

## SWOT ANALYSIS IN PHYSICAL EDUCATION FOR PROMOTION OF MOVEMENT ACTIVITY OF STUDENTS<sup>7</sup>

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**Abstract:**

*The paper reviews the existing SWOT analysis theories and reveals its application to promote movement activity of students.. The analysis aims to: (1) develop the idea of enhancing the efficiency of motor culture, physical education and movement activity in everyday life and student environment, and (2) assessing effectiveness in terms of significant benefits for physical, mental and emotional health . Special attention is paid to the resources and effectiveness of SWOT analysis.*

*SWOT analysis is a method not only for analysis but also for planning. The SWOT matrix has C-Stretching, B-Weaknesses, O-Opportunities, T- Threats. We analyze these components about physical culture, motor culture and movement activity of students.*

*Keywords: Analysis Student Movement Activity Approach; SVOT analysis; creative innovation techniques for motor culture analysis, physical education and movement activity; the importance of body posture; self-assessment.*

**JEL Codes: I 12, I 21, I 23**

### INTRODUCTION

The awareness and knowledge of health and the role of physical activity underlie the global recommendations of the World Health Organisation (WHO), which provide the best disease prevention in the different age groups. The document recommends frequency and intensity of the exercise that comply with the capacity of the individual, in order to enhance the health effect. (Global recommendations on physical activity for health, World Health Assembly) WHO defines physical activity as any bodily movement produced by the skeletal muscles that requires energy expenditure—including activities undertaken during work, play, doing household chores, travelling and recreational activities. (Vasilev, J. & N. Orloev, 2010) Physical education is pedagogical process which is planned, structured, organised and and purposeful in the sense that the improvement or maintainance of one or more components of physical fitness is the objective. (Batoeva, M. ,2006; Boeva, B. & V. Ivanova, 2018; Ilieva, B., 2017; Kunchev, K., 2017; Mileva, E., 2009; Momchilova, A., 2017)

The White Paper on Sport drawn up by the European Commission covers precisely the publicly important role of sport. It makes recommendations for the enhancement of public health through physical activity – development of new physical activity guidelines; building of an EU Health-Enhancing Physical Activity (HEPA) network by forming smaller and and more focused networks dealing with specific aspects of the topic; development of this priority in the respective financial instruments, including: the 7<sup>th</sup> Framework Programme for Research and Technological Development (lifestyle aspects of health); the Public Health Programmes; the Youth and Citizenship Programmes; and the Lifelong Learning Programme. This document underlines that the lack of physical activity reinforces the occurrence of overweight, obesity and a number of chronic conditions such s cardiovascular diseases and diabetes, which reduce the quality of life. The Commission's White Paper "A Strategy for Europe on Nutrition, Overweight and Obesity related health issues" underlines the importance of taking pro-active steps to reverse the decline in physical activity. Sport is attractive to people and has a positive image. However, the recognised potential of sport movement to foster

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health-engancing physical activity often remains under-utilised and needs to be constantly developed. (European Commission, White Paper on Sport, 2008)

The SWOT analysis will provide us with opportunities to evaluate how the strategy of physical education and sport for students will improve the results of their physical activity in order to achieve physical, mental and emotional health.

### EXPOSITION

A SWOT analysis is a model for strategic planning in business used to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in a project or in a business venture. (Stefanova, I., 2017; World Health Organization) This technique was devised by Albert Humphrey, head of a project at Stanford University in the period 1960 – 1970, using data for Fortune 500 companies. (Vasilev, J. & N. Orloev, 2010)

The said authors considered the application of a creative non-linear SWOT analysis from an individual's viewpoint. They stated that Peter Drucker's conclusions "that in developing a SWOT analysis emerges the truth about deep subjectivity in defining the strengths (S) and weaknesses (W), respectively of the strengths and weaknesses of the individual. It is typical of the individual to convictedly attribute to themselves strengths and to belittle or ignore their weaknesses".

