



## BARRIERS TO PHYSICAL ACTIVITY IN THE ELDERLY

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### Introduction

The population awareness of the physical exercise's benefits is widely diffused. These benefits are particularly important in the elderly because, with increasing age, there is a decline of the musculoskeletal system and the maximum oxygen consumption which reduces the functional fitness of the elderly and can often lead to a significant decline in the quality of life. Despite this awareness, a large part of the population remains sedentary. It is important to know what the barriers are, so they can be circumvented in order to increase the engagement of the elderly population in existing physical activity programs.

### Objectives

This study aims to identify some of the personal, behavioral and environmental barriers that prevent older adults to be physically active.

### Method

#### *Subjects*

The study sample consisted of 19 sedentary elderly subjects of both sexes, aged between 60 and 80 years ( $67.5 \pm 4.58$  years) living in the city of Bragança, Portugal.

#### *Instruments*

A questionnaire on Perceived Barriers (Hirayama, M.S. 2006) was used, which is composed of twenty-two answers from five groups of barriers: physical, psycho-personal, beliefs, psycho-motivational and external.

#### *Methods*

The participants were recruited randomly to assign the study. Each participant should choose a value from 1 (always) to 5 (never) to each barrier in the questionnaire. Descriptive statistics were performed using the Statistical Package for Social Sciences (SPSS v.22) to calculate the mean and standard deviation of scores for each answer and each group of answers.

### Results and discussion

The main group of barriers to physical activity, as seen in table 1 was the psycho-motivational group ( $3.00 \pm 0.21$ ) and the least important group of barriers was the psycho-personal group ( $3.80 \pm 0.21$ ). The

three main barriers to physical exercise were as shown in table 1: 1) "I'm already active enough" (2.67±1.11); 2) "could not continue or would give up soon" (2.72±1.19); 3) "I have no energy" (3.06±1.18) and; 3) "I am too lazy/unmotivated (3.06±1.31). The three least important barriers were: 1) "I feel insecure about the environment" (4.22±1.08); 2) "I do not believe that physical activity is good" (4.17±1.17) and; 3) "had unpleasant experiences with exercise" (4.06±1.03).

Table 1. Mean and standard deviation (SD) points obtained in each physical activity barriers groups

Barrier group	mean±SD
Physical barriers	3.41±0.40
Psycho-personal barriers	3.80±0.21
Beliefs	3.52±0.63
Psycho-motivational barriers	3.00±0.21
External barriers	3.50±0.34

Table 2. . Mean and standard deviation (SD) points given in each physical activity barrier

Group	Barrier	mean±SD
Physical barriers	I have a disease, injury or incapacity	3.28±1.33
	I have a very bad health	3.56±0.96
	had unpleasant experiences with exercise	4.06±1.0
	I am afraid to fall out or jeopardize my health	3.11±1.33
	I have no energy	3.06±1.18
Psycho- personal barriers	I have urinary incontinence	4.00±1.63
	I am too shy	3.94±1.18
	I don't like physical activity	3.50±1.38
Beliefs	I am too fat or too skinny	3.94±1.27
	I am already active enough	2.67±1.11
	I am too old for that	3.72±1.15
Psycho-motivational barriers	I do not believe that physical activity is good	4.17±1.17
	I need to rest and relax in my free time	3.22±1.18
	I am too lazy/unmotivated	3.06±1.31
	I could not continue or would give up soon	2.72±1.19
	I don't have any company	3.39±1.42
External barriers	I don't have enough money for that	3.67±1.49
	I don't have enough free time	3.33±1.45
	There are no appropriate facilities nearby	3.50±1.17
	I don't have appropriate clothes or equipment	3.06±1.54
	I feel insecure about the environment	4.22±1.08
	The weather is adverse	3.33±1.37

## Conclusions

The least important barriers described in this study, combined with the fact that there are physical activity programs focused in the elderly population in the city of Bragança, leads to the conclusion that the high prevalence of sedentary elderly is not due to supply but to demand, more specifically the elderly's psycho-motivational barriers, translated into lack of free will to be physically active.

## Bibliography

Hirayama, M. S. (2006) Atividade física e doença de Parkinson: mudança de comportamento, auto-eficácia, barreiras percebidas e qualidade de vida. Dissertação de Mestrado, Universidade Estadual Paulista, Rio Claro.