

HEALTH PROMOTION IN SCHOOLS - A KEY TO IMPROVING YOUNG PEOPLE'S HEALTH

Katarzyna Hampel^{*}, Paulina Ucieklak-Jeż^{**}
Agnieszka Bem^{***} Zuzana Hajduova^{****}



<https://doi.org/10.18778/2391-6478.S1.2023.05>

HEALTH PROMOTION IN SCHOOLS - A KEY TO IMPROVING YOUNG PEOPLE'S HEALTH

ABSTRACT

The purpose of the article. The presented research aims to analyze the impact of health education on students' attitudes towards taking care of their health, the health of other people and the ability to create a healthy environment. The paper assumes that health education is provided in schools by the applicable law. The work presents an up-to-date perspective on the complex problem of how young people perceive health.

Methodology. To verify the significance of the differences in the respondents' assessments, statistical methods (non-parametric tests) were used: the U-Mann-Whitney test and the Spearman rank correlation coefficient. The calculations were made using Statistica. The research sample included young people from upper secondary and general education schools. The author's questionnaire was used. The study was anonymous. Respondents completed the questionnaire voluntarily. The research was conducted between March and September 2023.

Results of the research. The conducted empirical analyses and the results of the surveys allowed us to achieve the goal assumed in the introduction and confirmed that health education in secondary schools influences the shaping of students' attitudes towards taking care of their health and the health of the community in which they live. By implementing health education at school –

^{*} Dr, Faculty of Law and Economics, Jan Dlugosz University in Czestochowa, e-mail: k.hampel@ujd.edu.pl, <https://orcid.org/0000-0001-9391-1265>

^{**} Dr, prof. UJD, Faculty of Law and Economics, Jan Dlugosz University in Czestochowa,, e-mail: p.ucieklak-jez@ujd.edu.pl, <https://orcid.org/0000-0002-4106-6984>

^{***} Dr hab., prof. UEW, Faculty of Economics and Finance, Wrocław University of Economics, e-mail: agnieszka.bem@ue.wroc.pl, <https://orcid.org/0000-0003-1653-6558>

^{****} Dr hab., Department of Business Finance, University of Economics in Bratislava, e-mail: zuzana.hajduova@euba.sk, <https://orcid.org/0000-0002-9381-776X>

according to the core curriculum – students' awareness and motivation to undertake activities to improve and maintain good health is increased. Additionally, practical skills are developed to help them use the acquired knowledge in everyday life, and pro-health attitudes are formed. Health promotion is, therefore, the key to improving the health of school children, preparing them for a healthy lifestyle and making informed choices about their health and the community in which they live.

Keywords: health promotion, health education, youth perception of health, well-being.

JEL Class: I10, I31, P46.

INTRODUCTION

Several studies show that disease prevention and healthy lifestyles are critical to the population's health, and education is significantly linked to health status. There is an inextricable link – confirmed by much evidence – between health promotion, health education and health. Education has a significant impact on people's lifestyles. It can be observed that the higher the level of education, the longer life expectancy, the lower the mortality and morbidity rates and the incidence of infectious diseases, and the lower the number of risky behaviours such as alcohol abuse, smoking, unhealthy diet (Suhrccke and de Paz Nieves, 2011). It is because education allows people to gain the knowledge and skills necessary to manage their health, cope with difficulties, find a better job and thus earn more, which are also determinants of a healthy lifestyle (Woynarowska, 2013: 9; Bulska, 2017).

Previous research suggests that students' knowledge in the area of preventive health is quite limited to the impact of physical activity on health, while other aspects of health, such as mental/psychological, behavioural and social aspects, are left underestimated (Wang et al., 2014). It sets essential directions for health education in schools. As suggested by Aira et al. (2014), there is a demand for the subject in society – it not only has the potential to build young people's positive attitudes towards health issues but, what is even more important – increases pupils' health literacy. Some results suggest that school education may positively affect pupils' health behaviours in terms of harmful health habits like smoking or drinking (West et al., 2004).

Therefore, health promotion and health education are essential tasks that should be carried out at school – and schools are recognised as key environments promoting a healthy lifestyle (WHO, 1997 and 2017). School should be a place where health knowledge is formed and health promotion programs involving the whole community are implemented (Darlington et al., 2018), vital to improving children's health and well-being (Darlington et al., 2017). By intervening early and raising children in the spirit of a healthy lifestyle, the school contributes to developing health-promoting behaviours that can benefit adult life (Craigie et al., 2011; Yang et al., 2014). It has been shown that healthy children learn better, and educated children live healthier lives (Suhrccke and de Paz Nieves, 2011).

Several phenomena can be distinguished when considering the relationship between health and health education (Bulska, 2017). Health education is a health potential. At the same time, health is a potential for education. Good health enables your child to start school, attend school and achieve good academic results. Therefore, health affects the proper learning process (acquiring knowledge, acquiring new skills, involving concentration and thinking), adaptation to the school environment, establishing contacts with peers, and developing creativity, talents and interests. The rich literature shows that the

determinants of health and education are similar. In the case of the youngest, the socio-economic factors of the family, school, peers, local environment and social media have the most significant impact.

The study aims to analyze the impact of health education on the development of pupils' attitudes toward caring for their own and other people's health and the ability to create a healthy environment. It is assumed that health education is implemented in a post-primary school following legal regulations. The work gives a fresh look at the complex problem of young people's perception of their health.

