% and divorced and separated with 2.4%

each. Regarding health problems, 40.5% of the individuals stated that they did not present impediments to physical exercise. Of those who present, 35.7% have bone or joint problems, 16.7% have hypertension, 2.4% have muscular problems and other responses totaled 4.8%, with cardiac and spinal problems. To conclude, 19% of the total interviewees stated that they used the services of a personal trainer, while 81% of the participants stated that they did not use this type of service.

Analyzing the collected data, we observed that the predominance of individuals who practice physical exercises in Itaipava occurs between 60 and 65 years of age. Older adults should exercise as much as younger individuals to avoid aggravation of the physiological damage already mentioned, but this does not occur, and is a predictable trend according to statistical data that show the profile of Brazilian physical activity (IBGE, 2015).

The research also showed a direct relationship between practicing physical exercises and the family income of the interviewees, with more people with greater purchasing power practicing physical activities. There was also a predominance of people with educational level equivalent to full tertiary education, a fact that also confirms the national trend that people with greater purchasing power and higher level of schooling exercise more (IBGE, 2017).

The largest number of physical exercise practitioners occurred in males, representing more than 60% of respondents, corroborating with the data from 2015 provided by IBGE that already confirmed this trend. The results showed that most of the participants performed the activities more than 24 months ago, which is a positive point, since studies show that regular and continuous practice of exercises brings numerous benefits to practitioners, besides indicating the fidelity of the elderly as a client. The present study pointed out that the two types of activities most practiced are bodybuilding and walking, partially agreeing with the data collected by the IBGE provided in 2015, and in the last survey cited these activities lost in absolute values for soccer, which did not arrive to be cited in the present research. The vast majority of subjects perform activities 3 to 4 times a week in the morning. This number is satisfactory, since according to Fleck and Kraemer (2017) the performance of resistance training 2 to 3 times a week has been recommended, corroborating with the ideas of the National Institute for Health and Care of Excellence (NICE). Quality of life was the main motivation of the participants to start physical activities. IBGE data show this item as the most cited by its respondents.

The vast majority of the elderly stated that they did not present health problems, showing that physical exercise improves the general health condition of the individual. Although the research has shown a good purchasing power for the interviewees, it also showed that only a very small percentage of the population surveyed uses the services of a personal trainer.

## CONCLUSION

The research concluded that physical exercise brings numerous benefits to practitioners. Many of the interviewees do not have health problems that prevent them from exercising, even though they are in their third age. Epidemic diseases such as obesity and diabetes, for example, were not even mentioned by participants. With regard to the social and psychological aspect, we have seen the tendency that the elderly have to develop depression. According to the research, no respondent reported suffering from this malady when asked about illnesses, stating that physical exercise reduces the possibility of developing depression. The majority of the interviewees sought physical exercise to improve the quality of life, showing that the elderly care about aging well, preserving health and autonomy. The research pointed out that social interaction did not appear as a primordial factor in the search for physical exercises, although this is of major importance during the third age. One hypothesis raised is that most of the interviewees, because they are married, do not feel isolated or alone. Another is that elderly people who practice physical exercises tend to have a greater social interaction, not becoming deprived in this aspect. More studies should be done to get this idea proven. Most of those interviewed who practice physical exercises are male, which shows that projects should be designed to encourage more women to engage in a regular physical activity program, as well as to understand why they exercise less. We found that age is inversely proportional to the number of physical exercise practitioners, that is, older people tended to exercise less and less, which is a problem because it is known that the loss of lean mass, bone density and increased body fat and sarcopenia gradually accentuates over time, especially from 70 years of age. Research has shown that most individuals have completed higher education, family income above nine minimum salaries and have been practicing physical exercises continuously for more than 24 months. This indicates that the elderly form a loyal public, that they have good purchasing power and conditions to make use of the services of a personal trainer. Despite this, the demand for this type of investment is low, which reveals that this area can be little explored by Physical Education professionals. Other studies should be done in an attempt to understand why this market niche, which is in rapid growth, is neglected by Physical Education professionals, or because the elderly do not think it is interesting to pay for these services, since they value both the quality of life.

#### REFERENCIAS

CARNEIRO, Rachel; FALCONI, Elaine. Um estudo das capacidades e deficiências em habilidades sociais na terceira idade. Psicologia em Estudo, Maringá, vol. 9, núm. 1, pp. 119-126, 2004.

DEL CONTÍ, Esteves, et al. O uso de academias da terceira idade por idosos modifica parâmetros morfofuncionais? Acta Scientiarum. Health Sciences, Maringá, vol. 34, núm. 1, pp. 31-38, janeiro-junho 2012.

FRIES, Aline; PEREIRA, Daniela. Teorias do envelhecimento humano. Revista Contexto e Saúde, Ijuí, v. 10, n. 20, p. 507-514, jan/jun. 2011.

GOZZI, Dianin; et al. Impacto das academias da terceira idade: comparação da capacidade motora e cognitiva entre praticantes e não praticantes. ConScientiae Saúde, São Paulo, vol.15, núm. 1, pp. 15-23, 2016.

PENNA, F.; SANTOS, F. O movimento das emoções na vida dos idosos: um estudo com um grupo da 3ª idade. Revista Eletrônica de Enfermagem, Goiânia, vol. 08, núm. 1, pp. 17-24, 2006.

PINELLI, Lígia et al. Prevalência de doenças crônicas em pacientes geriátricos. Revista Odonto Ciência, Porto Alegre, v.20, n.47, p.70. jan/mar. 2005.

