

THE NATURE OF MOTIVATION FOR A HEALTHY LIFESTYLE IN CHILDREN OF DIFFERENT AGES

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ABSTRACT

Aim: To study the types of motives for a healthy lifestyle (HLS) in children of different ages.

Materials and Methods: The research involved 150 children. The children were interviewed using the questionnaire developed by the authors, which contained 15 questions, using Google Forms. The survey was anonymous without any references to the authors made in the article. Methods: bibliosemantic, systematic analysis and generalization, medical and sociological, and statistical data processing.

Results: The psychosocial stages of children's development have been revealed and the motivation of children of different ages for a HLS has been characterized. It has been found that 72.0 % of the surveyed children have sufficient knowledge about the essence of a HLS, but most of them do not use this knowledge, only one-third regularly adhere to a HLS. Among the dominant motives for a HLS, children named the desire not to get sick (36.0 %), to be a physically healthy and spiritually rich individual (16.0%), to promote health and improve posture (12.0 %), to have a good physique (12.0 %).

Conclusions: The availability of knowledge but the lack of appropriate skills and parental control lead to children's neglect of a HLS and, consequently, their health. In the process of forming children's HLS motivations, it is necessary to intensify the work of parents, taking into account the individual and age characteristics and needs of their children, and taking into account the priority sources of information about maintaining their health.

KEY WORDS: healthy lifestyle, health, motivation, children

INTRODUCTION

In today's society, every child is systematically exposed to countless examples of human lifestyles. This diversity is not always a model for them, which results in chaos in their ideas about a healthy lifestyle (HLS) and destroys the examples that have already been formed [1, 2]. In addition, today there is a negative trend characterized by a decline in the health of the younger generation, which causes an urgent need to form the right ideas about a HLS in children and requires the search for new ways in education and upbringing [3-5].

WHO identifies the following negative factors that affect the health of a modern person: psycho-emotional overload; insufficient motor activity; irrational diet and related overweight (obesity); bad habits (smoking, alcohol abuse, drug addiction). According to scientists [6-8], the health of the younger generation depends not only on these factors but also on knowledge about the principles of a HLS and conscious motivation to follow them. Such motivation is formed primarily in the family.

AIM

The aim is to study the types of motives for a healthy lifestyle (HLS) in children of different ages. Objectives: 1) to reveal the psychosocial stages of children's development; 2) to characterize the motivation of children of different ages for a HLS; 3) to study the state of children's compliance with a HLS.

MATERIALS AND METHODS

The research was conducted in 2020-2022 at Zhytomyr Medical Institute of Zhytomyr Regional Council and Zhytomyr Ivan Franko State University. Methods: bibliosemantic, which included an analytical review of sources of scientific information on the research topic (18 sources from the scientometric databases Web of Sciences, Index Copernicus, Scopus, PubMed, and others were investigated); system-oriented analysis and logical generalization was used to formulate conclusions based on the results of the research; medical and sociological aimed at questioning parents; statistical processing method was utilized to process the experimental data obtained in the course of the research.

The research involved 150 children of different ages (10-12 years old (junior adolescence) - 62.0 % (93 people); 13-14 years old (senior adolescence) - 11.3 % (17 people); 14-18 years old (youth) - 26.7 % (40 people). The medical and sociological study among children was conducted to assess their compliance with the rules of a HLS. The survey was conducted using a specially designed questionnaire using Google Forms. The design of the questionnaire was typical and contained the structural components: addressing the respondent, obtaining informed consent to participate in the survey, and actual blocks with targeted questions (15 questions in total). The questionnaire was anonymous without any references to the authors of the article in the answers. The results were used for scientific purposes only. Questionnaire was assessed by the experts in this field (2 professors and 4 associate professors) and was approved by the Academic Council of Zhytomyr Ivan Franko State University (Protocol No. 14 dated 26.08.2020). Consent to voluntary participation in the survey was obtained from all the respondents involved in the study. This research followed the regulations of the World Medical Association Declaration of Helsinki - ethical principles for medical research involving human subjects.

