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*Original article*

## MEASURING THE LEVEL OF PHYSICAL ACTIVITY OF ADULTS

VASILIU ANA-MARIA<sup>1</sup>

### Abstract

**Aim.** This study aims the quality of life having as an indicator the level of physical activity of adults. Having a complex composition, the quality of life has not an universal agreed definition. Being a construct so complex, the Australian Centre on Quality of Life describes in 2013 over 1200 instruments that measure the quality of life. Physical education and sports contribute to quality of life influencing emotional state, peer relationships, material wealth. Physical activity influences the individuals, families, companies, society as a whole. Relaxed employees having a good physical and mental tone are more productive, independent and social integrated.

As objectives, we want to measure difference of the level of physical activity between male and female gender, and to observe the types of physical activities preferred for each gender.

**Methods.** As research method we firstly used International Physical Activity Questionnaire, IPAQ. This tool is designed to observe and record the level of physical activity undertaken by adults. Through its assessing physical activity performed in the last 7 days following situations: at work, home, leisure, all circumstances involving moving subjects. The short version of the questionnaire is directed towards three situations that vary according to the intensity with which the work is done: walking (low intensity) activities with moderate and high intensity activities. We opted for the short version self-applied of the questionnaire.

The second instrument used in this study is a 21 item questionnaire on which we built, with 6 open response items and 15 closed response items.

**Results.** We applied the questionnaire on a number of 56 subjects, adults between 20 and 30 years old, 35 - male gender, 21- female gender. The results are focused on finding the most relevant benefits of choosing an active lifestyle at the expense of a sedentary one.

**Conclusion.** The conclusions aim to analyze the level of physical activity of adults and to highlight the benefits of avoiding a sedentary life and to see to what extent this tool can be self-applied without difficulties.

**Key words:** level of physical activity, quality of life, gender, physical inactivity;

### Introduction

Zamfir and Vlăsceanu address in an interesting way the relationship between quality of life and happiness, saying about quality of life that from another perspective resumes the concept of happiness. They also distinguish the difference between the two concepts as follows: "if happiness refers to the subjective state resulting from living their own lives, quality of life refers to both aspects: objective conditions in which human life is constituted and subjective where each evaluates their own life, satisfaction, happiness and fulfillment". (Zamfir and Vlăsceanu, 1998)

The concept of quality of life includes both subjective and the objective aspects of human life. Quality of life refers to the subjective satisfaction of people's living conditions, activities, opportunities and results.

Dr. Steven Greer, director of the Royal

Marsden Hospital in London, cited in Optimistic people are healthier (2010) says that optimists do not accept as inevitable what is happening to them and continue to maintain a beneficial oriented spirit, combative, more likely to improve or and even healing to fight cancer. The same source mentions that researchers from the University of Pennsylvania, carefully analyzed a group of 120 men who had suffered a first heart attack. Eight years later, 80% of those pessimists had died after a second heart attack, compared to only 13% of the optimists.

A number of countries collect data about subjective well being in their statistics. OECD Guidelines on Measuring Subjective well-being, published in 2013 claims the importance for this data to be used for international comparisons in order to know better what is the subjective well being of the citizens and to find measures to improve the subjective quality of life.

<sup>1</sup> National University of Physical Education and Sports, Bucharest, ROMANIA

E-mail address: ana\_vasilu85@yahoo.com

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Helliwell, Layard, and Sach in 2013 identify a hierarchy of the countries depending on the level of happiness. Romania is not in the first 20 countries. The first five countries in the hierarchy are northern countries: Denmark, Norway, Switzerland, the Netherlands and Sweden.

Physical education fulfils an economic function illustrated on three types of beneficiaries (Șerbănoiu, Tudor, 2007): individuals who practice physical exercises, parents, sponsors, local, state or private companies and society as a whole.