The research sample includes young people from general secondary schools. Non-parametric methods were used in the data analysis (correlation of Spearman ranks and U-Mann-Whitney test). The Statistica package supports the calculations.

1. HEALTH PROMOTION AND HEALTH EDUCATION AS FACTORS SHAPING THE HEALTH OF THE POPULATION

The concept of "health promotion" is a relatively young field of knowledge because the first mention of it appeared in the 70s of the twentieth century. It was first defined at the World Health Assembly conference in 1977 (Karski, 2011: 12). At that time, it was stated that the existing methods, expenditures and resources for health protection were insufficient to improve the health of society. In this regard, the need to attach greater importance to taking care of health, and thus – to promoting good health among the public while developing primary health care – a place to which the individual turns directly when health loss was pointed out. Moreover, the structure of morbidity and mortality began to be dominated by new health threats associated with the development of civilisation, i.e. non-communicable diseases (Woźniak-Holecka, 2014).

A breakthrough in the development of health promotion was the Lalonde Report: A New Perspective on the Health of Canadians, which presents a model of health determinants valid to this day (Lalonde, 1974). This document indicates the determinants of health divided into four groups, the so-called *Marc Lalonde health fields*. Health promotion and health education are essential fields of activity of health authorities.

Health promotion is a process that aims to increase the awareness and motivation of individuals and communities to take action to improve and maintain good health. It refers to activities based on maintaining good health increasing the reserves and potential of the body (Najwyższa Izba Kontroli, 2017). Health promotion is a tool for improving the population's health, which should be understood as a process involving actions leading to an increase in personal impact on one's health. Showing a healthy lifestyle results from our conditions, individual behaviour patterns, and unique character traits. A healthy lifestyle

primarily results from promoting proper behaviour, diet, environmental protection, etc. In addition, health promotion includes many different factors affecting human health, such as the possibility of appropriate employment, food, education, a sense of security, relationships with other people, maintaining family ties, and living in a clean, natural environment. It is a concept and guidelines on strengthening health and its potential and a series of activities to teach the public how to do it properly.

The focus of health promotion is primarily on people and the conditions in which they live. Nowadays, it is believed that health promotion deals with issues that concern an individual and, above all, the whole social system, among others, education, science, politics, family, economics, politics and health care (Drzeżdżon, 2022: 74). By cross-sectoral interventions in these systems, we affect the development of the health of the whole society. What is important here is not individual but integrated action. None of the presented social systems should be omitted because there are many complicated relations between men and their entire environment. Health promotion pays attention to a man's health potential, which can be developed (Indulski et al., 2000: 82). It emphasises the importance of such determinants as routine behaviour patterns, lifestyle or interactions between the human individual and their environment.

It should also be noted that health promotion is not the same as health education. Health education can be implemented among people who are both healthy or sick and at risk of disease, while promotion is focused on prevention. The research results conducted in the United States and Western European countries confirm the effectiveness of promotional and educational activities. Research by L. Goldman and E.F. Cook shows that the decrease in mortality from coronary heart disease in the United States between 1968 and 1975 was more than 60% due to lifestyle changes and improved control of risk factors. On the other hand, improving the quality of medical services was responsible for a mortality reduction of only 1/3. In turn, the program for the prevention of ischemic heart disease implemented in Finland started in 1972 and led to a decrease in mortality of men aged 35–64 years by 65% for the whole country and by 73% for Karelia, where this program began to be implemented at the earliest (Indulski et al., 2000: 321, 339).

Health education is, therefore, an indispensable and complementary element of health promotion, and the effectiveness of both activities has a significant impact on the individual's health. The interconnectedness of health promotion tools is reflected, among other things, in the health promotion model developed by Tannahill (Sobczyk, 2020: 18), which highlights the links between critical areas for human health, i.e., health education, health protection and disease prevention.

When explaining the concept of health education, one should also mention health as the most outstanding value for every human being. Health is a superior value. It stands at the highest position in the hierarchy of all values and is a crucial element in determining the choices of the individual that make up the style and quality of life. Health education is, therefore, an element of shaping the entire human personality and should begin at the stage of early school education. It is a process in which the individual is taught to care for their health and the society in which they exist. Health education includes knowledge of environmental, social and political factors affecting health, the body's functioning, the ability to cope with difficult situations, the ability to use health care and learning to make informed decisions about one's health. It is a highly complex process involving many issues for which the family, the education system, and society are primarily responsible. From the pro-health point of view, the place of residence, lifestyle, access to health care, and genetic conditions are also important (Żmichrowska, 2019: 257).

Health education is an essential element of health promotion, as it leads to familiarisation with the objectives of health and disease prevention activities, influencing individual behaviour and attitudes and highlighting the benefits of maintaining health (Karski, 2011: 16). Classical health education was aimed at providing knowledge and striving to change behaviours and attitudes regarding health. The new approach emphasises participation in health promotion activities, especially the importance of social, political, economic and physical factors. Health education should provide reliable health information, strengthen pro-health activities, and convince and ensure influence on the creation of health social policy.

Health education is a process in which people learn to take care of their health and that of the community in which they live (Woynarowska, 2014: 11). It consists of acquiring knowledge about health, factors that increase its potential and pose a health risk, attitudes towards one's health and the health of others, skills of a healthy lifestyle, coping with new situations, and making the right decisions. Health education is a didactic and educational process in which students learn how to live to preserve and improve their health (Kędzior, 2019: 255).