In line with achieving the goals of physical education and sport for students, it is necessary to consider the period of educational and social engagement, to study their self-evaluation of physical development, physical abilities and satisfaction with active sports activities. The authors J. Vasilev and N. Orloev quote P. Drucker's recommendations very precisely with a view to correcting the consequences of the individual's weaknesses and bad habits, which prevent effectiveness and efficiency. "First, identification of and focusing on the possible weak results as a consequence of insufficient knowledge or neglectful and arrogant attitude to knowledge outside the area of personal specific competence or outside the given speciality. Second, use of "a single method", according to him, to analyse the "feedback". To this end, Peter Drucker recommends describing the expected consequences when making an important decision, and monitoring their compliance with reality in time.

Indeed, part of the students underestimate physical education as a subject. They fail to realise the significance of physical activity to their health. Maintaining physical activity and motor coordination requires a responsible attitude, persistence and targeted actions. The lack of movement affects the body posture. From a physical point of view, the body posture is basic as it is connected with the implementation of daily activities.

The posture is shaped under the influence of the environment, it is formed like every motor habit and should be maintained, as it can change in both positive and negative aspect (Sokolov B., Markova-Stareyshinska G, 1991).

N. Mihaylova, I. Borisov and T. Megova (2012) present the functions of the spinal cord, which are connected with internal and external factors. Another important condition necessary for the maximum stability of the spinal cord is the good position of the vertical line through the centre of gravity in a static upright position.

K. Tahtakov (2012) created a device for prevention of spinal curvature disorders. In this respect, he presented the types of body postures. "There are four types of postures. They are marked with the letters A, B, C, D, and for each letter there is a corresponding assessment. For posture A — very good, for B — good, for C — average, and for D — poor. The assessment is given after examining the body axis, the position of the head and the shoulders, the shape of the chest, the uniform course of the physiological curves of the spinal cord, the line of the abdominal wall and the shape of the lower extremities. For example, in posture A the body axis is upright, the shoulders are pulled to the back, the abdomen is flat, the head is held up. In posture B, the body axis is slightly broken, the head is held slightly to the front and the shoulders are slightly drooping. In posture C and D, these indicators are significantly deteriorated — the axis is broken, the shoulders are low-set and drooping, the head is tilted to the front, the thoracic kyphosis is increased, the abdomen is drooping, the thoracic wall drops slantwise and falls behind the abdominal line (Sokolov & Markova-Stareyshinska, 1991).

The posture is defined as the location of the body bone and joint segments at a certain moment. It could be static, when the body is at rest - standing, sitting, lying; or dynamic, when the body is moving and changing the position of its segments.

One of the most important mechanical factors in assuming a certain posture is its stability. It is determined by whether the projection of the general centre of gravity of the body is in the middle of supporting surface. The stability of the posture is determined by static and dynamic factors. Static factors include the position of the bone and joint segments, as well as the passive forces generated by the joint capsules and ligaments. The dynamic factors are determined by the active muscle tension.

Maintaining a correct body posture is implemented with the help of toned and operational muscles. That is why physical exercise and physical activity need to be practised on a daily basis.

The daily activities repeating with the same sequence, intensity and load influence one and the same muscle groups at the expense of others. This leads to changes in the musculoskeletal system, as some muscles become well-developed and others – dysfunctional. For example, in the case of kyphosis the chest muscles are heavily contracted, and the dorsal muscles are weak. In the case of lumbar lordosis, the abdominal muscles are weak, and in scoliosis (left or right) there is an asymmetric muscle imbalance. In case of developed scoliosis, the centre of gravity has already shifted sideways and the response of the spinal cord is its curvature to the opposite side until the gravity is balanced. (N. Mihaylova, I. Borisov & T. Megova, 2012).

According to H. Debrunner & W. Hepp (1999), the posture depends on the correct anatomical bone and joint structure of the spinal cord, chest, shoulder girdle, lower extremities, on the normal function of the muscles around the spinal cord, the abdominal muscles and on the developed motor habit. The normal morphological and static support of the spinal cord requires minimum muscle strength. Each deviation from the physiological curves is connected with increased muscle load. When muscles reach their functional incapacity, the shape of the back deteriorates immediately.

