# 144 - BENEFITS OF TRAINING FOR ELDERLY IN OUTDOOR ACADEMY OF CAMPO GRANDE-MS

LINEKER DOS SANTOS MARTINS
RAMON GUSTAVO DE MORAES OVANDO
Dom Bosco Catholic University - UCDB
Campo Grande - Mato Grosso Do Sul - Brazil
ramongustavo@uol.com.br

## INTRODUCTION

The elderly population, now known as common sense for seniors age or better, no doubt has caught the attention of health professionals, especially those of the physical education because their population is growing dramatically in recent years. The Brazilian Institute of Geography and Statistics (IBGE 2008), shows that the aging index shows changes in the structure of the population. In 2008 for every 100 children aged 0 to 14 years were 24.7, 65 years or older in 2050 are expected to change this situation for every 100 children aged 0 to 14 years old there will be 172.7, ie, the population almost will be elderly, and Brazil will become in 2030 the sixth oldest population in the world. The life of the Brazilian media in 2050 will reach the level of 81 years due to the life expectancy of Brazilians is increasing, medical advances, the field of health, other related areas, and improvements to the general conditions of life such as health and country's development. As we can see that population is growing considerably since the 90s to the present day. With this increase we observed that just as there is such growth also increases the demand for physical, mental and social.

In Brazil it is now considered an old guy when age is 65 years or more, this is justified because of the anatomical and physiological characteristics of these individuals are somewhat compromised. Farinatti (2008), says that age is an inaccurate term and condition which makes reference is difficult to understand and interpret, perhaps the truth when a person becomes older she may be 50, 60, 70 or 80 years depending on their limits of old age as complex physiological, psychological and social. So says the aging comprises a set of measurable variables that can be measured, as morbid factors and physical fitness. Making responses to stimuli more slowly, and effectively reduced, resulting from the deterioration of the physiological mechanism making them more vulnerable (Farinatti 2002).

Netto (1997) also states that aging is a natural process, not for, is always in progress and is irreversible, that accompanies each individual from birth and will continue throughout the life ending with death.

Reviewing the literature, we found that there is no universal definition as a concept or theory of aging, as well as a global terminology. Mazo et. al. (2001), demonstrates this by stating that the term replaces the term old age pension and represents a new stage of life, expressed by new cultural and social activities, which reinstates the old before calling the old society with the connotation of a new audience, the audience of senior citizens.

The aging process is defined in the context of a set of measurable variables. Marques (1996), says there is a decrease in these variables as motor skills, reduced strength, flexibility, speed, and levels of cardiorespiratory difficult to maintain a healthy lifestyle and daily life activities.

The biological theories of aging examined on a vision of the degeneration of the organ systems and cell phones through its degeneration. Farinatti (2002), points out theories that demonstrate the problems that affect the aging process, to divide into two categories: developmental genetic, and stochastic in nature. Burnet (1974 apud Farinatti 2002), emphasizes that theory on genetics, is one of the oldest and states that cellular aging takes place from the moment you start to experience errors in transcription and transport of genetic material, or mutations somatic. Another common theory is based on the imbalance that gradually focus their attention on the functioning of certain body systems, several authors associate the depletion of enzyme systems in cells or to changes in endocrine and immune functions. As we can see several theories attempt to explain the process of aging from a biological standpoint. As no theory that emphasizes the possible genetic control of cellular aging, other external aggressions to which they are constantly exposed, in both cases we found that it is a deficit in protein synthesis that impact on tissue dysfunction and systems that comprise it.

So aging is accompanied by significant changes in body composition, i.e., reduced muscle mass and increased body fat, significant reduction of thyroid hormones T3 and T4, Antunes et. al. (2005), reduced bone mass, abnormal cartilage, reducing the maximum muscular strength between 30 and 40% (Nobrega et. Al. 1999). Some of the main factors associated with muscle weakness that occurs with aging, changes are senescent skeletal muscle, accumulation of chronic diseases, medications needed to treat diseases, disuse atrophy, malnutrition, reduction in hormone secretion, changes in the nervous system (Fiataronee Evans 1993; Kraemer, 1992b cited in Fleck and Kraemer 2006).

