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Study regarding the Implications of Obesity as Perceived by a High-School Age Group of Subjects

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Abstract

The aim of this research was to know the perception on the obesity problem of a high-school age group of subjects that are exposed to its undesired consequences by following their degree of awareness, and the involvement of factors that could influence, prevent, or improve this condition. Starting from the premises detached from the study of the professional literature, we have elaborated the hypothesis stating that presumably the identification of the opinions of a high-school age group of subjects regarding the effects of obesity and the importance of exercise in maintaining one's fitness, could constitute a starting point for an applicative intervention in the sense of preventing and improving the apparition of this condition. The research methods used were: study of the bibliographical material, the questionnaire inquiry method, the statistical-mathematical method, and the graphical representation method. *Conclusions*: We identified both a willingness for practicing a physical activity, as well a diversity of activities towards which the group of subjects are oriented. The different orientation of the answers completes the picture of individual perceptions of the inquired segment of the population, the subjects being made aware of the effects obesity has on the body, as well as of the importance of exercise, a conclusion that confirms the hypothesis of this research.

Key words: obesity, perceived, group of subjects, high-school age

Rezumat

Scopul cercetării a fost de a cunoaște percepția asupra problematicii obezității la nivelul unei populații de vârstă școlară expusă la consecințele ei nedorite, urmărind gradul de conștientizare al acestora și de implicare a factorilor ce pot influența prevenirea sau ameliorarea fenomenului.Pornind de la premisele desprinse din studiul materialului bibliografic, am elaborat ipoteza potrivit căreia se presupune că identificarea opiniilor unui segment de populație școlară de vârstă liceală, privind implicațiile obezității asupra organismului și importanței mișcării în menținerea fitness-ului ar putea constitui un punct de plecare într-o intervenție aplicativă în sensul prevenirii și ameliorării instalării acestui fenomen. Metodele de cercetare folosite au fost: documentarea bibliografică, ancheta prin chestionar, metoda statistico – matematică și cea grafică. Concluzii: Se identifică atât disponibilitatea către practicarea unei activității fizice cât și diversitatea activităților spre care se orientează acest grupul țintă al cercetării. Orientarea diferită a răspunsurilor întregesc tabloul percepțiilor individuale ale segmentului de populație anchetat, conștientizând implicațiile obezității asupra organismului uman cât și opțiunile pentru importanța mișcării, concluzie ce confirmă ipoteza cercetării.

Cuvinte cheie: obezitate, percepție, populație școlară, vârstă liceală

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Introduction

Physical exercise, through its multiple forms of manifestation, contributes to the fight against a sedentary lifestyle, and weight excesses. The combination between intellectual and physical effort becomes a life principle in a modern civilization. Physical and sportive education is a form of teaching that is accessible to all ages, playing a special role in the process of forming the children's personality, their convictions in regards to adopting a healthy lifestyle, and their habits regarding exercise. [1]

Obesity, a disease of our century, should lead toward measures of reducing the number of calories we consume, toward a rational life, exercising, being aware that a normal weight means health and beauty. It tends to become a serious eating disease at a worldwide level. Over the last few years, the obesity rate has tripled in the countries that have adopted a western lifestyle, involving reduced physical activity, and overconsumption of cheap food that are energetically dense. The prevalence of overweightness in children varies between 10-125%, and of obesity, between 2-10%. The improvement of the overweight pupils' physical condition can offer them a chance to exercise, to adopt a healthy diet, adequate to their age, as well as to regain their selfconfidence, for a better social and academic integration.

A perpetuation of the actions to promote physical exercise for prophylactic and therapeutic purposes, is a consequence of the population receiving the message regarding an awareness of the role that eating plays, and of the effects of a sedentary lifestyle play. [2]

Unlike other types of disorders that present internal symptoms, obesity is an illness with an external response which can be emphasized, hence the person can be exposed, physically and psychologically to different statistics. [3]

The reasons for choosing this theme start from the following premises:

- the increasing number of overweight and obese children in Romania:
- the inexistence of a methodology based on objective criteria of education and evaluation of the overweight pupils' physical condition;
- the existence of a very shy campaign regarding the correlations between the causes for overweightness, and the means to prevent and improve this condition;
- the bad approach, or a lack of education regarding exercise in the families, and sometimes even in the teaching institutions;
- increasing number of medical excuses, totally unjustified by the parents, getting overweight children away from exercise.

