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The effectiveness of applying a remedial physical education programme in the physical training of students at higher education institutions

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Abstract. The aim was to establish the effectiveness of applying a corrective approach in the physical education of students within higher education institutions. The methodology included a comparative analysis of traditional and corrective physical education programmes for students, as well as a pedagogical experiment conducted at Hryhorii Skovoroda University in Pereiaslav. The results confirmed the need to reorient the physical education system in higher education institutions towards individualised corrective programmes. The results showed that the implementation of a corrective programme ensures greater effectiveness in students' physical training compared to the traditional system. In the experimental group, an increase in average values was recorded across all 15 parameters studied: speed qualities rose from 2.78 ± 1.07 to 3.70 ± 0.95; endurance – from 2.66 ± 1.09 to 3.62 ± 0.98; strength – from 2.54 ± 1.12 to 3.50 ± 1.00; strength endurance – from 2.91 ± 1.05 to 3.69 ± 0.94; flexibility – from 3.09 ± 1.03 to 3.84 ± 0.90; coordination – from 2.74 ± 1.08 to 3.66 ± 0.96; static endurance – from 2.60 ± 1.10 to 3.62 ± 0.97; explosive strength (long jump) – from 2.84 ± 1.05 to 3.70 ± 0.94. Functional indicators also improved: the Ruffier test – from 2.66 ± 1.09 to 3.66 ± 0.96; body mass index – from 3.08 ± 1.00 to 3.74 ± 0.92. Physical condition indicators and behavioural characteristics showed positive trends: posture – from 2.88 ± 1.03 to 3.72 ± 0.93; level of physical activity – from 2.86 ± 1.06 to 3.73 ± 0.94; self-assessment – from 2.84 ± 1.05 to 3.78 ± 0.91; motivation – from 2.74 ± 1.08 to 3.74 ± 0.95. The overall composite index of physical fitness increased in the experimental group from 2.80 ± 1.06 to 3.70 ± 0.94 (an increase of ≈0.90 points), whereas in the control group it rose only from 2.90 ± 1.05 to 3.10 ± 1.00 (an increase of ≈0.20 points). In the control group, following the conclusion of the experiment, a slight increase in average physical fitness scores was observed, from 2.90 ± 1.05 to 3.10 ± 1.00 points, whilst the improvement in results for most tests ranged between 0.15 and 0.25 points. The practical significance of the study lies in the possibility of using the developed corrective physical

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education programme within the physical education system of higher education institutions and when improving health programmes for students

Keywords: functional state of the body; individual characteristics of students; level of physical activity; educational process; adaptive capacity

Introduction

Improving the effectiveness of physical training for students in higher education institutions is one of the main objectives of the educational process, as it ensures the strengthening of health, the development of physical qualities and the formation of sustained motivation for physical activity. During the learning process, an insufficient level of physical activity among students is observed, which necessitates the search for effective means of improving physical condition and optimising physical education curricula. The use of corrective physical education programmes allows for a targeted influence on the development of physical qualities, takes into account students' individual characteristics, and enhances the effectiveness of the teaching and training process. At the same time, the issue of the effectiveness of such programmes within the physical training system for students at higher education institutions requires further scientific justification and empirical verification, which determines the relevance of this study.

Improving the physical training of students at higher education institutions through the implementation of corrective physical education programmes is regarded as an effective way of increasing the level of physical activity and developing physical qualities. In the study by H. Aliriad *et al.* (2024), the impact of using traditional games in the physical education process on motivation to learn and the development of motor skills was analysed. A positive trend in the development of physical abilities and an increase in students' interest in physical activity were established. The development of innovative approaches to organising physical education and health-promoting activities in higher education was highlighted by O. Bozhok & S. Kuryliuk (2025), who examined methods for optimising the physical education teaching process. An analysis of the implementation of new technologies and methodological solutions was carried out, confirming their positive impact on the quality of students' physical training. The results indicate an increase in the effectiveness of classes and the adaptation of programmes to the individual needs of students. The relationship between teaching models and students' level of physical fitness was explored in the article by H. Candra *et al.* (2023), which investigated the impact of project-based learning and the case study method. Indicators of students' physical fitness and health status were analysed, which allowed the positive impact of integrated educational models to be established. The data obtained confirm the effectiveness of a comprehensive approach to physical education.

Medical and pedagogical approaches to physical education for students were discussed by V. Grinko *et al.* (2024), who examined therapeutic physical education in higher education institutions. The organisation of remedial classes and their impact on the physical condition of students with varying levels of fitness are described. The results obtained demonstrate the effectiveness of therapeutic physical education in restoring and improving motor functions. Innovative methods of teaching physical education in higher education are presented by I. Lutsenko *et al.* (2025), who analysed approaches to organising the educational process. The implementation of the latest methodologies, which contributes to improving the quality of students' physical training, is examined. An increase in the effectiveness of training and the level of physical activity among students has been recorded. The integration of physical education with medical approaches was investigated by Y. Niu (2023), who analysed the use of educational technologies in the teaching of physical education. The combination of pedagogical and medical knowledge was considered as a factor in improving students' physical condition. The importance of a comprehensive approach to organising physical training in higher education institutions is emphasised. The application of digital technologies in physical education was analysed by S. Pérez-Muñoz *et al.* (2024), who examined the use of virtual and augmented reality. The impact of technologies on motivation and learning effectiveness was identified. The data obtained confirm the potential of digital tools in improving the quality of physical education.

Factors influencing learning outcomes in physical education were examined by R. Sepriani *et al.* (2024), who analysed the relationship between physical fitness, nutritional status and self-assessment. The influence of students' health indicators on academic achievement was established. The results highlighted the need for a comprehensive approach to the development of physical fitness. An assessment of the quality of physical education based on fuzzy logic is presented by W. Yang & C. Li (2024), who developed criteria for analysing the effectiveness of the educational process. Mathematical modelling was applied to assess the quality of classes and identify key influencing factors. The results obtained allow for an increase in the objectivity of assessing students' physical fitness. The impact of functional corrective training on students' movement patterns and physical fitness was investigated by Z. Zhang *et al.* (2024), who analysed the results of experimental sessions. Changes in physical fitness following the application of corrective exercises and positive improvements in motor performance were recorded. The data obtained confirm the effectiveness of corrective programmes in students' physical education.

Despite the aspects highlighted by the aforementioned researchers, the long-term impact of corrective physical education programmes on the dynamics of physical fitness among students in higher education institutions remains insufficiently explored in the literature. There is limited comparative analysis of the effectiveness of different models of corrective methods across various levels of students' physical condition. The integration of corrective programmes into the standard physical education curriculum, taking into account the individual characteristics of students, requires further study.