If we assume that the spinal curvature of a human body is absolutely normal and the alignment of the head, spinal cord, chest and pelvis is correct, its posture is determined by the condition of the muscles and their tendons. If the muscles are normally developed and the strength of the flexor muscles counterbalance that of the extensor muscles, the posture will be correct. The position of the shoulder girdle, arms and legs depends on the level of development and condition of the tone of their muscles. The main part in forming the posture is not played by the absolute strength of the muscles, but by their equal development and correct ratio of muscle strength.

The detailed study of the aspects of the correct body posture aims at highlighting the role and importance of physical education for the promotion of movement activity of students. The lack of exercise and the daily routines in combination with improper nutrition create prerequisites for morphological and functional changes with adverse effect on health. The solution to these situations is the planned, targeted physical activity and sport under the guidance of qualified professors.

Another important factor for the effective realisation of the goals of physical education is the professional interaction between the professor and the students. Y. Doncheva (2016) differentiated the communicative competences of the teacher, respectively the professor, in four aspects: sociopsychological, moral and aesthetic, aesthetic and technological. Paedagogical communication allows for the planning, coordination and optimisation of the joint activities, ensuring harmony of goals and means.

The academic aspect is a compulsory element in the attitude to students. The professors' academic culture should include the following: well-groomed appearance, good manners, grammatically correct language, professional and academic weight, normative awareness, digital competence, compassion, general knowledge, public authority, and other merits. (Mihailova, N., I. Borisov & T. Megova, 2012)

Table 1. SWOT matrix of students not involved in sports

<p><b><u>STRENGTHS (S)</u></b></p> <p>Observation of the morphological and functional changes – self-evaluation;</p> <p>Comparison of the personal physical condition as a person not involved in sports with the physical shape and physical development of athletes; establishing the differences;</p> <p>Remote intentions for active motor activity.</p>	<p><b><u>WEAKNESSES (W)</u></b></p> <p>Comfort zone;</p> <p>Weak muscles,</p> <p>Overweight condition prerequisites;</p> <p>Lack of desire for physical activity;</p> <p>Lack of time as an unconvincing reason</p>
<p><b><u>OPPORTUNITIES (O)</u></b></p> <p>After seeing their results as a person not involved in sports and deciding on taking up a sport, better realisation of the benefits of physical activity and sharing personal experience;</p> <p>Study of and search for a preferred physical activity.</p>	<p><b><u>THREATS (T); RISKS</u></b></p> <p>Changes in the muscle tone;</p> <p>Prerequisites for spinal cord curvature disorders;</p> <p>Hypodynamia;</p> <p>Hypokinesia,</p> <p>Overweight;</p> <p>Weak immune system</p>

Contemporary technologies can be effectively used to complement and acquire new motor skills and habits. A. Smrikarov (2017) recommends the innovative forms for the digital generation. The information about the benefits of physical activity and sport can also be presented through interactive and multimedia presentations. (Rusev, R., 2006)

The retrospective study provides the opportunity to summarise SWOT matrices: for students not involved in sports – table 1, and for students involved in sports – table 2.

The matrix of SWOT analysis includes strengths, weaknesses, opportunities, and threats/risks.

**Table 2. SWOT matrix of students involved in sports**

<p><b>STRENGTHS (S)</b></p> <p>Muscle tone; Prevention of spinal cord curvature disorders; Symmetrically developed and balanced muscles; Improvement of physical skills; Health, tone and energy; Good fitness; Realistic self-evaluation</p>	<p><b>WEAKNESSES (W)</b></p> <p>Spending time on practising physical education once a week.</p> <p>Adaptation to physical loads: solution – practising a different type of physical activity and compulsory complexes of routines for general development as morning exercise with periodic change of the complexes or the load.</p>
<p><b>OPPORTUNITIES (O)</b></p> <p>Emotional relaxation; Promotion of motor coordination; Social contacts. Knowledge and skills; Increasing the physical ability;</p>	<p><b>THREATS (T) – RISKS</b> which are also possible in the everyday activities: In case of individual practices – inappropriate load and intensity; neglect for the warm-up or stretching at the end of the practice; fatigue; injuries</p>