Mazo et. al. (2001), also points in the literature and proposed strategies that could possibly delay the process of biological aging, emphasizing physical activity among them. Finally, several authors suggest strategies to slow the aging process, among them stood out physical activity, in other words not as a modifying factor, or variable with a positive impact on the process of cell degeneration, but that physical activity contributes to the context on the functional aspects of aging and maintenance of actions that prevent disease (Ali et. al. 2005). So the outdoor gyms can be very useful for the elderly, also known as Academy of the best age is a set of apparatus for carrying out physical activities designed for the best age. The academies are designed for outdoor environments, and aims to reduce loss in cardiorespiratory fitness, stimulate the central nervous system, increase joint mobility and flexibility. It consists of 10 (ten) devices, which are: skiing, hiking simulator, simulator ride, double rotation angle, leg press, multiexercitador, stretcher, tilt, surf and seated row.

Thus, the study was to investigate the proposed public satisfaction of elderly participants performed the exercises in the gym outdoors, what about the academy's vision in the eye of the elderly regarding the benefits and even the results expected by them, and verify that the Older people feel the benefits of physiological and social, within the practice exercises.

## METHODOLOGY

This research is a quantitative, descriptive and exploratory designated

It was conducted with 20 participants, male and female, and eighteen women and two men, with age range between 60 and 80 years practicing activities in the gym the best age in Campo Grande - MS.

Data collection was performed at the Academy of the best age of Living Center of the better Age Grandma Ziza volunteers. All subjects received a verbal explanation about the procedures involved in the research and the participants who

agreed to participate, was handed a term of informed consent (IC) for the interview. The results of this study was collected in October 2010, using a questionnaire of a semi-structured and pre established, composed of ten open questions prepared by the author.

Tests of statistical significance could not be applied, then a study of descriptive analysis, using the software Microsoft Excel 2007.

**ANALYSIS AND DISCUSSION**

The study was a proposal to examine whether the elderly are satisfied with the academy's outdoor best age in the city of Campo Grande-MS. With regards to the goals of the participants, we observed that 52% search for the best age to the gym with the intention of improving or maintaining health, another 24% in order to seek welfare and 16% to improve on social issues, and 4% because both seek to adhere as leisure or for medical indication, as the chart I.




Graph 1 - Features the objectives of the study population.

Regarding the duration of practice of practitioners, we observed that 60% of respondents practice exercises from the gym the best age to more than five months, another 15% attend the gym 3 months, 10% two months practicing the exercises, 5% at 4 months and 1 month to 5%, other 5% less than a month. We analyzed data submitted by the apparent permanence of individuals in academia with the best age, the data presented in Chart 2.




Graph 2

Based on data collected we can analyze the influence of exercise in daily activities of elderly respondents, found that 70% feel that the exercises practiced in the academy's best age has a direct influence on their daily activities, 25% report that there is a significant influence on the activities daily, another 5% report that they feel little influence, and finally there were reports that there is no influence on daily activities that is equivalent to 0%, proving that exercise makes a difference in quality of life shown in Figure 3.



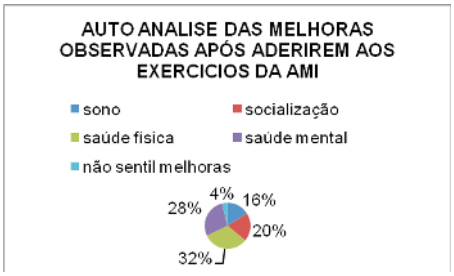

Graph 3

The study was a proposal to investigate the activities of day-to-day developments and progress were observed. We observed that 45% felt the difference in household chores like washing clothes extend them, cleaning house, and others. And another 45% in daily activities such as walking, squatting, or fundamental movements for locomotion, another 5% in work activities, and finally another 5% when climbing stairs, as shown in Graph 4.




Graph 4

The following chart recommends the perceptions of individuals in the improvements made after the beginning of activities in the gym the best age, 32% reported that they felt improvement in physical health, yet 28% reported that they felt improvements in mental terms, ie, increased short memory and long, another 20% felt the difference in socialization, improving your social life, and getting along with people, another 16% felt improvements in sleep, reporting having quieter nights and longer sleep, and finally another 6% felt no improvement significant or obvious. So 96% of seniors who exercise in the Centre Living Grandma Ziza feel some improvement, whether within the physical, mental and social that are considered by the World Health Organisation as importants aspects for the improvement of health as indicated by the graph 5.