Thanks to health education, it is possible to educate a person on how they should act so as not to get sick, but also on what to do to strengthen their health and that of others. It can be understood as knowledge but also beliefs, behaviours and lifestyles that aim to maintain health at a certain level by changing the way of thinking about health in the sense of promoting it and increasing the effectiveness of influence and control over one's health (Bulska, 2017: 156). It is a science-based process that provides opportunities for planned learning to enable individuals to make and act on informed health decisions (Woynarowska, 2013: 418). It is often called the process in which children and adolescents learn how to

shape an environment conducive to health and, in the event of a disease or disability, actively participate in its treatment or rehabilitation and cope with and reduce its adverse effects (Woynarowska, 2013: 418). It should be emphasised that systematic health education at school is considered the most cost-effective, long-term investment in the health of society (Jourdan et al., 2021: 295–303). The first health education programs in schools focused on solving physical health problems. Nowadays, however, it is believed that different goals should be considered – depending on the needs of a given group. Human knowledge does not always translate into actions beneficial to health. Thus, the main goal of health education in school should be to help students (Bulska, 2017: 157):

- learn about yourself, that is, getting to know yourself, your development, identifying and solving your health problems;
- understand what health is, how to take care of it and why;
- develop a sense of responsibility for one's health and that of others;
- strengthen self-esteem and confidence in one's abilities;
- develop personal and social skills conducive to well-being and positive adaptation to the challenges of everyday life;
- prepare to participate in health activities, creating a healthy environment at school, home, work, and local community.

Childhood and youth are the most critical periods when lifestyle and health behaviours are formed. Their quality is primarily influenced by the health behaviours of adults (especially parents), peer groups, social media and school (Driessen-Willems et al., 2023: 1–18). Therefore, various factors shaping health behaviours can be distinguished, e.g., predisposing factors, which may refer to attitudes, values and beliefs, knowledge and beliefs, and strengthening factors. They are also defined as moral norms, which are positive consequences of behaviour when socially approved as well as also enabling factors relating to the environmental determinants of health. These factors include health care services' availability and ownership or the local government's involvement in health matters (Bulska, 2017: 158). That way, upbringing and socialisation play a unique role in forming a young person's health behaviours.

Health education is a critical element of health promotion. It is about providing the information and skills necessary to make informed health decisions. Health education can take place in various forms, such as lessons at school, workshops, social campaigns, educational materials or social media. However, this information must be accessible, understandable and adapted to different age and cultural groups.

2. HEALTH PROMOTION AND HEALTH EDUCATION IN SECONDARY SCHOOLS IN POLAND

The requirements for health education in general upper secondary schools and technical secondary schools are regulated by the Regulation of the Minister of National Education of 30 January, 2018 on the core curriculum for public education¹ and cover various subjects (Rogacka, 2019: 3). The content of health education appears at the very beginning, where it is written that: *"An important task of the school is also health education, the aim of which is to develop in students an attitude of caring for their own and other people's health and the ability to create a healthy environment"* (MEN Regulation, 2018: 4). The appendix also emphasises the importance of health education for students with the words: *"Health education is vital, which will consistently and skilfully contribute to the improvement of the health condition of the society and the economic well-being of the state"* (MEN Regulation, 2018: 5). Health education provision appears in the education for safety, where the principles of first aid are mentioned due to the highest probability of using these skills in practice. The regulation emphasises that *"students should be introduced to care for their safety and that of others, indicating how they can get help from trustworthy people and emergency services"* (MEN Regulation, 2018: 22). Education for safety prepares students theoretically and practically for proper behaviour and appropriate reactions under challenging situations posing a threat to health and life (Rogacka, 2019: 37). The most widely described is health education in the case of the subject of physical education, in point 3 of the objectives of education (general requirements): *"Consolidation of the ability to apply in everyday life the principles conducive to maintaining physical, mental and social health, taking into account different periods of life and the specificity of the profession"* (MEN Regulation, 2018: 307).

Also, in the teaching content (specific requirements): *"I. Physical development and fitness. In terms of knowledge. The student: 1) explains the relationship between physical fitness and health and well-being; (...) In terms of skills. The student: 1) performs a self-assessment of physical fitness against the background of individual needs and health norms for the age category;(...)"* (MEN Regulation, 2018: 307). This thematic block emphasises the importance of physical development and fitness in health, not the grade given. It highlights the need to use various forms of activity that allow one to make individual choices for one's health, considering future family and professional roles. The thematic block, Health Education, contains content on health and its diagnosis in the context of counteracting civilisation and occupational diseases (MEN Regulation, 2018: 307). Combining the content of this block with the implementation of social

¹ Journal of Laws of March 2, 2018, item 467.