This paper tries to know the opinion of a group of high-school age subjects regarding their perception of the obesity problem, in order to be able to support the ones affected by this condition, helping them change their lifestyle and improve the quality of their life.

Material and methods

The aim of this research was to know the perception on the obesity problem of a high-school age group of subjects that are exposed to its undesired consequences, following their degree of awareness, and the involvement of factors that could influence, prevent, or improve this condition.

The objectives of this research, generated by its aim, envisaged:

- identifying the opinion of the teenagers who were interviewed about the effects obesity has on the body;
- knowing the degree of promoting of exercise in the lifestyle of the inquired high-schoolers;
- knowing the importance of a controlled diet

adapted to the teenagers' age;

 identifying the opinions regarding the prevention and improvement of unwanted consequences of overweightness.

Starting from the premises detached from the study of the professional literature, we have elaborated the hypothesis stating that presumably the identification of the opinions of a high-school age group of subjects regarding the effects of obesity and the importance of exercise in maintaining one's fitness, could constitute a starting point for an applicative intervention in the sense of preventing and improving the apparition of this condition.

In order to capture certain aspects regarding the pupils' attitude toward the obesity problem, the research has been conducted on a group of 105 teenagers (36 males and 69 females) in the senior years of the "Gh. Vranceanu" High-school (12th grade A, C, D), thinking that at this age they have some beliefs regarding a healthy lifestyle, and whose personality tends to be more mature, being able to identify both the causes and the effects of a phenomenon. This location was chosen because here there are pupils with high physical and intellectual potential, open to information, who spend their leisure time in environments highly popular with today's teenagers, open to the temptations of this century.

The research methods used were: study of the bibliographical material, the questionnaire inquiry method, the statistical-mathematical method, and the graphical representation method.

Wishing to improve the obesity problem in Romania, and associating with the practice of physical exercise, this paper envisaged to investigate the public opinion about the importance and promotion of movement, in order to suppress the obesity epidemic. The research consisted in making an inquiry under the form of a questionnaire,

considering it an instrument of collecting opinions and measuring the perception of one segment of the public on the obesity problem.

The questionnaire comprised 10 items with closed, open, and prefigured answers. It was applied to a group of 105 teenagers (36 males and 69 females) from the "Gh. Vranceanu" National College, with ages between 17 and 18. The items that were constructed for the development of the inquiry have tried to identify the respondents' opinion regarding:

- their willingness to practice physical exercise in an organized way, systematically;
- their choices for their favorite physical activities;
- the effects and measures taken for the prevention of overweightness and obesity tendencies;
- their perception of the health, of a healthy lifestyle, of diets, and the self image.

Results and Discussions

After analyzing the data, given the diversity of the answers, we selected the first three options in the open questions.

After analyzing the data for the first question, one can see that the answers are very diverse, which shows how different the respondents were. Thus, there are activities in which the boys are constantly engaged: soccer (58%), fitness (22.5%), jogging (19.3%) (Figure 1), while the girls prefer other types of activities, such as: jogging (39%), walking (34.3%), dancing (15.6%) and swimming (10.9%). (Figure 2)

The answers given by the male subjects regarding the activities they choose in the case of a weight surplus were orientated toward physical (29%) and athletic (38.7%) activities, which they would choose over diets (32.82%). (Figure 3)

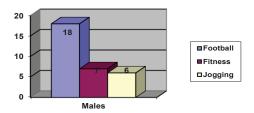


Figure 1. The results from question number 1 - males

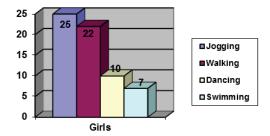


Figure 2. The results from question number 1 - girls

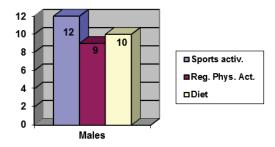


Figure 3. The results from question number 2 - males

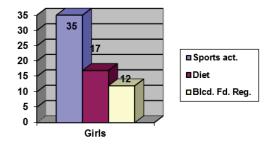


Figure 4. The results from question number 2 - girls

The girls chose mostly athletic activities (54.6%), diets (26.5%), and a well-balanced eating regime (18.7%), to counteract the extra weight. (Figure 4)

Regarding the next question, most of the male subjects (64.5%) are aware of the negative effects the obesity can have on the self image, while a 35.4% percentage manifest an uncertainty or a lack of interest for this question. (Figure 5) For most of the female subjects, the unpleasant physical appearance matters significantly (85.9%), while 13.9% of them did not express any opinion, probably because they did not have any weight problems. (Figure 6).