**FINAL**

We support the view that it generates benefits of significant importance for day to day life of the elderly, benefits cited by them. Thus, we find that the exercises at the gym the best age not only gain favor physiological, such as increased strength, increased cardiopulmonary capacity and flexibility, but the ability to perform daily activities more easily, achieving a certain independence . Evident among the benefits cited by the elderly were the improvement in performance of daily activities such as housework, cleaning house, washing clothes and extend, more intense hiking, climbing stairs, squatting, which in other times would be complex movements and / or performed with great difficulty.

Through this study, we conclude that the ultimate goal of the elderly to the gym the best age is the promotion of health, are on track due to 96% of individuals have an improvement in mental and physical well-being social. We also observed the benefits of exercise in different populations and age ranges. Often lost in the habit of physical exercise, over time, with acquisition of obligations and responsibilities. However we address a specific population, the elderly population, and analyze the benefits that exercise brings the population.

We know that aging as something immutable and true in life, a factor that considerably over time causes loss of muscle and bone mass and increased adipose tissue, we can observe in-depth studies on the subject that resistance exercises within the limitation of population elderly spur increased lean muscle mass, and this improved significantly stimulates the cells responsible for calcification, increased bone mass and density, avoiding and relieving degenerative bone diseases such as osteoporosis and arthritis.

Estimated to occur in 2010 increased 84% to 167% in the number of elderly patients with moderate or severe disability (Nobrega 1999), the epidemiological evidence points to a decreased level of physical activity with increasing chronological age, making a sedentary lifestyle aggravating factor in morbidity and mortality during the aging process (Matsudo 2001), the data indicate that the barriers to regular physical exercise, the elderly are easily overcome, however the implementation of prevention strategies such as regular exercise and rehabilitation programs, public health policies can be implemented to overcome the lack of time, equipment, and other factors as obstacles placed more common. Public policies should promote the adoption of the stimulus population in recommending exercise, encouraging all individuals including the elderly considered that there may be a functional improvement, and reduce and prevent these disabilities.

Therefore, it is for professionals working in the area of health maintenance and the like (especially the physical education teacher) suit and attend to this population and their needs.

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Author: Ramon Gustavo de Moraes Ovando
Street: Rua Plutão - Campo Grande – MS – Brazil
Email: ramongustavo@uol.com.br
Phone: 55 67 9984-7375

**BENEFITS OF TRAINING FOR ELDERLY IN OUTDOOR ACADEMY OF CAMPO GRANDE-MS**
**ABSTRACT**

This study aims to highlight the effects and benefits of strength training in the best age gym in Campo Grande-MS. The sample consisted of elderly between 60 and 80 years of age. The participants were 20, 18 (eighteen) women and 2 (two) men, all volunteers. This research is a quantitative, descriptive and exploratory designated. Data collection was performed at the Academy of the best age of Living Center Grandmather Ziza volunteers. All subjects signed an informed consent for the interview. He was using a questionnaire and a semi-structured pre established, composed of ten open questions. Tests of statistical significance could not be applied, then a study of descriptive analysis. We know that aging is a natural process, and irrevocable, always in progress, which accompanies the individual throughout the lifespan to death, and characterizes the loss of normal functions. Realizing that resistance exercises minimizes this functional deficit, this study found the improvements and benefits that the exercises performed in the academy provides the best age to the elderly who attend. Through this study, we conclude that the ultimate goal of the elderly to the gym the best age is the promotion of health, are on track due to 96% of individuals have an improvement in mental and physical well-being social.