competencies is conducive to developing a sense of responsibility for one's health and that of other people, strengthening self-esteem and confidence in one's abilities (Rogacka, 2019: 36). "IV. Health education.1. In terms of knowledge. The student: 1) explains what responsibility for one's own health and that of others means; 2) explains the relationship between nutrition and hydration and physical exercise and the type of work; 3) explains where to look for reliable health information and critically analyses media information in this area (trends, fashions, diets, eating patterns);4) lists civilisation diseases caused by lack of exercise, inadequate nutrition, in particular cardiovascular diseases, musculoskeletal system diseases and obesity, and discusses ways to prevent them; 5) explains the relationship between professional sport and sport for all and health, including the problem of doping; 6) explains why health is a value for man and a resource for society and what care for health in different periods of life is all about; 7) discusses the principles of rational time management and adaptation of the form of active recreation to the type of professional work and the period of life; 8) explains what self-examination and self-control of health are all about and why it is necessary to undergo preventive examinations throughout life; 9) discusses the causes and effects of stereotypes and stigmatisation of people with disabilities, mentally ill and discriminated against; 10) discusses the health and social harms associated with smoking, alcohol abuse and the use of other psychoactive substances, explains why and how to resist pressure and persuasion to use psychoactive substances and other risky behaviours. 2. In terms of skills. The student: 1) develops an individual, one-day nutrition plan, taking into account the energy balance and following the health training plan; 2) develops a project on selected health issues and indicates ways to gain allies and project participants at school, home or in the local community; 3) selects ways to reduce excessive stress and deal with it constructively; 4) develops and performs a set of shaping and compensatory exercises in the field of functional training, with particular emphasis on the prevention of back pain and the type of professional work. V. Social competencies. The student: 1) explains how to work on oneself to increase self-confidence, self-esteem and decision-making skills; 2) explains how to constructively give and receive positive and negative feedback and how to deal with criticism; 3) acts as an organiser and competitor; referee and fan in sports and recreational events; undertake individual and team initiatives; 4) lists and interprets examples of constructive and destructive behaviour by sports fans; 5) indicates the links between the values of Olympic ethics and non-sporting life; 6) discusses the ethical implications of doping agents" (MEN Regulation, 2018: 309–310).

The regulation places excellent emphasis on pro-health education in the case of biology by shaping the awareness of the need to take care of one's health and the health of others. It is recommended to pay special attention to the development

of health-promoting attitudes, such as rational nutrition, physical activity, attention to hygiene, undergoing periodic health examinations, skilful coping with stress, as well as to the fact that the human life span is significantly extended, which implies several aspects of biological and social human life (Rogacka, 2019: 36). It stresses that psychosocial health and preparing students for life in a rapidly changing environment are essential elements of health education. Health education content has also been incorporated into subjects such as the basics of entrepreneurship, foreign language and ethics. To sum up, universal pro-health education and promotion of a healthy lifestyle should be implemented on an ongoing basis to a vast extent in the core curriculum. In the opinion of the Ministry of Education, the content of health education teaching established in the core curriculum has a sufficiently wide and multifaceted scope and is considered at all stages of education, starting with pre-school education. Shaping health-promoting attitudes takes place in educational classes (e.g. biology, physical education, education for family life, ethics), including as part of the implementation of tasks specified in the educational and preventive programme of the school or institution, adopted by the parents' council in consultation with the teaching council (Puls Medycyny, 2023). In addition, the Ministry of Education informs that from the school year 2020/2021, an obligation has been introduced to implement issues related to critical social problems, such as health problems, in classes with the homeroom teacher in primary and secondary schools. As a result, many materials (e.g. in the form of scenarios) are created that support teachers in conducting attractive, science-based health classes. The condition for the effectiveness of health education at school is the integration of its content with such subjects as biology, education for family life, social studies, education for safety, ethics, physical education, chemistry, physics, music, and art (Rogacka, 2019: 35). It requires teachers to work with a school nurse or hygienist and with parents. It is essential to coordinate these activities with the educational programmes on health and prevention of risky behaviour or diseases offered to schools by various actors (Rogacka, 2019: 35).

It can be stated that the school health education process is based on three pillars: the transfer of health knowledge, the formation of practical skills that help to use the acquired knowledge in everyday life and the formation of attitudes. These three pillars interpenetrate each other, complementing each other and creating a solid foundation for effective health education. Their primary assumption is to shape the student's awareness of caring for theirs and others' health, creating a foundation for their future life.

Health education content is primarily concerned with strengthening physical and psychosocial health and includes elements of spiritual health. The content of education in the current core curriculum has been linked to the knowledge and skills that the student should acquire after graduating from a given class and

written in the language of requirements, constituting the continuation of the current approach (Rogacka, 2019: 17).

The legislature established that physical education is the leading subject in primary and secondary schools (MEN Regulation, 2018). In addition, health education content is incorporated into other school subjects (referred to in section 2.1). This recommendation obliges every teacher to implement health education. The current legal regulations present two ways of implementing health education at school:

- subject – emphasising the leading role of physical education classes and including health education in the content of other subjects;
- educational and preventive – emphasising the values of health and healthy lifestyle included in the educational and preventive program (Wolny, 2018: 19).

It is an overarching document defining activities and tasks in upbringing, health education and prevention. Health education in post-primary school is consolidating and preparing for independence and self-improvement of the student. In post-primary school, health education is an integral part of a comprehensive education program: an essential task of the school is health education, the aim of which is to develop in students an attitude of caring for their own and other people's health and the ability to create a healthy environment (MEN Regulation, 2018). In secondary school, axiological education is an essential element of health education. The education of young people is focused on highlighting the values of health and a healthy lifestyle. The main goal is to help students make responsible decisions and choices, which is extremely important in the context of contemporary threats to the health of children and adolescents, especially in mental health (Wolny, 2018: 24). Implementing the core curriculum for health education in post-primary schools should be adapted to the needs and abilities of pupils/students. The first step in a teacher's work is to diagnose students' health needs and interests (Wolny, 2018: 25). Health education as a process stretched over time requires the activity and commitment of all teachers, specialists and experts in dietetics, medicine, psychology, and prevention. Cooperation with parents is also an essential aspect of planning, implementing and evaluating classes with the participation of students.