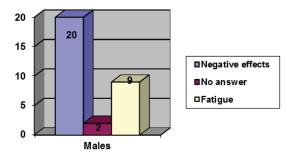


Figura 5. The results from question number 3 - males

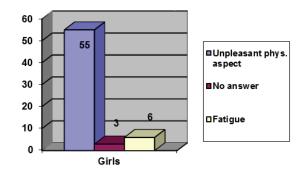


Figure 6. The results from question number 3 - girls

Regarding the subjects' favorite physical activities, the boys chose soccer (77.4%), swimming (70.9), and tennis (48.3%), (Figure 7), while the girls chose aerobic gymnastics (75%), believing it to be the most accessible means, and the most effective, then swimming (73.4%), and tennis (59.3%). (Figure 8)

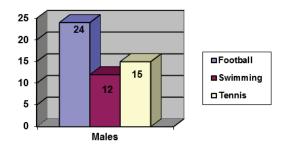


Figure 7. The results from question number 4 - males

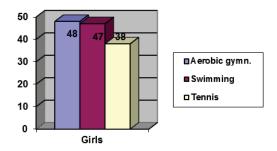


Figure 8. The results from question number 4 - girls

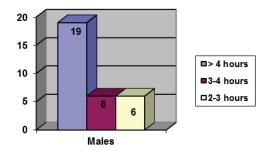


Figure 9. The results from question number 5 - males

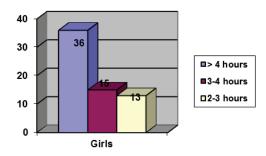


Figure 10. The results from question number 5 - girls

Regarding the next question, most of the subjects (61.2% of the boys and 56.2% of the girls) would

spend more than 4 hours a week for constant physical activity. (Figures 9 and 10)

More 70% of both groups do not consider themselves as persons with a normal, or good health condition, but just the opposite, the subjects are aware of the health issues that could be linked to an excess in weight. (Figures 11 and 12)

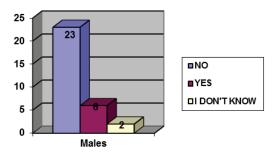


Figure 11. The results from question number 6 - males

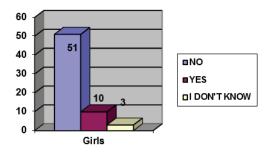
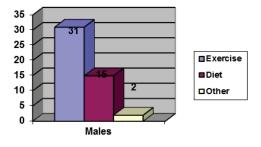


Figure 12. The results from question number 6 - girls



 $\textbf{Figure 13.} \ \textbf{The results from question number 7-males}$

The answers given by both groups show that they think exercise is very important (100% of boys, and of girls) for weight control. Also, for both genders the diet represents the second important element for

controlling their weight (48.3% of boys, and 90.6% of girls). (Fig. 13 and 14).

Note that for this question, the number of answers the subjects had to choose from was more than 2-3.

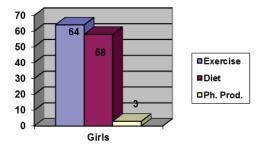


Figure 14. The results from question number 7 - girls

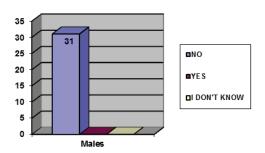


Figure 15. The results from question number 8 - males

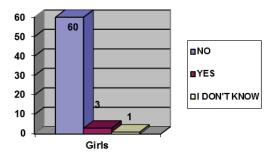


Figure 16. The results from question number 8 - girls

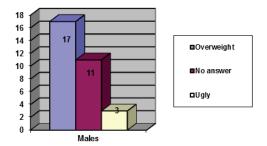


Figure 17. The results from question number 9 - males

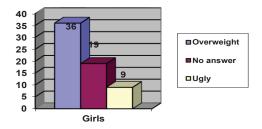
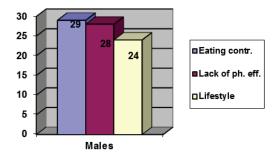