RESULTS

Modern research [9-11] allows us to identify several psychosocial stages of the younger generation's development:

1. Infancy (from birth to the end of the 1st year). Thanks to maternal care, the foundations of a healthy personality are laid during this period, which manifest themselves in the form of a general sense of trust, confidence in safety, and inner certainty. The child begins to trust society based on the degree of trust in the mother. Feelings of distrust, fear, and suspicion appear when the mother is unreliable and pushes the child away. In this case, the child's HLS is aimed at maintaining and promoting his or her health. The difference between this period and other age groups is that the child has no motivation for his or her health.
2. Early childhood (from 1 to 3 years). At this age, the child begins to act independently (stand, walk, wash, dress, eat). A child at this stage is characterized by a formula: "I am myself" and "I am what I can do," which contributes to the child's autonomy. In the case of constant hyper care or, conversely, when parents expect too much from the child, which goes beyond his or her capabilities, he or she develops doubts and self-doubt, and weak willpower. The differences from other age groups are that a child eats healthy food, sleeps the amount of time he or she needs, and plays with his or her favorite toys, not realizing that these are components of his or her HLS. The child acts following his or her physiology, and parents should direct this process to strengthen his or her health. The main motives of children's HLS at this age, which should be formed by parents, are the motives of self-preservation, self-development, and the desire to gain the approval of others ("I can do it myself").
3. Age of play (from 3 to 6 years). This period is characterized by a conflict between initiative and guilt. Children show interest in various activities, trying new things, interacting with peers, and easily fall under the influence of teaching and upbringing. This is the age with the slogan: "I am what I will be". Encouraging a child's endeavors helps to foster initiative, expand the boundaries of independence, and develop creativity. Nevertheless, because of excessive control and restriction of activities, children develop a strong sense of guilt. Children affected by this feeling are passive, constrained, and in the future will not be capable of productive work. During this period, children get to know their peers, want to be like their friends, and have nice clothes, toys, and the opportunity to run and play with everyone. Therefore, when motivating their children to adopt a HLS, parents often appeal to extrinsic motives that are "important" to them ("I'll buy you this toy if you do exercises and follow the rules of hygiene on your own"). We believe that on their children's way to a HLS, parents should develop identification motives (the best examples of a HLS of parents or other family members, peers of the child), the desire to gain the approval of others ("I am liked" when I wash my hands, do exercises), health-promoting motives (awareness of the importance of wearing a protective mask in public places).
4. Age of adolescence (from 6 to 12 years of age - junior adolescence and from 13 to 14 years of age - senior adolescence) is the first period when a child leaves the family and begins systematic education. The child's identity is now expressed as follows: "I am what I have learned". While studying at school, children learn the rules of conscious discipline and active participation in their own social life. The danger of this period is the presence of feelings of inferiority or incompetence, and doubts about their abilities or status among their peers. Children of this age strive to be good students, do physical exercises, play games with other children, and be liked by the opposite sex. The main principle of parents' motivation for their children's HLS is the motive of self-improvement ("You need to be healthy to continue playing football"). Other motives for a HLS include the following: identification motive (with parents or other family members, teachers, peers), submission to ethno cultural requirements, health-preserving motives (when a child likes the sport he or she is involved in; he or she wants to stay healthy), achievement motives (success in sports), the desire to gain the approval of others (teachers, peers, parents), prosocial motives (awareness of the importance of personal hygiene for public health in the context of the coronavirus pandemic), affiliation motives (maintaining personal hygiene as a condition for establishing and maintaining contacts with peers), and enjoyment of health.
5. Youth (15-20 years) is the most important period in a person's psychosocial development (he or she