3. RESEARCH SAMPLE AND METHODS

The research sample of the main study included high school students – a total of 582 students. Before the main study, a pilot study was carried out. The primary research was conducted among classes 1–4 students of all learning profiles.

The questionnaire contained 45 closed-ended questions. The study was anonymous. Respondents completed the questionnaire voluntarily. The survey

was conducted between March 2023 and September 2023. The questionnaire includes questions to analyse four aspects to assess:

- (1) the importance of health in my school (21 questions);
- (2) health attitudes in the last school year (8 questions);
- (3) well-being of health at school (3 questions);
- (4) self-assessment of healthy living (12 questions).

The study presented the following research hypotheses:

- (1) female students were more likely to appreciate the need/importance of health education at school;
- (2) assessment of the importance of health at school depends on the profile of teaching in the upper secondary school;
- (3) schoolgirls are more likely to take care of their health;
- (4) men feel better at school,
- (5) female students are more likely to evaluate their healthy lifestyle positively.

Spearman's rank correlation coefficient estimated the relationships between the variables. The statistical significance of the differences in the respondents' answers was estimated using the U-Mann-Whitney test (Szajt, 2014: 88). The checking statistic (Z) was verified at a significance level of $\alpha = 0.05$. Statistica Package supported the calculations.

4. RESULTS

The results illustrate the respondents' opinions on the importance of health education in their schools (Table 1). The analyses show statistically significant relationships between the studied elements (Table 1). In general, it can be seen that women rate the accuracy of the following statements significantly higher than men:

- *"Do you know the difference between prevention and health promotion?"* ($Z = -4,547$; $p = 0,000$),
- *"In my school, health and well-being are considered to be an important issue"* ($Z = -4,355$; $p = 0,000$),
- *"In the classroom we deal with topics concerning our health and well-being"* ($Z = -2,490$; $p = 0,013$),
- *"What I learn about health in school encourages me to take care of my health"* ($Z = -4,800$; $p = 0,000$),
- *"The school encourages me to be physically active, not only during PE classes"* ($Z = -3,32697$; $p = 0,000$),
- *"I willingly participate in PE classes"* ($Z = -3,327$; $p = 0,001$),
- *"At school they teach us how important personal hygiene is for health"* ($Z = -2,043$; $p = 0,041$),

- "Teachers teach us to keep order in our immediate surroundings (room, house, classroom) and in the further environment" ($Z = -4,739$; $p = 0,000$),
- "At school they teach us rational nutrition – paying particular attention to the quality of food (fresh fruit, vegetables, brown bread, dairy products, microelements, avoid sweets" ($Z = -4,763$; $p = 0,000$),
- "At school there are lessons/talks on addiction prevention" ($Z = -4,750$; $p = 0,000$),
- "Do you think the school is developing the ability to care for students' health?" ($Z = -3,992$; $p = 0,000$).

Men rate the accuracy of the following statements significantly higher than women:

- "Whether health education is conducted in your school" ($Z = 3,31382$; $p = 0,000$),
- "During educational hours we discuss topics related to health and care for it" ($Z = 2,14384$; $p = 0,032$),
- "We can suggest topics about health that interest us" ($Z = 2,078$; $p = 0,038$).

Table 1. U-Mann-Whitney test values for assessing the importance of health at school depending on the gender of respondents

Variable	Measure		
	<i>U</i>	<i>Z</i>	<i>p</i>
(1) Have you heard the term "healthy lifestyle" at school?	42340,50	-	1,000
(2) Do you know the difference between prevention and health promotion?	34238,00	-4,54768	0,000005
(3) Does your school offer health education?	35952,00	3,31382	0,000920
(4) Is a healthy lifestyle promoted in your school?	41453,00	0,49573	0,620085
(5) In my school, health and well-being are considered to be a significant issue	35647,50	-4,35538	0,000013
(6) In the lessons, we deal with topics related to our health and well-being	38149,00	-2,49003	0,012774
(7) During homeroom hours, we discuss topics related to health and healthcare	38255,50	2,14384	0,032047
(8) In the WDŽ lesson, we discuss topics related to health and healthcare	40317,00	1,06347	0,287568
(9) We can suggest topics about health that interest us	39867,00	2,07758	0,037749
(10) Classes on health and well-being are interesting to me	40658,50	-0,86348	0,387876
(11) What I learned about health in school encourages me to take care of my health	33102,00	-4,80086	0,000002

(12) The school encourages me to be physically active, not only during physical education classes	34863,00	-3,93059	0,000085
(13) I'm happy to participate in physical education classes	35994,50	-3,32697	0,000878
(14) In school, they teach us the importance of personal hygiene (washing hands, teeth, body, etc.) for health	38718,00	-2,04262	0,041091
(15) Teachers teach us to keep order in our immediate surroundings (room, house, classroom) and in the farther (yard, street, park, forest, etc.).	33324,50	-4,73992	0,000002
(16) At school, they teach us rational nutrition – paying special attention to the quality of food (fresh fruit, vegetables, brown bread, dairy products, micronutrients, avoid sweets (tooth decay, obesity)	33120,50	-4,76378	0,000002
(17) The school offers lessons/talks on addiction prevention (alcohol, drugs, cigarettes)	33394,50	-4,75064	0,000002
(18) Is there sex education at school (about human mental and physical needs, responsibility, HIV/AIDS, sexually transmitted diseases, etc.)?	41176,50	0,97214	0,330982
(19) Are there any activities shaping environmental awareness (e.g. workshops)?	40203,00	-1,12293	0,261469
(20) Do you think the social and physical environment of the school is conducive to the health and well-being of the students?	41028,50	-0,67927	0,496965
(21) Do you think the school develops the ability to care for students' health?	34631,50	-3,99251	0,000065

Source: own study.