The aim of the study was to determine the effectiveness of the physical education programme on the level of

physical fitness of students at higher education institutions. The objectives of the study were to conduct a comparative analysis of traditional and corrective physical education programmes in the process of students' physical training; to carry out a pedagogical experiment to determine the effectiveness of implementing the corrective programme; and to develop practical recommendations for improving physical education for students in higher education institutions.

Materials and Methods

In the study of the effectiveness of applying a corrective physical education programme in the physical training of students at higher education institutions, a three-stage pedagogical experiment was conducted, comprising the initial (descriptive), formative-control and final (summary) stages. At the initial (descriptive) stage of the study, a comparative analysis was carried out of the traditional and corrective physical education programmes for students at higher education institutions (Working programme…, 2022; Yevtyfiieva, 2024). The comparison of the traditional and remedial physical education programmes was carried out according to the criteria of purposefulness, organisation of classes, individualisation of the workload, consideration of health status, content of teaching material, motivational component, monitoring system, role of the teacher, level of student activity, programme flexibility and expected outcomes of physical training.

The formative-control stage involved the direct implementation of the pedagogical experiment between February and June 2025. The study was conducted at Hryhorii Skovoroda University in Pereiaslav over the course of one academic semester (4-5 months), using a face-to-face format for classes with elements of digital support (online recording of results and monitoring of students' physical activity). The total sample comprised 120 students aged 17-21, of whom 60 were assigned to the control group (CG) and 60 to the experimental group (EG). The sample included both men and women in an equal 1:1 ratio. The control and experimental groups were formed on the principle of an even distribution of students, taking into account indicators of physical condition and level of physical fitness. The inclusion criteria for the study were membership of the main or preparatory medical group, the absence of contraindications to physical exercise, and regular attendance at physical education classes. The exclusion criteria were the presence of chronic diseases in the acute phase, absences exceeding 30% of classes, and refusal to participate in the experiment.

All participants were informed of the study's objectives and gave their voluntary consent to participate (American Sociological Association, 1997); the study was conducted in accordance with ethical standards of academic integrity and data confidentiality. Students in the control group followed the traditional physical education programme set out in the higher education institution's curriculum. In the experimental group, a 17-week corrective physical education programme developed by the authors was implemented, comprising three sessions per week, each lasting 80 minutes and divided into a warm-up (15 mins), main session (50 mins) and cool-down (15 mins), with corrective exercises incorporated at each stage. The intensity of the workload varied between 60-80% of maximum heart rate, with a gradual increase to 80-85% by the end of the programme in accordance with the principle of progressive overload. The total volume of physical exercise was regulated by increasing the number of repetitions, sets and the complexity of the exercises whilst maintaining a controlled level of intensity. Individualisation was ensured by preliminary testing of the students' physical condition, division into conditional subgroups based on fitness level, and adjustment of the workload in accordance with the functional capabilities of each participant. In parallel, an initial assessment of the students' physical condition and fitness levels was carried out using standardised fitness tests (in accordance with state standards for physical education of students), anthropometric measurements and functional tests. The results obtained served as a basis for further comparison of changes during the experiment. The programme's effectiveness was assessed by students completing a set of diagnostic physical fitness tasks and using standardised scales for evaluating physical condition. Table 1 presents the set of diagnostic indicators.

Table 1. Set of diagnostic indicators of students' physical condition and physical fitness

Diagnostic indicator	Things assessed
100 m run	Level of speed qualities
1,000 m run (women) / 2,000 m run (men)	Level of general endurance
Pull-ups (men) / push-ups (women)	Upper body strength
Squats in 1 minute	Strength endurance
Forward bend from a sitting position	Flexibility
4×9 m shuttle run	Coordination and agility
Plank	Static core endurance
Standing long jump	Explosive strength of the lower limbs
Resting heart rate	Functional status of the cardiovascular system
Ruffier test	Adaptive capacity and functional status of the cardiovascular system
Body mass index (BMI)	Body mass index
Posture assessment	Postural status and presence of postural abnormalities
Level of physical activity	Intensity and regularity of physical activity
Self-assessment of physical condition	Subjective perception of one's own physical condition
Level of motivation to engage in physical activity	Level of interest and motivation for physical activity

Source: compiled by the authors based on the World Health Organization (n.d.), New York Posture Rating Scale (n.d.)

For questionnaire indicators, assessment was carried out on a five-point scale (from 1 to 5 points), where 1 point corresponded to a low level of indicator development, and 5 points to a high level of correct execution, technique, stability of results and positive individual dynamics. The above scores took into account correctness of execution, technique, stability of results and individual dynamics of the indicators. Body mass index (BMI) and posture assessment using the New York Posture Rating Scale (n.d.) were adapted to a five-point Likert scale to ensure a standardised quantitative assessment, comparison of results, and subsequent statistical analysis of the data obtained. The raw results of the diagnostic tests were recorded in their respective units of measurement, after which they were converted to a five-point rating scale for summarisation and comparison, in accordance with standard or developed criteria. Methods of mathematical statistics were applied to process the results obtained, including the calculation of the arithmetic mean (M) and standard deviation (SD); the level of statistical significance was set at $p < 0.05$. Statistical data processing was carried out using Excel. At the final (summary) stage, based on the established changes in the students' physical condition and fitness indicators, practical recommendations were developed for optimising the physical training of students, in particular regarding the individualisation of training loads, the integration of corrective exercises into training sessions, and increasing students' motivation for regular physical activity.

Results

Against the backdrop of the transformation of the higher education system, the issue of maintaining and improving the health of students is becoming increasingly relevant (Woessner *et al*., 2021). The intensity of the academic workload, the increasing volume of information, a sedentary lifestyle and the widespread use of digital technologies are leading to a decline in students' levels of physical activity and, consequently, to a deterioration in their physical condition. Physical education in higher education institutions is no longer limited to a purely academic and regulatory function and is increasingly taking on a health-promoting and corrective focus. This is precisely why the implementation of effective corrective physical education programmes, capable of adapting the content of classes to students' individual needs and ensuring a comprehensive impact on their bodies, is becoming increasingly important (Babaeer *et al*., 2022). The concept of "students" physical training' is viewed in academic discourse as a purposeful process of developing physical qualities, the body's functional capabilities, and the formation of motor skills and abilities necessary for maintaining health and ensuring fitness for work in the context of academic activities (Piores *et al*., 2023). At the same time, "physical condition" is interpreted as an integral characteristic reflecting the level of physical development, the functional state of the body's main systems, and the degree of adaptation to physical exertion. A decline in these indicators among students indicates the need to improve traditional approaches to the organisation of physical education classes. In this context, the essence of the concept of a "corrective physical education programme" is clarified (Buja *et al*., 2024). This should be understood as a scientifically grounded system of specially selected physical exercises and methodological techniques aimed at eliminating or reducing deviations in physical development and the functional state of the body, as well as optimising the level of physical fitness. Unlike traditional physical education programmes, which are primarily based on average statistical standards, corrective programmes involve individualising the workload, taking into account medical indicators, fitness levels and the specific characteristics of each student's physical development.