is no longer a child, but not yet an adult). A young person faces new social roles and related requirements. He or she evaluates the world and his or her attitude towards it, and spontaneously searches for new answers to important questions: "Who am I?", "Who do I want to become?". Teenagers experience a piercing sense of uselessness, mental disorder, and aimlessness, and sometimes they turn to a "negative" identity and deviant (abnormal) behavior. Identity crisis (role confusion) leads to an inability to choose a profession or continue education. An important task for parents during this period is to help their children make their own choice in favor of a HLS and adherence to its principles. However, parents in this period cannot radically influence their adult children's adherence to a HLS if they are not an authority for them. The motives for a HLS at this stage of a young person's life can be different, namely: "to be healthy in order to" continue education, to ensure his or her material well-being, to be competitive in the labor market, to be liked by the opposite sex, to create a healthy family, etc. In this context, to influence their adult child's involvement in a HLS, parents can promote the formation of motives for self-improvement, self-actualization and achievement ("having bad habits, you will not be able to get a prestigious job"), prosocial motives ("the company you want to work for is used to doing sports"), motives of power ("a manager should be a model for his or her subordinates in everything, be healthy physically and psychologically, and for this purpose it is necessary to observe optimal work and rest regime, to do sports, to harden"), motives of identification (with successful people), directly health-preserving motives (regarding favorite sports; control over one's health), affiliation motives ("to establish and maintain positive relationships with people and create a healthy family, one needs to be healthy, and this is possible only if one adheres to a HLS"), achievement of maximum comfort ("you will feel physically and psychologically comfortable if you are healthy"), and sexual fulfillment ("your health will give you the opportunity to create harmonious sexual relationships").

The motives that motivate a child to adopt a HLS directly depend on his or her needs. A. Maslow [12] identified five levels of personality needs: physiological, safety, social (belonging to a team, society), recognition (respect), and self-actualization (self-expression). The relationship between the types of needs in human life, the types of needs in the context of HLS principles, and motives as incentives for the realization of the needs of children of different ages are shown in Table 1.

Figure 1 shows the results that demonstrate children's vision of the essence of a HLS. The results show that the majority of children surveyed (72.0 %) understand the meaning of the concept of "a HLS".

The results of children's responses about their adherence to a HLS show that 42.0 % partially lead a HLS; 32.0%

regularly follow a HLS; 26.0 % do not lead a HLS at all. Even though the overwhelming majority of respondents (72.0 %) understand the essence of a HLS, only 32.0 % adhere to its principles. This difference in knowledge and its practical implementation can be explained by insufficient awareness of the value of health and the lack of parental motivation for a HLS.

The dominant motivation for adherence to a HLS for 36.0 % of the surveyed children is the desire not to get sick; 16.0 % - to be physically healthy and spiritually rich; 12.0 % - to promote health, 12.0 % - to improve posture, to have a good physique; 10.0 % - to improve their own body; 8.0 % - to be liked by peers; 4.0 % - to develop physical abilities; 2.0 % - to assert themselves.

The survey also found that only 12.0 % of children follow the correct daily routine, 36.0 % follow it from time to time, 14.0 % do not follow the daily routine at all, and 38.0 % said they did not care. Children spend most of the day outdoors: 1-3 hours - 38.0 %; from 3 to 5 hours - 8.0 %; rarely outdoors - 54.0 %. As you know, children under 11 should spend 2-2.5 hours outdoors, and older children should spend 1-1.5 hours. However, more than half of the surveyed children do not prefer outdoor activities, as they mostly spend time in a virtual environment (social networks, computer games). It was found that only 12.0 % of children spend enough time sleeping, 42.0 % do not sleep enough, and 46.0 % do not know how long their sleep should last. This indicates that most respondents have problems with the quality and duration of sleep. At the same time, the vast majority of children go to bed after 23:00 - 63.3 %, 26.7 % - at 22:00, 10.0 % have sleep disorders, i. e. are prone to insomnia. It was found that just 40.0 % of children brush their teeth regularly in the morning, while 30.0 % do it sometimes or do not brush their teeth at all. Only 24.0 % of respondents systematically do morning exercises, 38.0 % do it occasionally, and 38.0 % do not do morning exercises at all. In this case, parents should teach their children to be persistent and disciplined in daily morning exercises from an early age, emphasizing its health benefits. The study of children's involvement in sports showed that 28.0 % of children systematically attend sports sections, clubs, and unions; 36.0 % - periodically; 18.0 % - lead a sedentary lifestyle and do not play sports; the remaining 18.0 % - are unable to play sports due to contraindications to physical activities.