Figure 18. The results from question number 9 - girls



 $\textbf{Figure 19.} \ \textbf{The results from question number 10-males}$

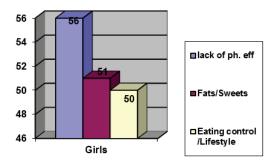


Figure 20. The results from question number 10 - girls

From the answers recorded for the eight question, one can gather that most of the subjects believe that there are no health problems caused by weight (100% of the boys and 93.7% of the girls), even though some said yes (4.6% of the girls), while 1.5% girls were undecided (Figures 14, 15).

To the ninth question, 54.8% of the male subjects

answered that they would be called obese after gaining weight, or being overweight, while 35.4% of them did not answer, which can indicate that this is not a situation that they had to face, or that they refuse to call such a person names. (Figure 17) Most of the girls (56.2%) said they would be called overweight, 29.6% sedentary, while 14% of them said that they would be called ugly. (Figure 18)

The answers given by the male respondents to the last question was that the health issues they can have are due to a lack of eating control (93.5%), lack of physical effort, a sedentary lifestyle (90.3%), stress of everyday life, not conforming to regular meal hours (77.4%). (Figure 19) Most of the female respondents believed that the lack of exercise and a sedentary lifestyle (87.5%) influence their health, recognizing problems regarding the consumption of hypercaloric foods (79.6%). Lastly, they think that lifestyle, everyday stress, irregular meal hours, and lack of an eating control matter in regards to the possible health problems that can appear as a result of overweightness. (78.1%)(Figure 20)

Conclusions

After conducting this research, we can draw the following conclusions:

- 1. We identified both a willingness for practicing a physical activity, as well a diversity of activities towards which the group of subjects are oriented.
- 2. The female respondents prefer to control their weight through diet and a balanced eating regime, while the males prefer various athletic activities.
- 3. Most of the female subjects are especially interested in the physical appearance, while the male subjects think that the most obvious effect among the negative effects obesity can have on

one's health, is the weight.

- 4. The choice of the type of physical activity can be done according to each individual's preferences and possibilities, but also according to the sport they practiced in the past.
- 5. There is a willingness from both groups of subjects to spend more time practicing physical activities.
- 6. The subjects' state of health is made aware and assumed by most of them.
- 7. The role of exercise and eating control is a priority for both groups of subjects in weight control.
- 8. At the age the respondents had (17-18 years old), the weight fluctuations do not lead to health issues that they would feel as being serious.
- 9. The different orientation of the answers completes the picture of individual perceptions of the inquired segment of the population, the subjects being made aware of the effects obesity has on the body, as well as of the importance of exercise, a conclusion that confirms the hypothesis of this research.

References

- Balint T., Dobrescu T., Raţă M., Cristuţă A. (2010) Research regarding the assessment of a body's normal size by using the body mass index, Gymnasium, Journal of Physical Education and Sport, "V. Alecsandri" University of Bacău, Ed. Alma Mater, 2010, Vol. XI, No. 2, ISSN 1453-0201, pp 13 – 19.
 - 3Dobrescu T., Balint T., Raţă M., Cristuţă A. (2010) Study regarding the public perception on the implications of obesity, in a group pertaining to the urban population, Scientific report, series Physical education and sport, Nr. 14 (1/2010) peer-reviewed scientific journal, Ed. Univ. Piteşti, ISSN 1453 1194, pp. 253-260.
- Dobrescu T. (2008) Gimnastica aerobică o alternativă pentru un nou stil de viață al adolescentelor, Ed. Pim, Iași;
- Mincu I., Hâncu N. (1993) Obezitatea, Editura Medicală, Bucuresti;
- Pavel I., Sdrobici D., Dumitrache C. (1991) Obezitatea, Editura Medicală, Bucureşti;
- d. Raţă M., Dobrescu T., Balint T., Lupu G. (2010) Research on ways of making people aware of the weight excess and obesity problems, Gymnasium, Journal of Physical Education and Sport, "V. Alecsandri" University of Bacău, Ed. Alma Mater, 2010, Vol. XI, No. 2, ISSN 1453-0201, pp 155 – 168.