On the one hand, there is a need to improve the physical health of students and foster a lasting motivation for physical activity; on the other hand, traditional forms of organising classes do not always ensure the achievement of these goals. A standardised approach to physical education often fails to take into account students' individual characteristics, which reduces the effectiveness of the learning process and does not fully promote the development of key physical qualities (Deliens *et al*., 2015). Another aspect is that research in the field of physical education increasingly emphasises the need to integrate health-promoting and corrective components into the structure of classes. This is because some students have various functional impairments, postural problems, insufficient physical fitness or low levels of physical activity. In such circumstances, the use of universal programmes is insufficiently effective, whereas corrective approaches allow for a targeted impact on problematic aspects of physical condition (Edelmann *et al*., 2022). Furthermore, corrective physical education programmes contribute not only to improving physical performance but also to fostering a responsible attitude towards one's own health, developing self-control, and increasing motivation for regular physical activity. They create conditions for more conscious student participation in the physical education process, which is a factor in achieving long-term positive results.

In the scientific literature, the issue of the effectiveness of remedial programmes is examined from various angles; however, their comprehensive impact on students' physical condition and fitness levels specifically within the context of the educational process at higher education institutions remains under-researched. This necessitates empirical research aimed at comparing indicators of students' physical development and functional condition before and after the implementation of such programmes, as well as determining their relevance in the practice of physical education (Kljajević *et al*., 2022) and the effectiveness of applying a corrective physical education programme in the physical training of higher education students is relevant from both a theoretical and practical perspective. Resolving this issue will contribute to improving the physical education system, raising the physical fitness levels of students, and fostering a need for a healthy lifestyle among them. To systematise the theoretical and analytical findings and provide a more thorough justification for the feasibility of introducing a corrective physical education programme into the physical training of students, a comparative analysis of traditional and innovative approaches to organising classes was carried out. A summary of the key differences according to the specified criteria is presented in Table 2.

Table 2. Comparative characteristics of traditional and corrective physical education programmes in the physical training of higher education students

Comparison criterion	Traditional physical education programme	Remedial physical education programme
Aims and focus	Focus on achieving standard physical fitness benchmarks	Focus on improving physical condition, correcting deviations and individual development
Approach to organising classes	Standardised, geared towards the average level of the group	Differentiated and individualised, taking into account students' physical abilities
Content of the teaching material	Standardised, limited to typical exercises	Varied, including corrective, health-promoting, functional and preventive exercises
Individualisation of workload	Minimal or non-existent	High, based on initial assessment of physical condition
Consideration of health status	Partial, mainly by medical groups	Comprehensive, taking into account functional indicators and individual characteristics
Development of physical qualities	General, without a clear focus on correction	Targeted development with an emphasis on underdeveloped qualities
Health-improvement focus	Secondary, not always systematic	Priority, integrated into the content of each session
Monitoring and assessment	Predominantly normative (pass marks)	Comprehensive (dynamics of indicators, functional status, well-being)
Use of functional tests	Limited	Systematic use to assess adaptive capacity
Motivational component	External motivation (tests, grades)	Development of intrinsic motivation and a conscious attitude towards health
The role of the instructor	Instructor supervising the exercises	Advisor and facilitator of the student's individual development
Student activity	Often passive and compliant	Active, involving self-monitoring and self-assessment
Flexibility of the programme	Low, strictly regulated	High, adapts to the needs of the group and individual students
Use of technology	Limited	Digital monitoring and fitness tracking may be used
Expected outcomes	Achievement of minimum standards	Improved physical condition, enhanced functional capabilities and sustained motivation

Source: compiled by the authors based on the Working programme for the subject "Physical Education" (2022), I.I. Yevtyfiieva (2024)

The theoretical, analytical and comparative analysis conducted has shown that traditional physical education programmes, which are primarily focused on normative indicators, do not sufficiently take into account the individual characteristics of students' physical condition, whereas corrective programmes are characterised by adaptability, individualisation of the workload and a comprehensive impact on the body's functional state. It has been established that the effectiveness of physical training depends on the consideration of the initial level of fitness, optimal workload dosing, and the development of motivation for physical activity. A synthesis of the results confirmed the advisability of using corrective physical education programmes in higher education institutions as a more effective approach to improving the physical condition and fitness of students. To verify the effectiveness of implementing the corrective physical education programme and to identify changes in students' physical condition and fitness levels, a pedagogical experiment was conducted. A comparative analysis of the results of the control and experimental groups before and after the programme was carried out. The summarised results of the study are presented in Table 3.

Table 3. Results of the assessment of physical condition and fitness indicators of students in the control and experimental groups before and after the pedagogical experiment

Diagnostic indicators	CG before	M ± SD	CG after	M ± SD	EG before	M ± SD	EG after	M ± SD
100 m run	1-12% 2-25% 3-33% 4-20% 5-10%	2.91 ± 1.08	1-8% 2-20% 3-35% 4-25% 5-12%	3.13 ± 1.02	1-14% 2-28% 3-32% 4-18% 5-8%	2.78 ± 1.07	1-3% 2-10% 3-25% 4-38% 5-24%	3.70 ± 0.95
1,000/2,000 m run	1-15% 2-27% 3-30% 4-18% 5-10%	2.81 ± 1.12	1-10% 2-22% 3-33% 4-23% 5-12%	3.05 ± 1.05	1-18% 2-30% 3-28% 4-16% 5-8%	2.66 ± 1.09	1-4% 2-12% 3-26% 4-34% 5-24%	3.62 ± 0.98
Pull-ups / arm curls and extensions	1-20% 2-30% 3-25% 4-15% 5-10%	2.65 ± 1.15	1-15% 2-25% 3-30% 4-18% 5-12%	2.87 ± 1.10	1-22% 2-32% 3-24% 4-14% 5-8%	2.54 ± 1.12	1-5% 2-14% 3-28% 4-32% 5-21%	3.50 ± 1.00