SILVA, Luciano Flausino. A impotância do exercício físico na vida do idoso. 31 f. 2012. Monografia. (Graduando Gerontologia Social) - Escola Superior de Educação João de Deus, 2012.

IBGE. Falta de tempo e interesse são os principais motivos para não se praticar esportes no Brasil. Mai/ag. 2017.

ALENCAR, Maria et al. Perdas de massa muscular e adiposa após institucionalização: atenção aos mais idosos. Gerontology and Aging, Teresina, vol. 9, nº4, p.105-5 out/dez 2015.

Em 2030, Brasil terá a quinta população mais idosa do mundo. Jornal da USP. Jun/2018.

Cresce demanda por profissionais na área de gerontologia: com cerca de 20 milhões de idosos no país, falta atendimento de profissionais qualificados. Jornal da USP. Maio/2018.

FLECK, Steven; KRAEMER, William. Fundamentos do treinamento de força muscular. 4ª ed. Porto Alegre: Artmed, 2017.

# ABSTRACT

This research aims at tracing the profile of the elderly practitioner of physical exercises in the district of Itaipava - Petrópolis. This study is important because the world age pyramid is reversing due to the accelerated growth of the elderly population. Studies indicate that physical exercise is primordial in the search for healthy aging and for the maintenance of the autonomy of the elderly. Through a questionnaire, we interviewed 42 elderly men and women, aged 60 and over, seeking to know the general profile of this public. The study will serve as an instrument for the service providers to offer a service of excellence and to meet this profile of clients in their needs. The survey found that most of the region's practitioners are between 60 and 65 years of age, are male, receive more than 9 minimum wages and have completed higher education. The most practiced activities are bodybuilding and walking, and the main goal sought by the elderly is the quality of life. The most part of the interviewed do not use personal trainer's service.

Keywords: elderly; physical exercises; quality of life.

## RÉSUMÉ

Cette recherche a pour but de retracer le profil du pratiquant âgé d'exercices physiques du district de Itaipava – Petrópolis. L'étude est importante car la pyramide des âges est en train de se revenser en raison de la croissance accélerée de la population âgée. Des études indiquent que l'exercice physique est primordial dans la recherche d'un viellissement en bonne santé et le maintien de l'autonomie des personnes âgées. Au moyen d'un questionnaire, nous avons interrogé 42 hommes et femmes âgés de 60 ans et plus, cherchant à connaître le profil général de ce public. L'étude se propose d'être un instrument permettant aux prestataires de services de proposer un service d'excellence et de répondre au profil de leurs clients. L'enquête a révélé que la plupart des praticiens de la région ont entre 60 et 65 ans, sont des hommes, perçoivent plus de 9 salaires minimums et ont terminé leurs études supérieures. Les activités les plus pratiquées sont la musculation et la marche. Le principal objectif recherché par les personnes âgées est la qualité de la vie. La plupart des personnes interrogées n'utilisent pas les services d'entraîneur personnel.

Mots-clés: personne âgée ; exercice physique ; qualité de vie.

### RESUMEN

Esta investigación pretende trazar el perfil del anciano practicante de ejercicios físicos del distrito de Itaipava -Petrópolis. El estudio se muestra importante pues, la pirámide etaria mundial se está invirtiendo debido al acelerado crecimiento de la población anciana. Los estudios apuntan que el ejercicio físico es primordial en la búsqueda del envejecimiento sano y para el mantenimiento de la autonomía del anciano. A través de un cuestionario, entrevistamos a 42 ancianos de los sexos masculino y femenino, con edad a partir de los 60 años, buscando conocer el perfil general de este público. El estudio se propone ser un instrumento para que los prestadores de servicios puedan ofrecer una atención de excelencia y atender este perfil de clientes en sus necesidades. La investigación concluyó que la mayoría de los practicantes de ejercicios de la región tienen entre 60 y 65 años de edad, son del sexo masculino, reciben más de 9 salarios mínimos y poseen enseñanza superior completa. Las actividades más practicadas son la musculación y la caminata y el principal objetivo buscado por los ancianos es la calidad de vida. La mayoría de los entrevistados no utilizan los servicios de personal trainer.

Palabras clave: anciano; ejercicio físico; calidad de vida.

### RESUMO

Esta pesquisa visa traçar o perfil do idoso praticante de exercícios físicos do distrito de Itaipava - Petrópolis. O estudo se mostra importante pois, a pirâmide etária mundial está se invertendo devido ao acelerado crescimento da população idosa. Estudos apontam que o exercício físico é primordial na busca pelo envelhecimento saudável e para a manutenção da autonomia do idoso. Através de um questionário, entrevistamos 42 idosos dos sexos masculino e feminino, com idade a partir dos 60 anos, buscando conhecer o perfil geral deste público. O estudo propõe-se a ser um instrumento para que os prestadores de serviços possam oferecer um atendimento de excelência e atender este perfil de clientes em suas necessidades. A pesquisa concluiu que a maioria dos praticantes de exercícios da região têm entre 60 e 65 anos de idade, são do sexo masculino, recebem mais de 9 salários mínimos e possuem ensino superior completo. As atividades mais praticadas são a musculação e a caminhada, e o principal objetivo buscado pelos idosos é a qualidade de vida. A maioria dos entrevistados não utiliza os serviços de um personal trainer.

Palavras-chave: idoso; exercício físico; gualidade de vida.