Șerbănoiu and Tudor also state that physical activity is a "direct stimulus of the morphofunctional development, its absence could lead to adaptations of involutive type such as appearance of deficient postures, anxiety or depressive states and the increase of stress levels with major implications on individual health".

### Methods

The subjects who participated at this study are students at faculties of National University of Physical Education and Sports.

The subjects chose freely to participate in this study. The aims and scale applied on this study were explained to the participants.

To encourage honesty answers, subjects were asked not to reveal their identity, thus being kept confidential answers but we kept two items of identification, depending on which we can analyze participants' responses: gender and age.

The first research instrument, we used the International Physical Activity Questionnaire, short version, but we found that does not provide enough opportunities to compare results with the level of self-esteem and then we decided to develop a questionnaire specifically designed for this purpose to provide greater flexibility in terms of answers and more detailed information on young people's attitudes towards the practice of physical activity.

The second and main research instrument which was applied in this study is a self applied questionnaire. We carried out a questionnaire with 21 items of which 6 are open-response items and 15 with closed-response. The questionnaire conducted aimed the youth opinion on the practice of physical activities and is part of a wider research on the quality of life of individuals and has been applied to a number of 33 male students and 22 female students at the National University of Physical Education and Sports from Bucharest, Romania.

The research was conducted in May 2015.

### Results

The results are focused on finding the most relevant benefits of choosing an active lifestyle at the expense of a sedentary one.

Following the obtained results we achieved 6 tables illustrating the respondents' opinion on the benefits of practicing physical activities.

**Table 1.** Do you think people who practice physical activities are more optimistic than sedentary people?

**Number of respondents 56**

| Response options                   | Number | Percent |
|------------------------------------|--------|---------|
| in very large measure of agreement | 6      | 10,71%  |
| largely agree                      | 29     | 51,78%  |
| in small extent agree              | 21     | 37,5%   |
| in very small extent agree         | 0      | 0%      |



In table 1 we find out that the majority of respondents largely agree that one of the most relevant benefits for practicing physical activities is that active people are more optimistic than people who chose to be sedentary.

Interestingly is that no respondent agrees in very small extent that active people are more optimistic than sedentary ones.

**Table 2.** Do you think people who practice physical activities have more friends than sedentary people than sedentary people?

**Number of respondents 56**

| Response options                   | Number | Percent |
|------------------------------------|--------|---------|
| in very large measure of agreement | 26     | 46,42%  |
| largely agree                      | 17     | 30,35%  |
| in small extent agree              | 11     | 19,64%  |
| in very small extent agree         | 2      | 3,57%   |

In table 2 we observe that most of respondents consider in very large measure of agreement that active people are more sociable and friendlier so they

attract as a magnet more people to become friends with than sedentary people.

**Table 3.** Do you think people who practice physical activities are more efficient at work than sedentary people?

**Number of respondents 56**

| Response options                   | Number | Percent |
|------------------------------------|--------|---------|
| in very large measure of agreement | 17     | 30,35%  |
| largely agree                      | 30     | 53,57%  |
| in small extent agree              | 7      | 12,5%   |
| in very small extent agree         | 2      | 3,57%   |

In table 3, related to efficiency at work place, we observe that most subjects who chose to participate at this study largely agree that sedentary people are not as efficient at work place as people

who practice physical activities. More than 83% of respondents consider in large and very large measure of agreement agree to this statement.



**Table 4.** Do you think people who practice physical activities are happier than sedentary people?

| Number of respondents 56           |        |         |
|------------------------------------|--------|---------|
| Response options                   | Number | Percent |
| in very large measure of agreement | 15     | 26,78%  |
| largely agree                      | 32     | 57,14%  |
| in small extent agree              | 9      | 16,07%  |
| in very small extent agree         | 0      | 0%      |

In table 4, regarding to happiness we observe that most of participants largely agree that active people are happier than sedentary ones.

We also note that 16,07% of respondents agree to this statement just in small extent. This could

happen because practicing physical activities is not the only thing that can makes us happy or not, and that happiness is a complex construct built from various sides.