Table 3, Continued

Diagnostic indicators	CG before	M ± SD	CG after	M ± SD	EG before	M ± SD	EG after	M ± SD
Squats in 1 min	1-10% 2-22% 3-35% 4-23% 5-10%	3.01 ± 1.03	1-6% 2-18% 3-36% 4-28% 5-12%	3.22 ± 0.97	1-12% 2-25% 3-33% 4-20% 5-10%	2.91 ± 1.05	1-3% 2-10% 3-27% 4-35% 5-25%	3.69 ± 0.94
Flexibility	1-8% 2-20% 3-30% 4-28% 5-14%	3.20 ± 1.01	1-5% 2-18% 3-32% 4-30% 5-15%	3.32 ± 0.98	1-10% 2-22% 3-30% 4-25% 5-13%	3.09 ± 1.03	1-2% 2-8% 3-22% 4-40% 5-28%	3.84 ± 0.90
Shuttle run	1-14% 2-26% 3-32% 4-18% 5-10%	2.84 ± 1.09	1-10% 2-20% 3-35% 4-23% 5-12%	3.07 ± 1.02	1-16% 2-28% 3-30% 4-18% 5-8%	2.74 ± 1.08	1-3% 2-12% 3-25% 4-36% 5-24%	3.66 ± 0.96
Reference	1-18% 2-28% 3-30% 4-16% 5-8%	2.68 ± 1.11	1-12% 2-25% 3-33% 4-20% 5-10%	2.91 ± 1.05	1-20% 2-30% 3-28% 4-14% 5-8%	2.60 ± 1.10	1-4% 2-12% 3-26% 4-34% 5-24%	3.62 ± 0.97
Long jump	1-12% 2-24% 3-34% 4-20% 5-10%	2.92 ± 1.06	1-8% 2-20% 3-36% 4-24% 5-12%	3.12 ± 1.00	1-14% 2-26% 3-32% 4-18% 5-10%	2.84 ± 1.05	1-3% 2-10% 3-25% 4-38% 5-24%	3.70 ± 0.94
Heart rate (HR)	1-10% 2-20% 3-35% 4-25% 5-10%	3.05 ± 1.02	1-6% 2-18% 3-34% 4-28% 5-14%	3.26 ± 0.98	1-12% 2-24% 3-32% 4-22% 5-10%	2.94 ± 1.03	1-2% 2-8% 3-24% 4-38% 5-28%	3.82 ± 0.91
Rufier test	1-16% 2-28% 3-30% 4-16% 5-10%	2.76 ± 1.10	1-10% 2-24% 3-32% 4-22% 5-12%	3.02 ± 1.03	1-18% 2-30% 3-28% 4-16% 5-8%	2.66 ± 1.09	1-3% 2-12% 3-26% 4-34% 5-25%	3.66 ± 0.96
BMI	1-8% 2-18% 3-36% 4-26% 5-12%	3.16 ± 0.98	1-5% 2-16% 3-35% 4-28% 5-16%	3.34 ± 0.94	1-10% 2-20% 3-34% 4-24% 5-12%	3.08 ± 1.00	1-2% 2-10% 3-26% 4-36% 5-26%	3.74 ± 0.92
Posture	1-12% 2-22% 3-34% 4-22% 5-10%	2.96 ± 1.04	1-8% 2-20% 3-35% 4-25% 5-12%	3.13 ± 1.00	1-14% 2-24% 3-32% 4-20% 5-10%	2.88 ± 1.03	1-3% 2-10% 3-25% 4-36% 5-26%	3.72 ± 0.93
Physical activity	1-10% 2-25% 3-35% 4-20% 5-10%	2.95 ± 1.05	1-6% 2-20% 3-36% 4-24% 5-14%	3.20 ± 1.00	1-12% 2-28% 3-32% 4-18% 5-10%	2.86 ± 1.06	1-3% 2-10% 3-25% 4-35% 5-27%	3.73 ± 0.94
Self-assessment	1-12% 2-24% 3-34% 4-20% 5-10%	2.92 ± 1.05	1-8% 2-20% 3-35% 4-24% 5-13%	3.14 ± 1.00	1-14% 2-26% 3-32% 4-18% 5-10%	2.84 ± 1.05	1-2% 2-10% 3-24% 4-36% 5-28%	3.78 ± 0.91
Motivation	1-15% 2-25% 3-30% 4-20% 5-10%	2.85 ± 1.09	1-10% 2-22% 3-32% 4-24% 5-12%	3.06 ± 1.03	1-16% 2-28% 3-30% 4-18% 5-8%	2.74 ± 1.08	1-3% 2-10% 3-25% 4-34% 5-28%	3.74 ± 0.95

Source: compiled by the authors based on World Health Organization (n.d.) and the New York Posture Rating Scale (n.d.)

Analysis of the results of the formative-control phase of the study revealed positive trends in indicators in both the control and experimental groups; however, the nature and severity of these changes differ. In the control group, the changes are moderate in nature and fluctuate within the range of a slight increase in mean values for most indicators (by an average of 0.15-0.25 points), which indicates the natural effect of systematic training under the traditional physical education programme. At the same time, in the experimental group, a marked positive trend in the growth of indicators is observed (within the range of 0.70-1.00 points), covering all the physical qualities and functional parameters under study, including endurance, strength, coordination, flexibility and cardiovascular system indicators. Notable are the changes in the distribution of scores: whilst at the initial stage both groups were dominated by average scores (3 points) and a proportion of low scores (1-2 points), after the experiment concluded, a shift in the distribution towards high scores (4-5 points) was observed in the experimental group, the proportion of which exceeded 60% in most tests. In contrast, in the control group, this trend was weaker and not systematic, confirming the limited effectiveness of the traditional approach.

A summary of the mean values allows to conclude that the overall physical fitness score in the control group increased from approximately 2.90 ± 1.05 to 3.10 ± 1.00, whereas in the experimental group it rose from 2.80 ± 1.06 to 3.70 ± 0.94, indicating a greater improvement in results under the influence of the corrective programme. At the same time, a reduction in standard deviation is also observed in the experimental group, indicating a more uniform improvement in indicators among students and an increase in the homogeneity of the group. For the control group, the calculated value of t is approximately 1.85, which corresponds to a significance level of $p > 0.05$ and indicates the absence of statistically significant changes. In contrast, for the experimental group, the value of t is approximately 5.60, which corresponds to a level of $p < 0.001$ and confirms the high statistical significance of the results obtained. When comparing the final indicators between the control and experimental groups, a t-value of ≈ 3.90 was obtained at $p < 0.01$, which further confirms the effectiveness of the implemented remedial programme.

Thus, the results obtained indicate that the implementation of a corrective physical education programme ensures a higher level of improvement in students' physical condition and fitness compared to the traditional physical education system. The changes identified are not only quantitative but also qualitative in nature, as evidenced by an increase in the proportion of high results, an improvement in the body's functional condition, and a rise in motivation to engage in physical education. This justifies the widespread implementation of remedial programmes in the physical education practice of higher education institutions.

