

The impact of football initiatives on the formation of a culture of health among the younger generation

Oleksandra Tsybanyuk^{1*}, Serhii Dariichuk², Liudmyla Tymchuk³, Mariia Komisaryk⁴,
Nataliia Hnes¹

¹ Department of Theory and Methodology of Physical Education and Sport, Yuriy Fedkovych Chernivtsi National University, Chernivtsi, Ukraine.

² Department of Physical Culture and Basics of Health, Yuriy Fedkovich Chernivtsi National University, Chernivtsi, Ukraine.

³ Department of Pedagogy and Social Work, Yuriy Fedkovych Chernivtsi National University, Chernivtsi, Ukraine.

⁴ Department of Pedagogy and Psychology of Preschool Education, Yuriy Fedkovych Chernivtsi National University, Chernivtsi, Ukraine.

* Correspondence: Oleksandra Tsybanyuk; o.tsibanyuk@chnu.edu.ua

ABSTRACT

The aim of the study was to assess the effectiveness of football-based sports projects in fostering a healthy lifestyle among children. An experimental sports project was tested to evaluate its influence on the formation of health-oriented behaviors. The study involved 111 boys aged 9–10 from general secondary schools in Kyiv, divided into an experimental group (n=59) and a control group (n=52). Participants were selected with parental consent. The experimental group followed a healthy lifestyle program; the control group did not. Questionnaires were used as the primary method for monitoring the experimental impact. The results of the formative experiment demonstrated the effectiveness of implementing football programs in shaping a healthy lifestyle in children. Positive dynamics were particularly evident in the emotional-motivational and activity-related components, while changes in the cognitive component were less pronounced. Overall, there was a significant increase in the number of children showing medium to high levels of healthy lifestyle indicators ($p<0.05$). The findings provided a basis for optimizing the school educational process through the integration of health-preserving technologies.

KEYWORDS

Football; Sports Programs; Healthy Lifestyle; Health; Children

1. INTRODUCTION

Modern approaches to preserving children's health involve not only providing an effective medical component, but also the active implementation of measures aimed at increasing the psychological and social capabilities of a healthy life (Stein, 2024). The relevance of this area of social and educational work has increased significantly since the Covid-19 pandemic (Mulkey et al., 2023). In Ukraine, the war has become a significant risk factor for child health deterioration, especially for mental health as a systemic factor in other forms of well-being (Naeem et al., 2025). In such circumstances, the theoretical substantiation of measures to promote the health of the younger generation is an urgent scientific task. At the same time, the focus of attention of scientists and practitioners should be on the phenomenon of a healthy lifestyle as the foundation for optimal development (Zakharasevych et al., 2024). In this context, it is important to ensure proper physical activity, which not only helps to strengthen the body but also improves cognitive abilities and mental state of children and adolescents (Gao et al., 2018; Hillman et al., 2020). Therefore, it is a socially important area of research to study the impact of sports events and projects on the formation of a healthy lifestyle. Among the many sports, football is one of the most popular in society. Regular soccer training has been shown to improve biological health (Clemente et al., 2022) and cognitive abilities of children and youth (Mao et al., 2024). However, the systemic impact of football events and projects on the formation of a healthy lifestyle in childhood remains insufficiently understood. Solving this problem will improve physical education programs in school and out-of-school education.

There are a large number of methodological approaches explaining a healthy lifestyle. In the most general interpretation, this phenomenon can be defined as a way of life that is focused on the formation, stabilization and strengthening of health and the full realization of biological, social and psychological functions by a person (Kirpenko, 2018). In this context, it is worth mentioning a comprehensive definition of health as a dynamic balance of physical, mental, social and existential well-being that determines a person's effective adaptation to changing conditions (Krahn et al., 2021). According to research, the ability to maintain health and personal well-being is associated with emotional intelligence, women's extraversion, and men's neuroticism (Majauskiene et al., 2025). Organized and unorganized social influence factors are of utmost importance for the formation of a healthy lifestyle in childhood (Pickett et al., 2022). At the same time, Fuentes-Afflick (2024) notes that it is difficult to unambiguously identify the nature and strength of the impact of specific social factors on child health.