**Table 5.** Subjects who opted for the response option “in very large measure of agreement”?

| Number of respondents 56                 |        |         |
|--|--------|---------|
| Response options                         | Number | Percent |
| Active people have more friends          | 26     | 46,42%  |
| Active people are more efficient at work | 17     | 30,35%  |
| Active people are happier                | 15     | 26,78%  |
| Active people are more optimistic        | 6      | 10,71%  |

In table 5 we wanted to see which are the most important benefits of staying active: optimism, efficiency at work place, binding friendships and happiness.

We note that these are not the only benefits of staying active, but are the ones we chose to analyze in this study. After analyzing responses given by subjects who participated at this study we note

that binding friendships seems to be the most important benefit of staying active. In the second place we note that efficiency at work place is another important benefit followed by the fact that active people are happier than sedentary people. In the last place is the fact that active people are more optimistic than sedentary ones.

**Table 6.** Subjects who opted for the response option in “in small/ very small measure of agreement”

| Number of respondents 56                 |        |         |
|--|--------|---------|
| Response options                         | Number | Percent |
| Active people are more optimistic        | 21     | 37,5%   |
| Active people have more friends          | 13     | 23,21%  |
| Active people are more efficient at work | 9      | 16,07%  |
| Active people are more happier           | 9      | 16,07%  |

In table 6 we chose to analyze the responses of the participants who are in small or very small measure of agreement. The most of responses are

### Discussion

For greater accuracy of results, the research instruments were applied on the same day for all participants in the study, so the comparison of results to be as accurate as possible.

The results obtained after doing this research enables us to say that physical activity influences positively various parts of life.

Happiness is an important construct to which men tend and we found it interesting to analyze to what extent this may be influenced by physical activity practice, knowing that through physical exercise endorphins are released, which are nothing but happiness hormones.

Being active maintains you optimistic, makes you be more efficient at work place, helps you to have more friends and keeps you happy.

The conclusions aim to encourage people to avoid sedentary lifestyle by highlighting some of the most important benefits of an active life-style and quality of life of participants in physical activity programs.

Based on the sincerity and correct assessment of participants regarding the time spent on physical activity performed during the day, we can say that people who stay active are more pleased by their quality of life.

about the fact that active people are more optimistic than sedentary people.

So, if practicing physical activities has so many benefits, why not to start being more active? This could be a starting point for a new research: to see if sedentary people are aware of the benefits of an active life and what makes them chose to remain inactive people.

Another interesting research could be to analyze responses of the participants related to age and gender: male and female.

Regarding to gender differences, Roşeanu and Fako (2010) conducted a research on the relationship between self-esteem, diet and perception of body and found that the pressure given by cultural norms that promote a supple and slender appearance slender, lead to a conflict on the normal increase in weight and changes regarding deposition of fat.

About the influence of these cultural norms speak Mollay & Herzberger (1998) who say that according to these cultural norms, women who eat less are considered more attractive and petite women are considered more delicate and attractive than other women.

Another interesting starting point for future research is to analyze in detail the reasons that influence the practice of physical activities.

The subjective part of the quality of life is an endless source for research that does not dry out.



Therefore we encourage people interested in this subject to deepen this subject: quality of life.

Practicing physical activities is an engine that helps maintaining a quality and satisfied life: emits optimism and generates resources for the successful achievement of predetermined goals.

Please note that this is a pilot study which helped us see to what extent we can apply these tools to a larger number of participants as well as to see what changes needs to be made to improve the quality of the instruments used in this study so the results to be more relevant, and to faithfully reflect reality and constitute a benchmark in terms of students of the National University of Physical Education and Sport, and other categories of participants as well.

### Conclusion

The conclusions aim to analyze the level of physical activity of adults and to highlight the benefits of avoiding a sedentary life and to see to what extent this tool can be self-applied without difficulties.

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