

SOCIO-ECONOMIC AND SOCIO-CULTURAL ASPECT OF INFLUENCE ON ANTHROPOMETRIC AND MOTOR CHARACTERISTICS: EMPIRICAL ANALYSIS OF THE EXPERIENCES OF THE TEACHING-EDUCATIONAL STAFF AMONG HIGH SCHOOL STUDENTS

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Abstract

Throughout the professional literature, it has been recorded that anthropometric characteristics are in direct correlation with the principles of health improvement; with motor skills, but also the basics of mastered psychological and sociological development. According to the above, in this scientific paper, the problem is considered from the aspect of socio-economic and socio-cultural influences on anthropometric and motor characteristics. In doing so, the analysis is based on the impact on physical activity, but according to individual differences in motor performance, while interacting with environmental factors.

The theoretical framework of this paper is complemented by an empirical analysis, which refers to the experiences of the teaching-educational staff among the target group of high school students. Namely, the teaching staff of a high school "X" in the territory of the city of Skopje, North Macedonia, was included, in order to see through their experience, the influence of socio-economic and socio-cultural factors on the anthropometric and motor characteristics of high school students. It is about a mutual share of influence of the home environment, the school environment, but also the social groups of interaction on the motor and anthropometric characteristics of the students.

Keywords: Anthropometry, motoric, high-school, socio-cultural, environment

1. Introduction

Anthropometric characteristics are closely related to health improvement, as well as motor skills, psychological and sociological development. Therefore, it is of particular importance to continuously pay attention to the research of the influence of different factors on anthropometric characteristics in different target groups.

In the context of the above, it is important to highlight the relationship between the way of life of students and the opportunities offered by various socio-cultural and economic factors, the living environment, the level of education of the parents, the way of spending free time, physical activity and similar.

There is a large literature of research that supports the link between lifestyle, diet and the impact of technological development on young people.

Any growth and development of the body is defined by the quantitative and qualitative anatomical, physiological and psychological changes that occur in the body itself, with special attention and reference to the development of sensory and motor skills (Haase, et al., 2016).

In addition, by presenting anthropometric measurements and characteristics, the importance of their connection with motor, psychological and sociological development among adolescents is

highlighted. This situation is complemented by a series of social challenges that new generations face and are exposed to their influence, which distracts them from physical activity and healthy eating.

What is of particular importance to indicate as a field of interest is the fact that the development process of school children occurs according to the model established by the genetic potential, but also by the influence of environmental factors. These environmental factors have a direct impact on the anthropogenic and motor characteristics and development of children. In the context of the above, it is about: (1) family characteristics, such as: socio-economic status; the educational level of the mother and father; the existence of brothers and sisters, which can greatly affect the motor competence of children.

In addition, the socio-cultural context in which the child is brought up forms certain requirements for his/her motor behavior, favoring specific aspects of motor development and disrupting others. A very influential factor (and consequently a very significant cultural-educational factor) is the use of intervention movement programs, i.e. a developmentally appropriate movement program that can improve motor development, thus preventing the long-term negative consequences that adversely affect several genetic or the aforementioned environmental factors (through compensation with socio-cultural and socio-economic factors). In this paper, an empirical research is carried out, which aims, by recording the attitude of the teaching staff in secondary school "X", to see the influence of socio-economic and socio-cultural factors on the anthropometric and motor characteristics of secondary school students, in Skopje, North Macedonia.

Quantitative research methodology is applied in the paper, using a survey questionnaire, and then the data is synthesized and generalized in order to draw solid conclusions.

The aim of the research is to improve the cooperation between the teaching staff, the professional teams in the school and the student himself, with the aim of improving his physical activity, progress and thus a positive impact on the anthropometric and motor characteristics during the development itself.

2. Literature review

Although the development of motor competence in childhood and adolescence depends on growth and is directly influenced by the characteristics of the child's maturity (morphological, physiological and neuromuscular), environmental factors also play a major role. According to ??, motor development occurs in a specific social and cultural context, with the environment in which the child is raised being particularly important. Each spatial context has its own specific demands on children's motor competences and physical activities. According to ??, when analyzing specific influencing factors of the environment and the socio-cultural and socio-economic context, the following stand out: (1) the society in which the student lives; (3) the school setting it follows; (4) the quality of living conditions; (5) family size or number of siblings; (6) sibling interactions; (7) overall socio-economic circumstances are potentially important factors (Gill et al., 2017).

Regarding socioeconomic status, Lejarraga et al examined the psychomotor development of 3,573 boys and girls, aged 0.01–5.99 years in Argentina. The results showed that higher social

class and educational level of the mother were associated with better psychomotor performance in children over 1 year of age.

School children, unlike before, spend most of the day in school, which has a direct impact on their development. Of particular importance is the extent to which a school has an open space for play, gymnasium, fields and playgrounds and including daily exercise programs for physical activity, which contributes to a higher motor result.