The results of the study have enabled the formulation of practical recommendations for improving the physical fitness of students, which can be implemented into the physical education system of higher education institutions, taking into account the identified positive trends in the physical condition and fitness indicators of students in the experimental group. The implementation of these recommendations involves a comprehensive approach to organising physical education classes based on individualised training loads, regular monitoring of functional status, and increasing motivation for systematic physical activity. The results obtained demonstrated that the use of a differentiated approach led to an increase in the comprehensive physical fitness index in the experimental group from 2.80 ± 1.06 to 3.70 ± 0.94, whereas in the control group the increase was insignificant, amounting to only about 0.20 points. This confirmed the advisability of moving from a standardised model of organising classes to an individualised one, which takes into account the students' initial level of physical fitness, the functional state of the body and the characteristics of physical development. Initial assessment of physical condition should include evaluation of endurance, strength, coordination, flexibility, heart rate, the Ruffier test, posture indicators and body mass index. The results obtained allow for the formation of student subgroups according to their level of fitness and for the adjustment of training intensity. In particular, among students in the experimental group, following the implementation of the corrective programme, endurance scores increased from 2.66 ± 1.09 to 3.62 ± 0.98 points, upper body strength from 2.54 ± 1.12 to 3.50 ± 1.00 points, and flexibility – from 3.09 ± 1.03 to 3.84 ± 0.90 points, confirming the effectiveness of individually tailored training loads and the gradual progression of exercises. For students with low levels of endurance, it is advisable to use moderate interval training with a gradual increase in duration, whilst for more fit students, the use of prolonged aerobic or functional circuits with additional coordination tasks is effective.

The study results confirmed the effectiveness of integrating adaptive exercises directly into the structure of the training session. The most appropriate approach is to organise an 80-minute session divided into a preparatory phase (15 mins), a main phase (50 mins) and a concluding phase (15 mins), with adaptive exercises used at each stage. In the preparatory part, it is advisable to use functional warm-up and joint mobilisation exercises; in the main part, circular or functional exercise routines; and in the concluding part, recovery and stretching exercises. The results obtained regarding posture improvement in the experimental group, from 2.88 ± 1.03 to 3.72 ± 0.93 points, confirmed the effectiveness of the systematic use of exercises to strengthen the back muscles, stabilise the core and improve joint mobility. It was established that the combination of strength, coordination and functional exercises improved shuttle run results from 2.74 ± 1.08 to 3.66 ± 0.96 points and plank performance from 2.60 ± 1.10 to 3.62 ± 0.97 points. The use of a varied workload, with alternating exercises of different intensity and focus, proved effective, ensuring not only the development of physical qualities but also a reduction in the monotony of training sessions. It is advisable to use bodyweight exercises, resistance bands, fitness balls and elements of functional training, which simultaneously activate several muscle groups and improve students' coordination skills. Regular monitoring of physical condition should be carried out using objective and subjective indicators. Retesting every 4-6 weeks allows for tracking changes over time and adjusting the training programme in line with the results obtained.

The study results demonstrated the feasibility of using digital tools to monitor students' physical activity and

develop self-monitoring skills. The use of electronic physical activity diaries, mobile apps or fitness trackers allows for monitoring of physical activity levels, heart rate and the volume of exercise performed. It was found that the introduction of motivational mechanisms had a positive impact on students' engagement in physical education classes, as motivation scores in the experimental group increased from 2.74 ± 1.08 to 3.74 ± 0.95 points, and the level of physical activity rose from 2.86 ± 1.06 to 3.73 ± 0.94 points. This confirmed the effectiveness of using gamification elements, mini-competitions, team tasks and individual tracking of students' progress. It is advisable to combine compulsory physical education classes with optional forms of physical activity, including health-improving gymnastics, functional training, fitness programmes or sports clubs, in accordance with the students' fitness levels. The organisation of physical education should involve collaboration between teachers, healthcare professionals and the educational institution's administration to ensure timely adjustments to physical workloads and the development of individual recommendations. The results obtained confirmed that the implementation of a corrective programme ensures not only an improvement in students' physical condition but also the development of sustained motivation for regular physical activity, which justifies the need to modernise the physical education system by integrating adaptive and individualised approaches.

Discussion

The findings of this study allow to consider the issue of physical fitness among students within the broader context of changes in the educational environment, where there is a combination of increasing academic workload, the digitalisation of the learning process, and a decline in levels of physical activity. Under such conditions, the traditional model of physical education is gradually losing its effectiveness, as it fails to fully ensure the individualisation of the workload, the timely correction of functional deviations, and an adequate level of student motivation for systematic physical activity. At the same time, the introduction of corrective physical education programmes creates the conditions for a more targeted impact on students' physical condition, ensuring the integration of diagnostic, health-improving and developmental components into a single pedagogical system. The analysis of empirical data allows not only to record changes in the level of physical fitness, but also to track qualitative shifts in the structure of physical development and the motivational sphere.

The study found that learning conditions in higher education institutions are accompanied by a decline in students' physical activity and a deterioration in their physical condition; this is consistent with N. Albujulaya *et al.* (2024), who analysed physical activity policies and determined that social and educational conditions reduce the level of physical engagement among young people. The researchers examined progress and challenges in the field of physical activity and noted that systemic constraints within the learning environment directly contribute to a reduction in students' physical activity. It was found that the traditional physical education system is predominantly focused on normative requirements and does not sufficiently take into account students' individual characteristics. This is highlighted in the work of J. Blegur & S. Hardiansyah (2024), who analysed publications on differentiated instruction in physical education. The researchers reviewed educational approaches in recent years and noted that standardised models are gradually losing their effectiveness due to insufficient adaptation to the individual needs of learners. It is argued that a uniform approach to physical education does not provide a sufficient adaptive and health-promoting effect. This view was partly reflected in the work of S. Baena-Morales & S. González-Víllora (2022), who investigated the role of physical education in achieving sustainable development goals. The authors analysed educational frameworks and noted that traditional approaches require modernisation to enhance the health-promoting and social benefits of the learning process.

It has been demonstrated that some students have functional impairments and low levels of physical activity; this is consistent with the findings of J. Deng *et al.* (2023), who investigated the relationship between physical activity and students' life satisfaction. The authors analysed the role of self-efficacy and psychological resilience and noted that low activity is accompanied by a deterioration in both physical and psychological indicators. It has been established that remedial physical education programmes allow for a more targeted influence on students' physical development; this is consistent with J. Blegur & S. Hardiansyah (2024), who examined differentiated approaches in physical education. The researchers analysed pedagogical models and noted that individualisation is a key factor in enhancing the effectiveness of physical development. It was found that an adaptive approach ensures flexible adjustment of physical workload in accordance with students' fitness levels; this is consistent with Q. He *et al.* (2024), who investigated the use of interactive technologies in physical education. The authors examined the possibilities of digital analysis and noted that technological support allows for precise adjustment of the workload in accordance with individual indicators. It has been shown that the integration of a diagnostic component is a prerequisite for the effective organisation of classes, which is consistent with L.H. Hsia *et al.* (2024), who investigated the application of AI in reflective practice in physical education. The researchers analysed self-assessment mechanisms and noted that regular assessment improves the quality of the learning process. The author substantiated the advisability of combining health-improving, functional and preventive exercises in classes, which is consistent with A. Khanbeiki (2024), who investigated the impact of physical activity on mental health and academic performance. The author analysed the effects of physical exercise and noted that a comprehensive approach provides a broader health-promoting effect. It has been established that corrective programmes contribute to the harmonious development of students' physical qualities; this is consistent with W. Zheng *et al.* (2023), who investigated the relationship between physical fitness and well-being. The researchers examined the motivational and emotional aspects of physical activity and noted that the development of physical qualities is directly linked to general well-being. It has been proven that an individualised approach has a positive effect on the body's adaptive capacity, which is consistent with the findings of Y. Li & K. Guo (2023), who investigated the relationship between physical activity, sleep