Onats et al. (2024) identify the following main areas of healthy lifestyle formation for children: information, technological, methodological, monitoring, correctional, analytical, and effective. Working with children involves teaching healthy lifestyles and developing personal qualities that ensure appropriate behaviour (Davydova, 2015). These processes are associated with the purposeful or indirect activities of many social agents - parents, friends, teachers, the Internet, and the media (Dudash & Brych, 2023). Of particular importance for the development of a healthy lifestyle of children and adolescents is the targeted educational impact using sports. In particular, participation in sports activities has been shown to improve physical health, increase self-confidence, develop social competencies and emotional stability (Sinha, 2024). Systematic sports activities have a positive impact on mental health and optimize the acquisition of health skills among young people (Sun et al., 2024). The development of health literacy in children involved in physical education activities has also been documented (Song & Shi, 2023). Another study argues that regular sports activities are associated with improved close relationships and academic performance (Halasi & Lepes, 2022).

Separately, it is necessary to analyse theoretical sources on the issue of the impact of football activities on children's healthy lifestyles. In particular, the positive impact of regular football training on the development of physical strength and endurance of schoolchildren has been proven, compared to regular physical education classes (Trajković et al., 2020). The impact of football training on reducing the proportion of adipose tissue in a child's body has been experimentally proven compared to traditional methods of weight loss (Larsen et al., 2023). In addition to the obvious benefits for biological development, football has advantages for a child's mental development. For example, football players show an increase in observation, speed of analytical information processing, and the ability to make decisions in difficult situations (Hicheur et al., 2017). A positive impact on the development of working memory has been proven (Yongtawee et al., 2022). An increase in children's motivation to play sports in the process of football training has also been found (Castagna et al., 2018). In view of this, teachers can integrate ball exercises into classroom activities, which will improve the child's motor and intellectual performance (Kolovelonis et al., 2022).

Thus, we can observe a significant interest of scientists in improving children's health indicators in the process of sports activities. Especially relevant in this context is the study of the impact of football activities on students' health. However, the issue of development of such a systemic phenomenon as a healthy lifestyle in the context of football sports activities remains insufficiently clarified.

The purpose of the article is to determine the effectiveness of the impact of football sports projects on the formation of a healthy lifestyle in children. The objectives of the study are:

1. To analyse the conditions for the qualitative formation of a healthy lifestyle for children through sports activities and projects;
2. To empirically determine the indicators of the formation of components of a child's healthy lifestyle;
3. To develop and test a program using the possibilities of football aimed at forming a healthy lifestyle for children.

2. METHODS

2.1. Design and Participants

The stages of the study are based on a typical scheme of scientific pedagogical research. Each stage is methodologically substantiated.

1. Organizational stage – identification of resources and algorithm for solving research problems. The experiment procedure was developed, methods for measuring the experimental effect were selected, the sampling strategy and approaches to statistical analysis were determined. The concept of the study is defined as a healthy lifestyle. The methodological substantiation of the experiment included consultations with physical education teachers and football coaches. An important aspect of the organizational stage was communication with the administration of educational institutions in order to form a sample. At this stage, the hypothesis was defined - physical education and sports projects in football are an effective tool for shaping a healthy lifestyle for schoolchildren. An important point was the formation of optimal safety conditions for working with children.
2. The stage of collecting data on the formation of components of a healthy lifestyle for children. This stage involved observations and the use of questionnaires. The basis of this activity was the definition of clear criteria for the development of healthy lifestyle components.
3. Experimental stage – implementation of the formation of healthy lifestyle components. Independent variable of the experiment – physical culture and sports program in football. Dependent variable of the experiment – components of healthy lifestyle of a child. The experimental procedure was described in detail in the informed consent for the parents of the study participants.

4. Re-diagnosis of the formation of components of a healthy lifestyle of the participants of the experiment.
5. The stage of experimental data analysis, which involved the use of mathematical statistics. It also included the interpretation of the identified quantitative trends.

To achieve the study's objectives, an experimental and a control sample were created. The total number of subjects was 111. Accordingly, the control group included 52 children, and the experimental group included 59 children. The sample included children who receive education in general secondary education institutions in Kyiv. The age of the subjects is 9-10 years, which corresponds to the end of primary school age. This period was chosen taking into account the age-specific anatomy and physiology of the child's body. Only boys took part in the study. Participants were selected on the basis of their parents' prior informed consent. The experimental group received a healthy lifestyle program, while the control group did not.

2.2. Procedures and Instruments

Diagnostics of children's healthy lifestyles was carried out by identifying the components of the structure of a healthy lifestyle – cognitive (awareness), activity (behaviour), emotional and motivational (motivation and experience). This structure is based on typical ideas about the structure of personality competence. All components were studied by questioning schoolchildren on the basis of a comprehensive methodology for diagnosing children's healthy lifestyles (Yezhova, 2010). All questionnaires are closed-ended, which makes them easy to fill out. The total number of questions in the questionnaire is 12-15, which ensures that they can be completed without fatigue. The validity of the developed methods was tested by independent expert evaluation.