In relation to the influence of the social and cultural context, the more opportunities children are given to practice, the more they develop their repertoire of movement and refine basic motor skills. Training intervention is considered the most important factor that can influence motor development.

The leading world health institutions warn that students in primary schools do not meet the minimum level of physical activity that is necessary for the proper physical development of young people, which is considered one of the main problems of public health (under the influence of socio-economic and socio-cultural factors). In addition to personal preferences, socio-economic and cultural factors play an important role in the involvement of young people in sports. In one study, a sample of 83 adolescents was included, of which 45 (54.2%, 13.51 ± 0.55 years) were from urban areas and 38 (45%, 13.45 ± 0.50 years) they were from rural areas in the Belgrade region. By assessing anthropometric characteristics through body height (BH), body mass (BM), body mass index (BMI) and motor abilities, the Mann-Whitney U test shows that place of residence has an impact on sports involvement and motor abilities. Namely, students from urban areas are more involved in sports and have better motor skills. However, the importance of this study is highlighted because it examines the urban-rural environment and the state of sports activity, anthropometric characteristics and motor abilities of students, thus making an important contribution to this field. Namely, different levels of urbanization and population density contribute to different access to sports facilities (Reimers et al., 2014) and opportunities to play sports.

This is exactly the essence of the influence of socio-cultural and socio-economic characteristics, when in fact it is realized that precisely infrastructural, cultural and educational factors, life habits and the way of spending time in school and free time, have a different effect on the involvement of students in physical activities, and thus the direct impact on anthropometric and motor characteristics is seen (Olson et al., 2019).

3. Methodology and findings

Within the framework of this paper, an empirical research was carried out on a target group of teaching and educational staff in secondary school "X" in the territory of the city of Skopje, North Macedonia, with the aim of seeing through their experience the influence of socio-economic and socio-cultural factors on anthropometric and motor characteristics in high school students. It is about a mutual share of influence of the home environment, the school environment, but also the social groups of interaction on the motor and anthropometric characteristics of the students.

The research was implemented in the time period of 15.02. – 30.02.2024.

The paper attempts to confirm the following, general hypothesis

"If the socio-cultural and socio-economic specifics of influence on the anthropometric and motor characteristics of students are recorded in a timely manner, in that case an improvement of the influence of school conditions is expected"

Quantitative research methodology is applied in the paper, using a survey questionnaire, and then the data is synthesized and generalized in order to draw solid conclusions.

4. Results and Discission

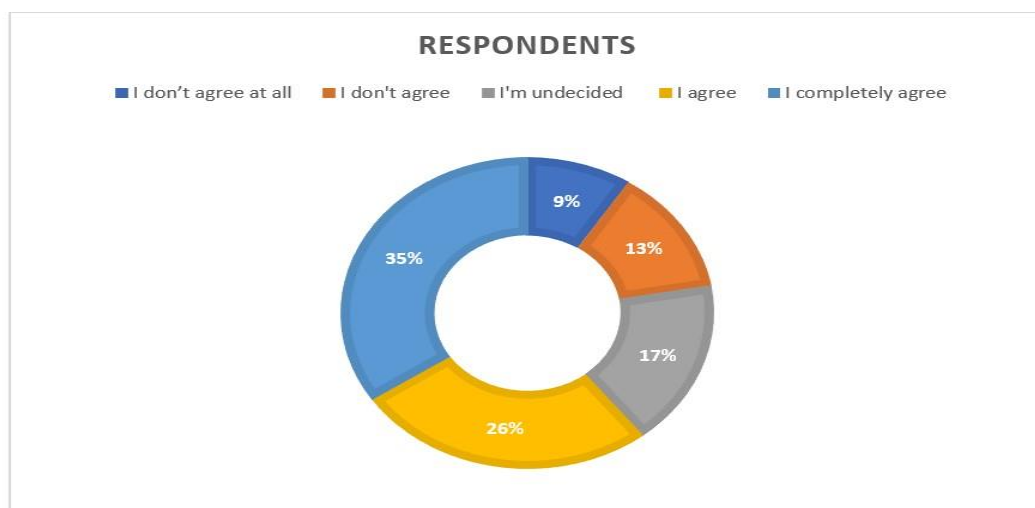
The general hypothesis is analysed and interpreted through the answers to the questions:

- Question 3 of survey questionnaire no. 1, which refers to: *"The teaching and educational staff has direct insight through their professional team into the potential influence of the environment (social and cultural) on the growth and development of the student in order to assess the impact on his physical activity and progress."*
- Question 5 of survey questionnaire no. 1, which refers to: *"The level of physical activity, growth and development of the students is recorded, in order to compare the insight itself with the socio-cultural and socio-economic habits of the environment itself".*

The answers to the questions do not include testing of variables, but the distribution is considered in relation to the total number of respondents.

The distribution of answers to question number 3, survey questionnaire no. 1 is shown in Figure no.