Regarding children's compliance with a rational diet, it was found that 42.0 % of children do not always eat regularly and in a balanced manner, 26.0 % do not follow a rational diet, and only 32.0 % systematically adhere to the correct eating behavior. The benefits of water are undeniable, but its insufficiency leads to dehydration and disrupts the functioning of body systems. It was found that 28.0 % drank enough drinking water per day, 30.0 % - not enough, and 42.0 % failed to provide a clear answer. Answers to the question about the sources of information about a HLS were distributed as follows: most often respondents receive information about a HLS from parents and relatives (28.0 %), from the media (Internet, social networks, etc.),

Table 1. Nature of motivation of children of different ages for a HLS

| Types of needs according to A. Maslow | Types of needs in the context of a HLS | Motives for a HLS |
|---------------------------------------|--|--|
| Physiological | Adequate and rational nutrition, healthy sleep | Early childhood |
| Safety | Personal hygiene, adequate and rational nutrition, healthy sleep, active recreation, sports, outdoor walks, hardening, quitting bad habits, optimal work and rest schedule | Extrinsic motives: self-development ("I can do it myself" - brushing teeth, washing hands, washing, eating, exercising, getting dressed for a walk, going to bed, etc.), identification (being like parents in their adherence to HLS elements), obtaining parental approval, self-preservation (being careful not to harm your health) |
| Social (belonging to a team, society) | Personal hygiene, active recreation, sports, quitting bad habits, optimal work and rest schedule | 3-6 years old children |
| | | Intrinsic motives: directly health-preserving (e. g., eating healthy food; sleeping during the day to rest and play again; washing hands after walking and before eating to avoid getting sick; wearing a protective mask in public places; doing morning exercises, participating in entertainment programs, riding a bike, scooter, swimming, rubbing down with cool water, going to the pool, etc.) Extrinsic motives: identification (to play sports and harden up like parents or other family members, peers) and the desire to gain the approval of others (to get a toy by doing morning exercises), and to comply with ethno cultural requirements. |
| Recognition, self-actualization | Exercise, hardening, quitting bad habits, optimal work and rest schedule | Adolescence |
| | | Intrinsic motives: directly health-preserving (the child likes the sport he or she is involved in; he or she eats healthy food with pleasure, and knows how to differentiate it from junk food; the child sleeps the number of hours necessary for his or her age; he or she does morning exercises without being forced; gets hardened; attends sports clubs, unions, associations, etc., hiking trips, recreation camps; adjusts his or her health activities (contrast shower, sunbathing, etc.); alternates mental and physical activity (i. e., strengthens occupational health skills to avoid overwork); has a positive mindset; generally takes care of his or her health and does not want to get sick). Extrinsic motives: identification motive (he or she adheres to the principles of a HLS, like parents or other family members, favorite teachers, peers), achievement motives (tries to achieve success in sports, have a good body type), desire to get the approval of others (teachers, peers, parents), prosocial motives (realizes the importance of personal hygiene for public health, especially in the context of the coronavirus pandemic), affiliation motives (supports personal hygiene as a condition for establishing and maintaining contacts with peers; tries to be healthy and beautiful to be liked by his or her peers, including the opposite sex; strives to have a healthy family), the motive of enjoying health. |
| | | Youthful age |
| | | Intrinsic motives: directly health-preserving, self-improvement, and achievement of maximum comfort (he or she wants to be healthy and beautiful, have good and healthy skin condition, body weight that meets physiological norms, prevents overeating and obesity, observes hygiene of clothes, shoes and home, sexual culture; engages in favorite sports and active leisure activities (football, tennis, skiing); consciously gives up bad habits; learns to manage stress; constantly monitors his or her health, including mental health; tries to become confident and emotionally happy). Extrinsic motives: motives of self-actualization (including sexual) and achievement (taking care of one's health, quitting bad habits to get a prestigious job, creating material well-being, establishing sexual relationships); prosocial motives (he or she engages in sports and other active forms of recreation, as is customary in the environment - class, college, higher education institution, etc.), power motives (wants to stand out among members of the class, group, work team by being unique to get opportunities to lead this team); identification motive (wants to be like successful people), affiliation motive (tries to be healthy to establish and maintain positive relationships with group members, management, and create a healthy family). |