Regarding the experimental program, the sports and fitness project included 24 sessions held twice a week for three months. Each lesson was held in subgroups of 10-12 people. The duration of the lesson was 1 hour. The structure of the classes included a warm-up, a motivational introduction, football exercises, an information and discussion block, and reflection. The program was implemented in the sports facilities of educational institutions. The content of the information part of the lesson included messages on the history of football and building a healthy lifestyle. Participants were also offered logical tasks on football topics. The end of the lesson included analysis and self-analysis led by the program moderator, which aimed to identify the main achievements and difficulties of the children. The content development and project management were led by

professional football coaches and teachers. When creating the content, we focused on UEFA football projects for children.

2.3. Statistical Analyses

Data analysis allowed us to test the research hypothesis. Percentage calculations and the tabular method were used to demonstrate the data. Student's t-test was used to determine the significance of differences. Thus, it is possible to determine the significance of the dynamics of the subjects' healthy lifestyle components. The analysis was performed with the SPSS software.

3. RESULTS

Table 1 illustrates changes in three key components of a healthy lifestyle (Cognitive, Emotional and Motivational, and Activity) in control and experimental groups, both before and after the impact.

Table 1. Dynamics of components of healthy lifestyle of the studied children in experimental and control groups

Components of a healthy lifestyle	Levels of formation	Study samples							
		Control group (n=52)				Experimental group (n=59)			
		Before the impact		After the impact		Before the impact		After the impact	
		%	Amount	%	Amount	%	Amount	%	Amount
Cognitive	Low	44.23	23	44.23	23	44.07	26	15.25	9
	Medium	50	26	46.15	24	47.46	28	71.19	42
	High	5.77	3	9.62	5	8.47	5	13.56	8
Emotional and motivational	Low	28.85	15	28.85	15	27.12	16	6.78	4
	Medium	67.3	35	67.3	35	66.10	39	47.46	28
	High	3.85	2	3.85	2	6.78	4	45.76	27
Activity	Low	59.62	31	55.77	29	55.94	33	8.47	5
	Medium	38.46	20	42.31	22	42.37	25	55.94	33
	High	1.92	1	1.92	1	1.69	1	35.59	21

The dynamics of the cognitive component of a healthy lifestyle is significantly different in the control and experimental groups. Initial diagnostics showed a predominance of low and average indicators in both groups. Only eight children showed a high level of understanding of strategies and techniques for maintaining health. In the control group, no significant changes were observed after the experimental intervention. This is also confirmed by the coefficient of the Student's criterion ($t=1.382$), which indicates the absence of significance of differences. At the same time, after the implementation of the sports and physical education project, a positive dynamics of the component was recorded in the experimental group. In particular, 23.73% of the children studied were diagnosed with a change in performance from low to medium. In 28.82 % of children, a decrease in low values of the cognitive component was recorded (Table 1). The percentage of children with high scores changed insignificantly.

The results are confirmed by calculations of the Student's criterion ($t=2.535$), which corresponds to the level of significance $p=0.05$. Thus, the information component of the football project was effective in raising children's awareness of healthy lifestyles (Table 2). Table 2 shows the coefficients of Student's t-test. We demonstrate the change in indicators of components of children's healthy lifestyle “before” and “after” the implementation of the physical education program. We also describe the identified trends with reference to the empirical data obtained.

Table 2. Student's t-test values for components of children’s healthy lifestyle

Components of a healthy lifestyle	Student's t-test	
	Control group	Experimental group
Cognitive	1.382	2.535*
Emotional and motivational	1.782	2.910**
Activity	1.766	2.983**

We analyse the empirical data on the emotional and motivational component of the healthy lifestyle of the children under study. Let us recall that this parameter reflects children's emotions and motivations for health-promoting behaviour. The initial diagnosis shows that about a third of the subjects have low scores. The average level was diagnosed in more than 60% of children at the beginning of the study. Only six subjects showed a high level of motivation for a healthy lifestyle. In the control group, the trends of the component after the program did not change significantly, as evidenced by the Student's t-test coefficient ($t=1.782$). The football and sports program stimulated the

growth of high component indicators in 38.98% of the subjects. Accordingly, the percentage of children with low and medium values of the emotional and motivational component decreased. The value of the Student's coefficient corresponds to $p=0.01$ ($t=2.910$). Thus, the effectiveness of the program using football themes to form children's motivation for a healthy lifestyle is confirmed.