and psychological adaptation. The authors analysed the socio-behavioural aspects and noted that individualisation promotes better adaptation of students to physical demands.

It was found that the adaptive model increases students' awareness of their own physical condition, which is consistent with F.Z. Mu *et al.* (2024), who investigated the impact of physical exercise on emotional regulation. The researchers analysed self-control mechanisms and noted that physical activity promotes greater awareness of one's own condition. It has been shown that the motivational component is strengthened under conditions of individualised learning, which is consistent with D. Zhihao *et al.* (2024), who investigated the impact of physical activity on motivational and behavioural factors. The authors analysed the role of self-assessment and noted that individualised approaches increase motivation to exercise. It has been established that adaptive approaches reduce imbalances in physical fitness, which is consistent with the findings of M. Liu *et al.* (2024), who investigated the impact of physical activity on stress levels and psycho-emotional state. The researchers examined adaptive mechanisms and noted that physical activity contributes to the equalisation of functional indicators. Corrective physical education programmes ensure a higher level of adaptation of physical loads to students' individual capabilities compared to traditional approaches to physical education. The individualisation of the workload enhances the effectiveness of physical development and improves the functional condition of students' bodies. This assertion is supported by the research of A.H. Rakha (2023), who investigated the effectiveness of interactive teaching methods in physical education. The author analysed educational technologies and noted that regular monitoring enhances the effectiveness of assessment. It was found that the implementation of adaptive programmes ensures stable positive development dynamics; this is consistent with X. Song (2024), who investigated the use of artificial intelligence in physical education. The researcher examined technological models of teaching and noted that a systematic approach ensures the stability of results. It has been demonstrated that varied training methods enhance the effectiveness of sessions, which is consistent with G. Flores-Aguilar *et al.* (2023), who investigated the effectiveness of gamification in physical education. The authors analysed pedagogical innovations and noted that variety increases student engagement.

It has been established that the use of digital technologies in physical education broadens the scope for monitoring physical activity and developing students' self-management skills. The use of fitness trackers, electronic diaries and mobile apps increases motivation to engage in regular physical activity. This view is consistent with the work of Q. He *et al.* (2024), who investigated the role of AI in physical education. The researchers analysed digital monitoring systems and noted that technology improves the accuracy of monitoring. It is concluded that a corrective programme is more effective than the traditional model of physical education; this is consistent with the findings of T. Xiao *et al.* (2024), who investigated the relationship between physical activity, motivation and well-being. The authors analysed the results of empirical studies and noted that modernised approaches yield better indicators of physical and psycho-emotional well-being. The study conducted enabled a comprehensive analysis of the effectiveness of implementing an adaptive physical education programme in the physical training of students at higher education institutions and established its advantages over the traditional physical education system. A synthesis of theoretical principles and the results of the pedagogical experiment demonstrated that current educational conditions require a reorientation of physical education from a standard-oriented model to an individualised and health-improvement/corrective one. It was found that the application of a corrective approach ensures a more pronounced positive trend in physical fitness, promotes the harmonious development of physical qualities, improves the functional state of the body, and increases students' motivation for regular physical activity. It has been confirmed that the integration of diagnostic procedures, variable workloads and individualised programmes contributes to increasing the effectiveness of the physical education teaching process, as well as fostering a more conscious attitude among students towards their own health. It has been established that the corrective programme ensures not only a quantitative increase in physical fitness indicators but also qualitative changes in the structure of physical activity and the body's adaptive capabilities. Thus, the research results confirm the advisability of introducing corrective physical education programmes into the physical education system of higher education institutions as a more effective tool for improving the physical condition of students. Prospects for further research relate to refining methods for individualising physical exercise, expanding the use of digital monitoring technologies, and developing adaptive models of physical education for different groups of students.

Conclusions

In the course of the study, the effectiveness of applying a corrective physical education programme in the physical training of students at higher education institutions was theoretically substantiated and experimentally verified. Based on an analysis of scientific and methodological sources, it was established that the traditional physical education system does not provide a sufficient level of individualisation of the workload and does not fully take into account the functional capabilities of students, which limits its impact on improving physical condition. It has been determined that the implementation of an adaptive approach, based on adapting the content of classes to individual characteristics, has greater health-improving potential. The baseline level of physical fitness and physical condition of the students was established, characterised by a predominance of average and below-average scores (within the range of 2.6-3.1 points on a five-point scale), as well as variability in results (SD within the range of 1.00-1.12), which indicated the heterogeneity of the group and varying levels of physical development. This confirmed the need to implement a differentiated approach to the organisation of physical education. During the formative stage of the study, the effectiveness of the proposed corrective programme was confirmed. It was found that in the control group, where a traditional system of classes was used, there was a slight improvement in physical fitness indicators, amounting to an average of 0.15-0.25 points, which is statistically insignificant ($t \approx 1.85$; $p > 0.05$). In contrast, the experimental group showed an increase in results ranging from 0.70 to 1.00 points,

covering all parameters studied, including speed, endurance, strength, flexibility, coordination and the functional state of the cardiovascular system. Statistical analysis confirmed the significance of these changes ($t \approx 5.60$; $p < 0.001$), indicating a high level of effectiveness of the implemented programme.

A qualitative analysis of the results showed that, under the influence of the corrective programme, there was not only an increase in average scores but also a change in the distribution of marks: the proportion of low scores (1-2 points) decreased, and the proportion of high scores (4-5 points) increased, exceeding 60% in some tests. A decrease in the standard deviation was recorded in the experimental group (to 0.90-0.96), indicating a levelling of students' fitness levels and an increase in the homogeneity of the group. This means that the remedial programme contributes not only to raising the overall level of physical development but also to reducing individual disparities. The results obtained allow to conclude that the implementation of an adaptive physical education programme has a comprehensive effect on students' physical condition, contributes to an increase in the body's adaptive capacity, an improvement in functional indicators, and the development of sustained motivation for physical education. Based on the results obtained, it is recommended to individualise physical loads through preliminary assessment of students' physical condition, systematically integrate adaptive exercises into all parts of the session, apply varied training methods, and conduct regular monitoring of functional status. It is also advisable to increase students' motivation through the use of interactive forms of classes, competitive elements and digital means of monitoring physical activity. Prospects for further research lie in expanding the sample size, extending the duration of the experimental intervention and studying the effectiveness of corrective programmes using digital technologies for monitoring physical activity.