**KEY-WORDS:** Elderly, Academy seniors, Training.

**AVANTAGES DE FORMATION POUR LES PERSONNES AGEES EN PLEIN AIR ACADEMY DE CAMPO GRANDE-MS**
**RÉSUMÉ**

Cette étude vise à mettre en évidence les effets et les avantages de l'entraînement en force dans le gymnase le meilleur âge à Campo Grande-MS. L'échantillon se composait de personnes âgées entre 60 et 80 ans. Les participants âgés de 20 et 18 (dix-huit) des femmes et 2 (deux) hommes, tous volontaires. Cette recherche est une quantitative, descriptive et exploratoire désigné. La collecte des données a été réalisée à l'Académie de l'âge idéal de Vivre Grandma bénévoles Ziza. Tous les sujets ont signé un consentement éclairé pour l'entrevue. Il a été l'aide d'un questionnaire et d'une semi-structurés pré établi, composé de dix questions ouvertes. Tests de signification statistique ne pouvait être appliquée, puis une étude de l'analyse descriptive. Nous savons que le vieillissement est un processus naturel, et irrévocable, toujours en cours, qui accompagne l'individu tout au long de la durée de vie à la mort, et caractérise la perte de fonctions normales. Réalisant que la résistance des exercices minimise ce déficit fonctionnel, cette étude a révélé des améliorations et les avantages que les exercices effectués dans l'académie offre le meilleur âge pour les personnes âgées qui y participent. Grâce à cette étude, nous concluons que l'objectif ultime des personnes âgées à la salle de gym le meilleur âge est la promotion de la santé, sont sur la bonne voie en raison de 96% des individus ont une amélioration de la santé mentale et physique-être social.

**MOTS-CLÉS:** personnes âgées, personnes âgées, l'Académie, de la Formation.

**BENEFICIOS DE LA FORMACIÓN DE ADULTOS MAYORES EN LA ACADEMIA DE EXTERIORES DE CAMPO GRANDE-MS**
**RESUMEN**

Este estudio tiene como objetivo poner de relieve los efectos y beneficios del entrenamiento de fuerza en el gimnasio la mejor edad en Campo Grande-MS. La muestra estuvo constituida por adultos mayores entre 60 y 80 años. Los participantes de entre 20 y 18 mujeres (dieciocho) y 2 (dos) hombres, todos voluntarios. Esta investigación es cuantitativa, descriptiva y exploratoria designada. La recolección de datos se realizó en la Academia de la mejor edad de Centro de Vida abuela voluntarios Ziza. Todos los sujetos firmaron un consentimiento informado para la entrevista. Él estaba usando un cuestionario y un semi-estructuradas previamente establecidos, compuesto de diez preguntas abiertas. Las pruebas de significación estadística no puede aplicarse, a continuación, un estudio de análisis descriptivo. Sabemos que el envejecimiento es un proceso natural, e irrevocable, siempre en progreso, que acompaña al individuo durante toda la vida a la muerte, y caracteriza a la pérdida de las funciones normales. Al darse cuenta de que la resistencia a los ejercicios minimiza este déficit funcional, este estudio se encuentran las mejoras y beneficios que los ejercicios realizados en la academia ofrece la mejor edad para las personas mayores que asisten. A través de este estudio, se concluye que el objetivo final de la tercera edad al gimnasio la mejor edad es la promoción de la salud, van por buen camino debido al 96% de los individuos tienen una mejora de bienestar físico y mental del ser social.

**PALABRAS CLAVE:** Ancianos, ancianos de la Academia, de formación.

**BENEFÍCIOS DO TREINAMENTO PARA IDOSOS EM ACADEMIA AO AR LIVRE DE CAMPO GRANDE-MS**
**RESUMO**

O presente estudo tem como objetivo evidenciar os efeitos e benefícios do treinamento de força na academia da melhor idade em Campo Grande-MS. A amostra foi composta por idosos com idade entre 60 e 80 anos. Participaram 20 idosos, sendo que 18 (dezoito) mulheres e 2 (dois) homens todos voluntários. A presente pesquisa é de caráter quantitativo, descritiva e designada exploratória. A coleta de dados foi realizada na academia da melhor idade do Centro de Convivência Vovó Zizaa, com os voluntários. Todos os sujeitos assinaram o termo de consentimento livre e esclarecido para a realização da entrevista. Foi utilizando um questionário de caráter semi-estruturado e pré elaborado, composto de dez questões abertas. Testes estatístico de significância, não puderam ser aplicados, então foi realizado um estudo de análise descritiva dos resultados. Sabemos que o envelhecimento é um processo natural, e irrevogável, sempre em progressão, que acompanha o indivíduo por todo o tempo de vida até a morte, e caracteriza a perda das funções normais. Compreendendo que os exercícios resistidos amenizam esse déficit funcional, neste estudo constatamos as melhoras e benefícios que os exercícios executados na academia da melhor idade proporcionam aos idosos que a freqüentam. Através da realização deste estudo, concluímos que quanto ao objetivo maior dos idosos ao freqüentar a academia da melhor idade, é a promoção da saúde,estão no caminho certo devido a 96% dos indivíduos ter melhoras no bem estar físico mental e social.

**PALAVRAS-CHAVE**: Idosos, Academia da melhor idade, Treinamento.