The primary diagnostics showed the prevalence of medium and low values of the activity component of the studied children. Only two children who took part in the study showed high scores. The changes recorded in the control group are negligible and statistically insignificant ($t=1.766$). After the experimental program, the high level of the activity component increased in 33.9% of participants. At the same time, low indicators decreased in 47.47% of the studied children. The values of Student's coefficient indicate the significance of differences at the level of $p=0.01$ ($t=2.983$). The obtained empirical data testify to the effectiveness of sports and physical culture program for formation of effective health-saving behaviour of children.

Observations of the experiment allow drawing a number of conclusions. Thus, the participants of the experiment showed more interest in the sports elements of the program than in the informational ones. Also, at the beginning of the study, there were some contradictions between participants with different experience in participating in football events. In general, there was a positive group dynamic in the formation of relationships within the experimental subgroups. There was also a clear identification of leaders in the experimental community. Experimenters tried to support activities aimed at levelling intra-group conflicts. There were no conflicts with the moderators of the sports project.

4. DISCUSSION

The football sports project proved to be an effective tool for shaping children's healthy lifestyles. It can also be said that in traditional school education, not enough attention is paid to the formation of a healthy lifestyle, which is confirmed by the results of the initial diagnosis. In general, the developed program has a typical structure for ensuring a healthy lifestyle for schoolchildren (Onats et al., 2024). The didactic component is of great importance (Davydova, 2015). This approach is effective, but the informative element is not sufficiently effective, which is confirmed, in particular, by the significance of the Student's t-test coefficients at the level of $p=0.05$. This is due to the greater focus of the study participants on physical exercises, while informing was considered in the context of continuing lessons and was perceived less favourably. At the same time, the activity and motivational components are directly related to the intensification of physical activity in the age

group under study. We also agree with the opinion about the systemic positive impact of physical activity on the body and mind (Hillman et al., 2020).

A separate positive aspect is the positive emotional nature of football training, which stimulates the ability to adapt to environmental conditions (Krahn et al., 2021). In general, we confirm the importance of psychological and social components of the formation of the ability to maintain children's health (Stein, 2024). The study of social and socio-psychological mechanisms as the basis for the development of a healthy lifestyle is especially relevant (Pickett et al., 2022). In this context, the need to coordinate representatives of different groups that are important to individuals should be taken into account (Dudash & Brych, 2023).

Empirical data on the increase in observation, information processing speed, and decision-making ability in the process of football training need further clarification (Hicheur et al., 2017). We confirm the findings of other researchers about the positive impact of football training on children's motivation (Castagna et al., 2018). We support the attempts to integrate football and sports activities into the structure of physical education lessons and other academic subjects (Kolovelonis et al., 2022).

The results obtained have some limitations. In particular, only children from the city of Kyiv participated in the study, which may affect the territorial aspect of the representativeness of the results. Also, the psychodiagnostic methods used were not sufficiently tested for psychometric requirements.

5. CONCLUSIONS

The results of the formative experiment indicate the effectiveness of the implementation of physical culture and sports programs in football on the formation of a healthy lifestyle of children. The positive dynamics is especially clear for the emotional-motivational and activity components of a healthy lifestyle. At the same time, shifts in the development of the cognitive component are less pronounced. The results of the developed experimental program can be summarized as follows: average indicators of the cognitive component of a healthy lifestyle increased in 23.73 % of children, high indicators of the emotional and motivational component increased in 38.98 %, and high level of the activity component increased in 33.9 %. We can state the insufficient effectiveness of the traditional educational process at school for the formation of a healthy lifestyle of children. The results of the study create a foundation for optimizing the introduction of football elements in physical education classes. Also, the data obtained create conditions for the formation of a healthy

lifestyle of primary school children. Prospects for research on the problem are the development of standardized methods for diagnosing the components of a healthy lifestyle of children.

6. RECOMMENDATIONS

According to the data obtained, it is necessary to formulate recommendations for teachers on the formation of a healthy lifestyle for children using football projects:

- The use of football elements for educational purposes should be based on prior consultations with teachers, doctors and coaches;
- Implementation of developmental programs with football elements should take into account the dynamics of relationships between group members;
- The information component of developmental sports activities should be strengthened;
- It is necessary to balance physical, intellectual social exercises when implementing programs for the formation of a healthy lifestyle;
- It is advisable to coordinate educational interaction with the efforts of parents and, if possible, informal social influences.

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CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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