**CONCLUSION**

The presented SWOT matrices provide information about strengths, weaknesses, opportunities, threats/risks of/to students who are involved and who are not involved in sports. The analysis of the essential activity of physical education for promotion of the movement activity of students reveals the need for and actual results of the prevention of spinal curvature disorders; muscle tone maintenance, symmetrically developed and balanced muscles; physical improvement; health, tone and energy; good fitness; realistic self-evaluation. The SWOT analysis also envisages the study of the interaction between the factors in pairs, namely: “S-W”; “S-O”; “S-T”; “W-O”; “W-T”; “O-T”. These results will be presented in a subsequent research paper.

**REFERENCES**

Batoeva, M. (2006). Pedagogicheska psihologia, Sofia: Izdatelstvo „Askoni-Izdat” (Оригинално заглавие: Батоева Д. и кол. (2006) Педагогическа и психологическа диагностика, Аскони-Издат, Сф.).

Воева, В., V. Ivanova (2018) Teoretichni I metodicheski osnovi na fizicheskoto vazpitanie–parva chast, St. Z. (Оригинално заглавие: Боева Б., В. Иванова (2018) Теоретични и методически основи на физическото възпитание, Ст.З.)

Doncheva, J. (2016) Communicative Competence of The Teacher as The Fundamental Obtaining of its Professionalism, Novokuznezsk, voll. 1, pp. 96, <http://infed.ru/articles/452/> (Оригинално заглавие: Дончева, Ю. (2016) КОММУНИКАТИВНАЯ КОМПЕТЕНЦИЯ УЧИТЕЛЯ КАК ОСНОВОПОЛАГАЮЩАЯ ЕГО ПРОФЕССИОНАЛИЗМА.// Новокузнецк, брой 1, стр. 96-104, ISSN 978-5-8353-1991-6.

Evropeiska komisija (2008), Byala kniga na sporta.// European Commission, White Paper on Sport.

Пиева, В. (2017) Socialna podkrepa na vazrastni i stari hora (teoretichni osnovi), R, (Оригинално заглавие: Илиева, Б., СОЦИАЛНА ПОДКРЕПА НА ВЪЗРАСТНИ И СТАРИ ХОРА, (теоретични основи). Русе, 2017, ISBN 978-619-7418-07-1).

Geron, E., J. Mutafova (2004). Motivacia pri fizicheskata deinost i sporta, Sofia: Izdatelstvo „NSA PRES” (Оригинално заглавие: Герон, Е., Ю. Мутаfoва (2006) Мотивация при физическата дейност и спорт, НСА ПРЕС, Сф.).

Kozhuharov, K., V. Kozhuharov (2006). Dvigatelna anatomia, Ruse: Izdatelska baza na RU „A. Kanchev“ (Оригинално заглавие: Кожухаров, К., В. Кожухаров (2006) Двигателна анатомия, Изд. База на РУ „А. Кънчев”, Рс).

Kunchev, K. (2017). Samoocenka i socialni otnosheniya, <http://kunchev.blog.bg/drugi/2017/10/06/samoocenka-i-socialni-otnosheniia>, (Оригинално заглавие: Кунчев, К., (2017) Самооценка и социални отношения).

McKenzie, Br. (2011). 101 testa za ocenka na fizicheskata godnost, Sofia: Izdatelstvo „NSA PRES” (Оригинално заглавие: Маккензи, Бр. (2011) 101 теста за оценка на физическа годност, НСА ПРЕС, Сф.).

Mileva, E. (2009) Pedagogika na fizicheskoto vazpitaniee i sporta, Sofia: Izdatelstvo „Avangard Prima” (Оригинално заглавие: Милева, Е. (2009) Педагогика на физическата възпитание и спорта, Авангард Прима, Сф.).