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Conflict of Interest

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References

[1] Albujulaya, N., Stevinson, C., & Piggin, J. (2024). Physical activity policy in Saudi Arabia: Analysis of progress and challenges. *International Journal of Sport Policy and Politics*, 16(4), 609-624. doi: 10.1080/19406940.2023.2228812.

[2] Aliriad, H., Adi, S., Manullang, J.G., Endrawan, I.B., & Satria, M.H. (2024). Improvement of motor skills and motivation to learn physical education through the use of traditional games. *Physical Education Theory and Methodology*, 24(1), 32-40. doi: 10.17309/tmfv.2024.1.04.

[3] American Sociological Association. (1997). Retrieved from https://www.asanet.org/about/ethics/.

[4] Babaeer, L., Stylianou, M., Leveritt, M., & Gomersall, S. (2022). Physical activity, sedentary behaviour and educational outcomes in university students: A systematic review. *Journal of American College Health*, 70(7), 2184-2209. doi: 10.1080/07448481.2020.1846047.

[5] Baena-Morales, S., & González-Víllora, S. (2022). Physical education for sustainable development goals: Reflections and comments for contribution in the educational framework. *Sport, Education and Society*, 28(6), 697-713. doi: 10.1080/13573322.2022.2045483.

[6] Blegur, J., & Hardiansyah, S. (2024). Differentiation instruction publications in physical education: Bibliometric analysis of the last ten years. *Journal of Education and Learning*, 18(3), 902-913. doi: 10.11591/edulearn.v18i3.21307.

[7] Bozhok, O., & Kuryliuk, S. (2025). Modern innovative approaches to organising physical and health-improving activities in higher education institutions in Ukraine. *Problems of Education*, 1(102), 340-353. doi: 10.52256/2710-3986.1-102.2025.23.

[8] Buja, A., Lo Bue, R., Mariotti, F., Miatton, A., Zampieri, C., & Leone, G. (2024). Promotion of physical activity among university students using social media or text messaging: A systematic review. *Inquiry: A Journal of Medical Care Organisation, Provision and Financing*, 61. doi: 10.1177/00469580241248131.

[9] Candra, H., Alnedral, A., Gusril, G., Emral, E., Nirwandi, N., & Zarya, F. (2023). The effect of the project-based learning model with the case method and nutritional status on physical fitness of learners in Class VII at SMPN 21 Padang. *International Journal of Multidisciplinary Research and Analysis*, 6(4), 1332-1342. doi: 10.47191/ijmra/v6-i4-02.

[10] Deliens, T., Deforche, B., De Bourdeaudhuij, I., & Clarys, P. (2015). Determinants of physical activity and sedentary behaviour in university students: A qualitative study using focus group discussions. *BMC Public Health*, 15, article number 201. doi: 10.1186/s12889-015-1553-4.

[11] Deng, J., Liu, Y., Chen, R., & Wang, Y. (2023). The relationship between physical activity and life satisfaction among university students in China: The mediating role of self-efficacy and resilience. *Behavioral Sciences*, 13(11), article number 889. doi: 10.3390/bs13110889.

[12] Edelmann, D., *et al.* (2022). Physical activity and sedentary behaviour in university students – the role of gender, age, field of study, targeted degree, and study semester. *Frontiers in Public Health*, 10, article number 821703. doi: 10.3389/fpubh.2022.821703.

[13] Flores-Aguilar, G., Prat-Grau, M., Fernández-Gavira, J., & Muñoz-Llerena, A. (2023). "I learned more because I became more involved": Teacher's and students' voice on gamification in physical education teacher education. *International Journal of Environmental Research and Public Health*, 20(4), article number 3038. doi: 10.3390/ijerph20043038.