Figure 1: The teaching and educational staff has direct insight through their professional team into the potential influence of the environment (social and cultural) on the growth and development of the student in order to assess the impact on his physical activity and progress (%)



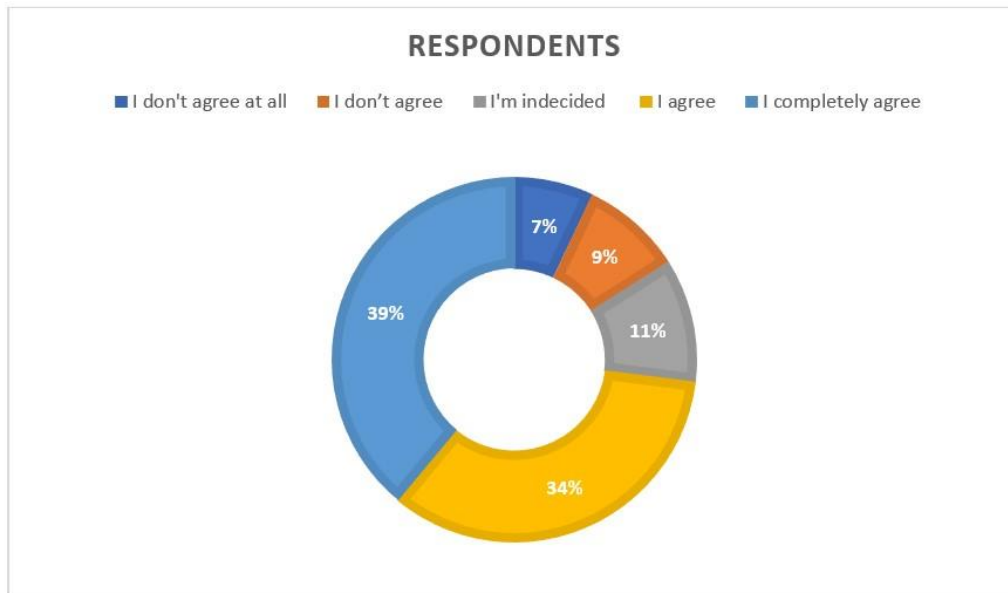
Source: Author's own research

According to the above, the following distribution of answers was obtained, 22% do not agree with the statement; 17% are undecided in their opinion and 61% agree with the statement. Since a higher percentage of those who agree with the statement prevails, a general conclusion in favor of confirming the hypothesis is that in the school, there is a certain level of expertise in assessing the student in relation to the progress of physical activity, but there is a need for better direction, in favor of the predominance of obstacles in the development of anthropometric and

motor characteristics. It is important to promote programs that will be known to all staff and will be implemented professionally and competently.

The distribution of answers to question number 5, survey questionnaire no. 1 is shown in Figure no. 2.

Figure 2: The level of physical activity, growth and development is recorded among the students, in order to compare the insight itself with the socio-cultural and socio-economic habits of the environment itself



Source: Author's own research

According to the attached data, the following distribution of answers is presented: 16% of respondents do not agree with the statement; 11% of the respondents are undecided in their attitude and 73% of the respondents agree with the statement. Consequently, there is a high percentage of agreement between the respondents that the level of physical activity, growth and development is regularly recorded among high school students, in order to compare the insight itself with the socio-cultural and socio-economic habits of the environment itself. In this way, a solid foundation is laid that if a student does not live in suitable socio-cultural or socio-economic conditions, the professional team of the school will help to obtain more conditions for physical activity and progress in the school itself, which can include the positive influence of the local self-government, through a series of projects and realization of additional activities. According to the above, the general hypothesis of the paper has been confirmed, which means, *"If the socio-cultural and socio-economic specifics of influence on the anthropometric and motor characteristics of students are recorded in a timely manner, in that case an improvement of the influence of school conditions is expected"*.

5. Conclusion

A healthy living and learning environment provide greater effectiveness in child development, as well as opportunities for perceptual-motor experiences that help children's development. In addition, the specific pedagogical methodology is also important, which should be suitable for the age group, in order to enable the maximum stimulation of motor abilities.

Apart from the schooling process, the society in which the child lives forms a specific cultural context that favours certain aspects of motor skills. What needs to be insisted upon in the direction of encouraging positive anthropometric and motor characteristics is stimulation with developmentally appropriate movement programs.

According to the theoretical and practical-empirical approach in this paper, the following conclusions and recommendations are drawn for the problem itself:

- Environmental factors (economic, social, cultural) have a direct impact on the motor and anthropometric characteristics of students;
- Awareness is needed from the school staff (teaching, management, professional) regarding the socio-cultural and socio-economic impact on the physical activity of the students, which requires precise and clear programs for mutual cooperation with the students;
- It is necessary to reduce the negative impacts of the socio-cultural environment in which the student grows and develops, by complementing quality programs for physical activity and fitness in schools;
- It is important to set up special, professional programs for the additional development of the anthropometric and motor characteristics of students, and by setting up a correlation with external factors, that is, factors of the living environment and the school environment.

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