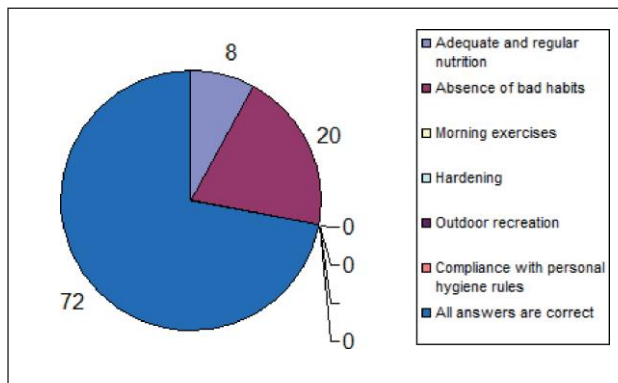


Fig 1. Children's understanding of the concept of a HLS

and from peers and friends (24.0 % each). The survey results also show that educational institutions do not devote enough time to covering the issue of a HLS.

DISCUSSION

A person's focus on a HLS is a rather complex and controversial process that depends on the peculiarities of state development, public opinion, environmental situation, educational process, and family upbringing orientation [13, 14]. Given this, from early childhood, it is necessary to create an environment around children that would contain the necessary knowledge, habits, skills, and abilities regarding a HLS.

Forming a culture of a HLS is a necessary component of primary prevention to improve public health by changing lifestyles, promoting health, and using knowledge to counteract addictions, physical inactivity, etc [15, 16]. The WHO provides several interpretations of the definition

of a "healthy lifestyle": human behavior that ensures the preservation and promotion of health; an individual system of habits necessary to maintain a certain level of life-sustaining activities related to solving personal and professional tasks [17, 18]. We believe that a HLS is the only existing way to restore, maintain and promote the health of the population. Therefore, the formation of this lifestyle in the life of the population is the most important social task on a national scale.

CONCLUSIONS

The psychosocial stages of children's development have been revealed and the motivation of children of different ages for a HLS has been characterized. It has been found that 72.0 % of the surveyed children have sufficient knowledge about the essence of a HLS. Of course, the education of children is positive, but most of them do not use this knowledge: only one-third regularly adheres to a HLS; 12.0 % - have the correct daily routine; 40.0 % - brush their teeth regularly; 24.0 % - systematically do morning exercises; 28.0 % - attend sports sections, clubs; 32.0 % - adhere to proper eating behavior. Among the dominant motives for a HLS, children named the following: the desire not to get sick (36.0 %), to be physically healthy and spiritually rich (16.0%), to promote health and improve posture, and to have a good physique (12.0 % each). Thus, the availability of knowledge, but the lack of appropriate skills and parental control, leads to children's neglect of a HLS, and, accordingly, their health.

Prospects for further research aim to study the motivation for a HLS among subjects of the educational process in schools (teachers and high schoolers) and higher educational institutions (instructors and students).