Mihailova, N., I. Borisov, T. Megova (2012). Nasoki vav fizikalnoto lechenie pri deformacii na grabnachnia stalb vav frontalnata ravnina, Nauchni trudove RU and SU 2012, Ruse, volume 51, s. 8.1. (Оригинално заглавие: Михайлова, Н, И. Борисов, Т. Мегова. (2012) Насоки във физикалното лечение при деформации на гръбначния стълб във фронталната равнина, Научни трудове РУ и СУ 2012, Русе, т. 51, с. 8.1.).

Momchilova, A. (2017) Teoria i metodika na fizicheskoto vazpitanie i sporta, Ruse: Izdatelstvo „MEDIATEH-Pleven” (Оригинално заглавие: Момчилова, А. (2017) Теория на физическото възпитание и спорта, МЕДИАТЕХ - Плевен, Рс.).

Pencheva, V., Hr. Beloev, M. Fartunova, R. Kyuchukov. (2017) New Educational Platforms in Higher Education, PROCEEDINGS OF UNIVERSITY OF RUSE - 2017, volume 56, book 9, (Оригинално заглавие: Пенчева, В., Хр. Белоев, М. Фъртунова, Р. Кючуков. (2017) Нови образователни платформи във висшето образование, Научни трудове РУ и СУ, т.56, с. 10, стр. 9, Рс.)

Peneva, B. (2011) Uchilishtnoto fizichesko obrazovanie i sport v Evropa – sastoyanie I tendentsii na XXI vek, Sofia: Izdatelstvo „Avangard Prima” (Оригинално заглавие: Пенева, Б. (2011) Училищното физическо възпитание и спорт в Европа – състояние и тенденции на XXI век, Авангард Прима, Сф.).

Rusev, R. (2006) Kibernetika i upravlenie na dvijeniata v sporta, Sofia: Izdatelstvo „GERA ART” (Оригинално заглавие: Русев, Р. (2006) Кибернетика и управление на движенията в спорта, ГЕРА АРТ, Сф.).

Smrikarov, A. How to Make a Lecture more Interesting or Students of The Digital Generation, PROCEEDINGS OF UNIVERSITY OF RUSE - 2017, volume 56, book 9, (Оригинално заглавие: Смрикарров, А. (2017) Как да направим една лекция по-интересна за студентите от дигиталното поколение, Научни трудове РУ и СУ, т.56, с. 10, стр. 82, Рс.).

Stefanova, I. (2017) Kineziologichni osnovi na kineziterapiata, Ruse: Izdatelska baza na RU „A. Kanchev“ (Оригинално заглавие: Стефанова, И. (2017) Кинезиологични основи на кинезитеропията, Изд. База на РУ „А. Кънчев”, Рс).

Tahtakov, Kr. (2012) Ustroistvo za prevencia na grabnachni izkrivyavaniya i eksperimentalna ocenka na prilogimostta mu, avtoreferat, Sofia. (Оригинално заглавие: Тахтаков, Кр. (2012) Устройство за превенция на гръбначни изкривявания и експериментална оценка на приложимостта му, Изд. База на РУ „А. Кънчев”автореферат, Сф).

Vasilev, J., N. Orloev. (2010) Creative non Linear SWOT Analysis, [http://mechaning.com/journal/Archive/2010/6/2.tehnologii/62\\_Jordan%20Vasilev.pdf](http://mechaning.com/journal/Archive/2010/6/2.tehnologii/62_Jordan%20Vasilev.pdf), (Оригинално заглавие: Василев, Й., Н. Орлоев (2010) Креативен нелинеен SWOT анализ).

World Health Organization, <http://www.who.int/about/who-we-are/en/>

Метод SWOT анализа в стратегическом управлении, <http://powerbranding.ru/biznes-analiz/swot/matrix/>

SWOT analysis <http://www.promise.org.uk/swot.htm>