Another analysis issue is interpreting the results of the U-Mann-Whitney test for assessing the importance of health at school, depending on the profile of high school education. The test values are presented in Table 2.

In this case (Table 2), students of the mathematical-physical profile rate the accuracy of the following statements significantly higher than those of the biology-chemistry profile (3,4,5,7, 10,12,15,18). On the other hand, the following statements were rated lower:

- "Do you know the difference between prevention and health promotion?" ($Z = 3,684$; $p = 0,000$);
- "In the lessons, we deal with topics concerning our health and well-being" ($Z = 2,929$; $p = 0,003$);
- "We can suggest topics about health that interest us" ($Z = 7,530$; $p = 0,000$);
- "What I learn about health in school encourages me to take care of my health" ($Z = 3,223$; $p = 0,001$);
- "I like to participate in PE classes" ($Z = 7,740$; $p = 0,000$).

What is more, students of the mathematical-physical profile rate the accuracy of the following statements significantly higher than those of the mathematical-geographical profile: 2,4,5,7,10,15,18, and lower: 9. In addition, students of the mathematics and physics profile rate the accuracy of the following statements significantly higher than students of the IB profile: 2,5,11,15,17,21 and lower: 3,9.

Table 2. U-Mann-Whitney test values for assessing the importance of health at school depending on the teaching profile

Variable	mathematical-physical profile/ biological-chemical profile		mathematical-physical profile/ mathematical-geographical profile		mathematical-physical profile / IB	
	Measure		Measure		Measure	
	Z	p	Z	p	Z	p
(1) Have you heard the term "healthy lifestyle" at school?	-	-	-	-	-	-
(2) Do you know the difference between prevention and health promotion?	3,684	0,000	-3,714	0,000	-5,749	0,000
(3) Does your school offer health education?	-7,993	0,000	0,811	0,418	4,009	0,000
(4) Is a healthy lifestyle promoted in your school?	-7,954	0,000	-2,681	0,007	0,775	0,439
(5) In my school, health and well-being are considered to be a significant issue	-7,492	0,000	-8,247	0,000	-6,485	0,000
(6) In the lessons, we deal with topics related to our health and well-being	2,929	0,003	-1,581	0,114	-1,793	0,073
(7) During homeroom hours, we discuss topics related to health and healthcare	-7,091	0,000	-3,258	0,001	1,700	0,089
(8) In the WDŽ lesson, we discuss topics related to health and healthcare	-0,568	0,570	-0,435	0,664	0,891	0,373
(9) We can suggest topics about health that interest us	7,530	0,000	6,043	0,000	2,868	0,004
(10) Classes on health and well-being are interesting to me	-8,575	0,000	-5,837	0,000	0,047	0,963
(11) What I learned about health in school encourages me to take care of my health	3,223	0,001	-3,259	0,001	-3,033	0,002
(12) The school encourages me to be physically active, not only during physical education classes	-2,764	0,006	-8,516	0,000	1,019	0,308
(13) I'm happy to participate in physical education classes	7,740	0,000	0,367	0,713	-1,976	0,048
(14) In school, they teach us the importance of personal hygiene (washing hands, teeth, body, etc.) for health	7,078	0,000	-2,189	0,029	-0,025	0,980

(15) Teachers teach us to keep order in our immediate surroundings (room, house, classroom) and in the farther (yard, street, park, forest, etc.).	-3,528	0,000	-4,671	0,000	-7,173	0,000
(16) At school, they teach us rational nutrition – paying special attention to the quality of food (fresh fruit, vegetables, brown bread, dairy products, micronutrients, avoid sweets (tooth decay, obesity)	-1,930	0,054	-7,083	0,000	-1,287	0,198
(17) The school offers lessons/talks on addiction prevention (alcohol, drugs, cigarettes)	0,326	0,744	-4,527	0,000	-2,478	0,013
(18) Is there sex education at school (about human mental and physical needs, responsibility, HIV/AIDS, sexually transmitted diseases, etc.)?	-5,014	0,000	-2,181	0,029	-0,664	0,507
(19) Are there any activities shaping environmental awareness (e.g. workshops)?	0,775	0,438	-0,213	0,831	1,382	0,167
(20) Do you think the social and physical environment of the school is conducive to the health and well-being of the students?	-1,499	0,134	-2,516	0,012	0,248	0,804
(21) Do you think the school develops the ability to care for students' health?	1,113	0,266	-5,749	0,000	-2,281	0,023

Source: own study.

The Spearman rank correlation coefficient between age and respondents' answers to questions was calculated to deepen the analysis. The test results are shown in Table 3.