References

1. Stonerock GL, Blumenthal JA. Role of Counseling to Promote Adherence in Healthy Lifestyle Medicine: Strategies to Improve Exercise Adherence and Enhance Physical Activity. *Prog Cardiovasc Dis*. 2017;59(5):455-462. doi:10.1016/j.pcad.2016.09.003.
2. Zaman R, Hankir A, Jemni M. Lifestyle Factors and Mental Health. *Psychiatr Danub*. 2019;31(3):217-220.
3. Griban G, Moskalenko N, Adyrkhaiev S et al. Dependence of students' health on the organization of their motor activity in higher educational institutions. *Acta Balneol*. 2022; 5 (171): 445-450. doi: 10.36740/ABAL202205112.
4. Arefiev V, Tymoshenko O, Malechko T et al. Methodology of differentiation of health-improving classes in physical education for primary school students. *Int J Appl Exer Physiol*. 2020; 9(7): 134-143.
5. Pengpid S, Peltzer K. Sedentary behaviour, physical activity and life satisfaction, happiness and perceived health status in university students from 24 countries. *Int J Environ Res Public Health*. 2019; 16(12):2084. doi: 10.3390/ijerph16122084.
6. Prysiazniuk S, Oleniev D, Tiazhyna A et al. Formation of health preserving competence of students of higher educational institutions of information technologies specialties. *Inter J Appl Exer Physiol*. 2019; 8(3.1): 263-271.
7. Griban G, Prontenko K, Yavorska T et al. Non-traditional means of physical training in middle school physical education classes. *Inter J Appl Exer Physiol*. 2019; 8(3.1): 207-214.
8. Griban G, Filatova O, Bosenko A et al. Water in students' life and its impact on their health. *Acta Balneol*. 2021; 2 (164): 99-104. doi: 10.36740/ABAL202102104.
9. Griban G, Dovgan N, Tamozhanska G et al. State of physical fitness of the students of Ukrainian higher educational institutions. *Inter J Appl Exer Physiol*. 2020; 9(5): 16-26.
10. Mukdad L, Shapiro NL. Establishing Healthy Lifestyle Choices Early: How to Counsel Children and Their Parents. *Otolaryngol Clin North Am*. 2022;55(5):1111-1124. doi:10.1016/j.otc.2022.06.013.
11. Pantiuk TI, Pantiuk MP, Kvas OV et al. Healthy lifestyle principles formation of children aged 6-7. *Wiad Lek*. 2021;74(10):2477-2481.
12. Taormina RJ, Gao JH. Maslow and the motivation hierarchy: measuring satisfaction of the needs. *Am J Psychol*. 2013;126(2):155-177. doi:10.5406/amerjpsyc.126.2.0155.
13. Marconcin P, Matos MG, Ihle A et al. Trends of Healthy Lifestyles Among Adolescents: An Analysis of More Than Half a Million Participants From 32 Countries Between 2006 and 2014. *Front Pediatr*. 2021;9:645074. doi:10.3389/fped.2021.645074.

14. Grey EB, Atkinson L, Chater A et al. A systematic review of the evidence on the effect of parental communication about health and health behaviours on children's health and wellbeing. *Prev Med.* 2022;159:107043. doi:10.1016/j.ypmed.2022.107043.
 15. Münzel T, Münzel H, Geipel P et al. Educating Children for a Healthy Lifestyle. *Eur Heart J.* 2019;40(25):2000-2003. doi:10.1093/eurheartj/ehz419.
 16. Skouteris H, Hill B, McCabe M et al. A parent-based intervention to promote healthy eating and active behaviours in pre-school children: evaluation of the MEND 2-4 randomized controlled trial. *Pediatr Obes.* 2016;11(1):4-10. doi:10.1111/ijpo.12011.
 17. Maximova K, Ambler KA, Rudko JN et al. Ready, set, go! Motivation and lifestyle habits in parents of children referred for obesity management. *Pediatr Obes.* 2015;10(5):353-360. doi:10.1111/ijpo.272.
 18. Richards D, Caldwell PH, Go H. Impact of social media on the health of children and young people. *J Paediatr Child Health.* 2015;51(12):1152-1157. doi:10.1111/jpc.13023.
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CONFLICT OF INTEREST

The Authors declare no conflict of interest

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