Table 3. Spearman's correlation coefficients and their significance in relation to the correlation between age and answers to questions

Variable	R	t _(N-2)	p
(1) Have you heard the term "healthy lifestyle" at school?	-	-	-
(2) Do you know the difference between prevention and health promotion?	0,243	6,044	0,000
(3) Does your school offer health education?	-0,150	-3,654	0,000
(4) Is a healthy lifestyle promoted in your school?	-0,098	-2,368	0,018
(5) In my school, health and well-being are considered to be a significant issue	0,129	3,125	0,002
(6) In the lessons, we deal with topics related to our health and well-being	-0,017	-0,410	0,682
(7) During homeroom hours, we discuss topics related to health and healthcare	0,048	1,163	0,245

(8) In the WDŽ lesson, we discuss topics related to health and healthcare	-0,028	-0,666	0,505
(9) We can suggest topics about health that interest us	0,004	0,096	0,924
(10) Classes on health and well-being are interesting to me	0,069	1,674	0,095
(11) What I learned about health in school encourages me to take care of my health	0,029	0,689	0,491
(12) The school encourages me to be physically active, not only during physical education classes	0,147	3,578	0,000
(13) I'm happy to participate in physical education classes	0,097	2,351	0,019
(14) In school, they teach us the importance of personal hygiene (washing hands, teeth, body, etc.) for health	0,164	4,009	0,000
(15) Teachers teach us to keep order in our immediate surroundings (room, house, classroom) and in the farther (yard, street, park, forest, etc.).	0,045	1,092	0,275
(16) At school, they teach us rational nutrition – paying special attention to the quality of food (fresh fruit, vegetables, brown bread, dairy products, micronutrients, avoid sweets (tooth decay, obesity)	0,031	0,745	0,456
(17) The school offers lessons/talks on addiction prevention (alcohol, drugs, cigarettes)	-0,021	-0,514	0,608
(18) Is there sex education at school (about human mental and physical needs, responsibility, HIV/AIDS, sexually transmitted diseases, etc.)?	0,057	1,384	0,167
(19) Are there any activities shaping environmental awareness (e.g. workshops)?	0,080	1,939	0,053
(20) Do you think the social and physical environment of the school is conducive to the health and well-being of the students?	-0,008	-0,205	0,838
(21) Do you think the school develops the ability to care for students' health?	0,093	2,255	0,025

Source: own study.

The results of the Spearman test showed that students understand the importance of prevention and health promotion and know the difference between their importance ($R=0,243$; $p=0,000$). They also confirmed that health and well-being are essential at school ($R=0,129$; $p=0,002$). In addition, the school encourages students to be physically active ($R=0,147$; $p=0,000$), and students are happy to participate in these activities ($R=0,097$; $p=0,019$). Students agree that "in school, they teach us the importance of personal hygiene (washing hands, teeth, body, etc.) for health" ($R=0,164$; $p=0,000$). Young people also agree that school improves their ability to care for their health ($R=0,093$; $p=0,025$).

CONCLUSIONS

The conducted analyses confirmed the existence of significant differences in students' assessments of health education and health promotion at school. Most students approved that they try to use what they learn at school in the field of a healthy lifestyle later in life and their daily routine, thanks to the knowledge gained at school. They develop the ability to take better care of their health and the health of the environment in which they live. Therefore, it can be concluded that systematically implemented health promotion becomes a practical key to improving young people's health.

Health is an intrinsic condition for school achievements, economic performance and a good quality of life. Equipping students with knowledge, skills, and the right attitudes towards health gives them a chance for a better, healthier life. Health education and promotion are essential to upbringing and serving the student's development. Putting into practice the activities of health education and health promotion is becoming the key to improving the health of young people. It is absolutely necessary to provide them with knowledge about health, healthy lifestyle, diseases and prevention and to shape practical skills that help to use the acquired knowledge in everyday life. Teachers are undoubtedly the creators of school health. They should encourage and inspire students to live healthy lifestyles, make healthy choices, and be responsible for their own health and that of the community in which they live.

In conclusion, it should be emphasised that systematically implemented health education at school, combined with the intensification of activities aimed at promoting health, constitutes adequate protection for the health of students and is in line with the priorities of strengthening health promoted by the WHO and the public health policy expressed in the National Health Programme for 2021–2025. There is a lot of evidence that properly implemented health education and health promotion in schools becomes effective, gives health benefits and is considered the most cost-effective, long-term investment in the health of society.

BIBLIOGRAPHY

- Aira T., Välimaa R., Paakkari L., Villberg J., Kannas, L. (2014). *Finnish pupils' perceptions of health education as a school subject*, *Global Health Promotion*, 21(3), pp. 6–18.
- Bulska J. (2017) *Edukacja zdrowotna i promocja zdrowia w Szkole Promującej Zdrowie – działalność na rzecz współpracy ze środowiskiem lokalnym*, *Instytut Studiów Międzynarodowych i Edukacji HUMANUM*, 25(2).
- Craigie A.M., Lake A.A., Kelly S.A., Adamson A.J., Mathers, J.C. (2011), *Tracking of obesity-related behaviours from childhood to adulthood: a systematic review*, *Maturitas*, Vol. 70 No. 3, pp. 266–284, <https://doi.org/10.1016/j.maturitas.2011.08.005>.

- Darlington E.J., Violon N., Jourdan D. (2018) *Implementation of health promotion programmes in schools: an approach to understand the influence of contextual factors on the process?*, BMC Public Health, <https://doi.org/10.1186/s12889-017-5011-3>.
- Darlington E.J., Simar C., Jourdan, D. (2017) *Implementation of a health promotion programme: a ten-year retrospective study*, Health Education, Vol. 117 No. 3, pp. 252–279. <https://doi.org/10.1108/HE-09-2016-0038>.
- Driessen-Willems M., Severens F., Darlington E., Bartelink N., Kremers S., van Assema P. and Bessem, K. (2023) *Exploring the implementation dynamics of the Health Promoting School approach in Europe: a qualitative study among school health representatives*, Health Education, Vol. 123 No. 1, pp. 1–18, <https://doi.org/10.1108/HE-12-2021-0149>.
- Drzeżdżon W. (2022) *Edukacja zdrowotna i promocja zdrowia. Aspekt pedagogiczny*, Studia Gdańskie, Wzjęcie i rzeczywistość, 18, pp. 71–85, <https://doi.org/10.5604/01.3001.0015.8650>.
- Indulski J.A., Jethon Z., Dawydzik L.T. (2000) *Zdrowie Publiczne. Wybrane zagadnienia*, Instytut Medycyny Pracy im. prof. J. Nofera, Łódź.
- Jourdan D., Gray N.J., Barry M.M., Caffè S., Cornu C., Diagne F., El Hage F., Farmer M.Y., Slade S., Marmot M. and Sawyer S.M. (2021), *Supporting every school to become a foundation for healthy lives*, The Lancet Child and Adolescent Health, Vol. 5 No. 4, pp. 295–303, [https://doi.org/10.1016/S2352-4642\(20\)30316-3](https://doi.org/10.1016/S2352-4642(20)30316-3).
- Karski J.B. (2011) *Praktyka i teoria promocji zdrowia*, CeDeWu, wyd. V, Warszawa.
- Kędzior M. (2019) *Współczesna edukacja zdrowotna na poziomie wczesnoszkolnym*, Prace Naukowe WSZIP, nr 47 (1).
- Lalonde M. (1974) *A new perspective on the health of Canadians*, A working document Government of Canada, Ottawa.
- Najwyższa Izba Kontroli (2017) *Profilaktyka zdrowotna w systemie ochrony zdrowia. Informacja o wynikach kontroli*, Departament Zdrowia, Warszawa.
- Puls Medycyny (2023), <https://media.pulsmedycyny.pl/aktualnosci/pr/763514/zdrowotne-zmiany-w-szkolach-2022-2023-co-planuje-minister-czarnek-dla-uczniow> [Accessed: 08.01.2024].
- MEN Regulation (2018), Regulation of the Minister of National Education of 30 January 2018 on the core curriculum general education for general upper secondary schools and five-year technical secondary schools - Journal of Laws of March 2, 2018, item 467.
- Rogacka A. (2019) *Edukacja zdrowotna w podstawie programowej Liceum ogólnokształcące*, Technikum, Zeszyt 3, Ośrodek Rozwoju Edukacji, Warszawa.
- Sobczyk.K. (2020) *Edukacja zdrowotna jako narzędzie promocji zdrowia*, Biblioteka Główna SUM w Katowicach.
- Suhrcke M., de Paz Nieves C. (2011) *The impact of health and health behaviours on educational outcomes in high-income countries: a review of the evidence*, World Health Organization, Regional Office for Europe, Copenhagen.
- Szajt M. (2014), *Przestrzeń w Badaniach Ekonomicznych*, Częstochowa: Sekcja Wydawnictw Wydziału Zarządzania Politechniki Częstochowskiej.
- Wang S.M., Zou J. L., Gifford M., Dalal, K. (2014). *Young students' knowledge and perception of health and fitness: A study in Shanghai*, Health Education Journal, 73(1), pp. 20–27.
- West P. H. S. A. L., Sweeting H., Leyland A. (2004). *School effects on pupils' health behaviours: evidence in support of the health promoting school*, Research papers in Education, 19(3), pp. 261–291.
- WHO (1997) *Promoting health through schools: report of a WHO expert committee on comprehensive school health education and promotion*, Geneva, Switzerland.
- WHO (2017) *Report of the Commission on Ending Childhood Obesity. Implementation Plan*, Executive Summary, Geneva.
- Wolny B. (2018) *Zdrowie jako wartość w edukacji wczesnoszkolnej. Uczeń w świecie wartości*, Poradnik aksjologiczny dla nauczycieli, Wydawnictwo Regis, Łapczyce.

- Woynarowska B. (2013) *Edukacja zdrowotna. Podstawy teoretyczne, metodyka, praktyka*, Wydawnictwo Naukowe PWN, Warszawa.
- Woynarowska B. (red.) (2014) *Organizacja i realizacja edukacji zdrowotnej w szkole. Poradnik dla dyrektorów i nauczycieli szkół ponadgimnazjalnych*, Wydawnictwo Ośrodek Rozwoju Edukacji, Warszawa.
- Woźniak-Holecka J. (2014) *Cele i zadania promocji zdrowia*, [w:] Woźniak-Holecka J., Braczkowski R. (red.), *Promocja zdrowia i edukacja zdrowotna z elementami pedagogiki*, Śląski Uniwersytet Medyczny w Katowicach.
- Yang X., Telama R., Hirvensalo M., Tammelin T., Viikari J.S., Raitakari O.T. (2014) *Active commuting from youth to adulthood and as a predictor of physical activity in early midlife: the young finns study*, Preventive Medicine, Vol. 59, pp. 5-11, <https://doi.org/10.1016/j.ypmed.2013.10.019>.
- Żmichrowska M.J. (red.) (2019) *Współczesne poszukiwania w pedagogice*, Prace naukowe WSZiP z siedzibą w Wałbrzychu, tom 47.