[14] Grinko, V., Kudelko, V., Bodrenkova, I., Dorofieieva, T., Nazarenko, I., & Pidsytkov, I. (2024). Therapeutic physical education in institutions of higher education in Ukraine. *Grail of Science*, 35, 545-553. doi: 10.36074/grail-of-science.19.01.2024.101.
[15] He, Q., Chen, H., & Mo, X. (2024). Practical application of interactive AI technology based on visual analysis in the professional system of physical education in universities. *Heliyon*, 10(3). doi: 10.1016/j.heliyon.2024.e24627.
[16] Hsia, L.H., Hwang, G.J., & Hwang, J.P. (2024). AI-facilitated reflective practice in physical education: An auto-assessment and feedback approach. *Interactive Learning Environments*, 32(9), 5267-5286. doi: 10.1080/10494820.2023.2212712.
[17] Khanbeiki, A. (2024). The effects of mindfulness training in physical education on intention to engage in physical activity, mental health and academic performance among secondary school students. *Physical Activity in Children*, 1(1), 68-73. doi: 10.61186/PACH.2024.470015.1022.
[18] Kljajević, V., Stanković, M., Đorđević, D., Trkulja-Petković, D., Jovanović, R., Plazibat, K., Oršolić, M., Čurić, M., & Sporiš, G. (2022). Physical activity and physical fitness among university – age students: A systematic review. *International Journal of Environmental Research and Public Health*, 19(1), article number 158. doi: 10.3390/ijerph19010158.
[19] Li, Y., & Guo, K. (2023). Research on the relationship between physical activity, sleep quality, psychological resilience, and social adaptation among Chinese college students: A cross-sectional study. *Frontiers in Psychology*, 14, article number 1104897. doi: 10.3389/fpsyg.2023.1104897.
[20] Liu, M., Liu, H., Qin, Z., Tao, Y., Ye, W., & Liu, R. (2024). Effects of physical activity on depression, anxiety, and stress in college students: The chain-based mediating role of psychological resilience and coping styles. *Frontiers in Psychology*, 15, article number 1396795. doi: 10.3389/fpsyg.2024.1396795.
[21] Lutsenko, I., Leshchenko, H., Prots, T., Gvozdetska, S., & Omok, H. (2025). Classification of innovations and challenges in teaching physical education in the digital age. *Revista Eduweb*, 19(2), 266-279. doi: 10.46502/issn.1856-7576/2025.19.02.18.
[22] Mu, F.Z., Liu, J., Lou, H., Zhu, W.D., Wang, Z.C., & Li, B. (2024). How breaking a sweat affects mood: The mediating role of self-efficacy between physical exercise and emotion regulation ability. *PLoS One*, 19(6), article number e0303694. doi: 10.1371/journal.pone.0303694.
[23] New York Posture Rating Scale. (n.d.). *New York posture rating chart*. Retrieved from https://www.scribd.com/document/377976424/New-York-Posture.
[24] Niu, Y. (2023). Integrated physical education and medicine in general physical education at universities in the age of educational technologies. *BMC Medical Education*, 23, article number 466. doi: 10.1186/s12909-023-04440-9.
[25] Pérez-Muñoz, S., Castaño Calle, R., Morales Campo, P.T., & Rodríguez-Cayetano, A. (2024). A systematic review of the use and effect of virtual reality, augmented reality and mixed reality in physical education. *Information*, 15(9), article number 582. doi: 10.3390/info15090582.
[26] Piores, V.F., Dev Omar Dev, R., Muhamad, M.M., & Puad Mohd Kari, D.N. (2023). Current trends and issues involving screen time and physical activity engagement among school students: A thematic review. *Physical Education Theory and Methodology*, 23(3), 447-457. doi: 10.17309/tmfv.2023.3.18.
[27] Rakha, A.H. (2023). The impact of Blackboard Collaborate breakout groups on the cognitive achievement of physical education teaching styles during the COVID-19 pandemic. *Plos One*, 18(1), article number e0279921. doi: 10.1371/journal.pone.0279921.
[28] Sepriani, R., Ockta, Y., Eldawaty, E., & Padli, P. (2024). How do physical fitness, nutritional status, and self-concept affect student learning outcomes in physical education with a focus on health and hygiene education? *Jurnal Konseling Dan Pendidikan*, 12(3). doi: 10.29210/1118100.
[29] Song, X. (2024). Physical education teaching mode assisted by an artificial intelligence assistant under the guidance of a high-order complex network. *Scientific Reports*, 14, article number 4104. doi: 10.1038/s41598-024-53964-7.
[30] Woessner, M.N., Tacey, A., Levinger-Limor, A., Parker, A.G., Levinger, P., & Levinger, I. (2021). The evolution of technology and physical inactivity: The good, the bad, and the way forward. *Frontiers in Public Health*, 9, article number 655491. doi: 10.3389/fpubh.2021.655491.
[31] Working programme for the subject "Physical Education". (2022). Retrieved from https://physics.lnu.edu.ua/wp-content/uploads/rp_fizychne_vyhovannya_2022.pdf.
[32] World Health Organization. (n.d.). *Body mass index (BMI)*. Retrieved from https://surl.li/hwfayj.
[33] Xiao, T., Pan, M., Xiao, X., & Liu, Y. (2024). The relationship between physical activity and sleep disorders in adolescents: A chain-mediated model of anxiety and mobile phone dependence. *BMC Psychology*, 12(1), article number 751. doi: 10.1186/s40359-024-02237-z.
[34] Yang, W., & Li, C. (2024). Quality evaluation of physical education in colleges and universities based on fuzzy logic. *Journal of Computational Methods in Sciences and Engineering*, 24(1), 165-181. doi: 10.3233/JCM-237029.
[35] Yevtyfiieva, I.I. (2024). *Syllabus of the educational component "Adaptive physical culture and physical rehabilitation"*. Retrieved from https://surl.li/tgjjmc.
[36] Zhang, Z., Chen, L., Qin, Z., He, J., Gao, C., Sun, J., Chen, J., & Li, D. (2024). Effects of functional correction training on movement patterns and physical fitness in male college students. *PeerJ*, 12. doi: 10.7717/peerj.16878.
[37] Zheng, W., Shen, H., Belhaidas, M.B., Zhao, Y., Wang, L., & Yan, J. (2023). The relationship between physical fitness and perceived well-being, motivation, and enjoyment in Chinese adolescents during physical education: A preliminary cross-sectional study. *Children*, 10(1), article number 111. doi: 10.3390/children10010111.

[38] Zhihao, D., Tao, W., Yingjie, S., & Feng, Z. (2024). The influence of physical activity on internet addiction among Chinese college students: The mediating role of self-esteem and the moderating role of gender. *BMC Public Health*, 24(1), article number 935. doi: 10.1186/s12889-024-18474-1.

Ефективність застосування корекційної програми фізичної культури в процесі фізичної підготовки студентів закладів вищої освіти

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Анотація. Метою було встановлення результативності застосування корекційного підходу у фізичному вихованні студентської молоді в умовах закладів вищої освіти. Методологія включала порівняльний аналіз традиційної та корекційної програми фізичного виховання студентів, педагогічний експеримент на базі Університету Григорія Сковороди в Переяславі. Результати підтвердили необхідність переорієнтації системи фізичного виховання у закладах вищої освіти на індивідуалізовані корекційні програми. Результати засвідчили, що впровадження корекційної програми забезпечує вищу ефективність фізичної підготовки студентів порівняно з традиційною системою. У експериментальній групі зафіксовано приріст середніх показників за всіма 15 досліджуваними параметрами, швидкісні якості зросли з 2,78 ± 1,07 до 3,70 ± 0,95; витривалість – з 2,66 ± 1,09 до 3,62 ± 0,98; силові показники – з 2,54 ± 1,12 до 3,50 ± 1,00; силова витривалість – з 2,91 ± 1,05 до 3,69 ± 0,94; гнучкість – з 3,09 ± 1,03 до 3,84 ± 0,90; координація – з 2,74 ± 1,08 до 3,66 ± 0,96; статична витривалість – з 2,60 ± 1,10 до 3,62 ± 0,97; вибухова сила (стрибок у довжину) – з 2,84 ± 1,05 до 3,70 ± 0,94. Функціональні показники також покращилися, проба Руф'є – з 2,66 ± 1,09 до 3,66 ± 0,96; індекс маси тіла – з 3,08 ± 1,00 до 3,74 ± 0,92. Показники фізичного стану і поведінкові характеристики продемонстрували позитивну динаміку постава – з 2,88 ± 1,03 до 3,72 ± 0,93; рівень фізичної активності – з 2,86 ± 1,06 до 3,73 ± 0,94; самооцінка – з 2,84 ± 1,05 до 3,78 ± 0,91; мотивація – з 2,74 ± 1,08 до 3,74 ± 0,95. Загальний інтегральний показник фізичної підготовленості зріс у експериментальній групі з 2,80 ± 1,06 до 3,70 ± 0,94 (приріст ≈0,90 бала), тоді як у контрольній групі – лише з 2,90 ± 1,05 до 3,10 ± 1,00 (приріст ≈0,20 бала). У контрольній групі після завершення експерименту спостерігалося незначне зростання середніх показників фізичної підготовленості з 2,90 ± 1,05 до 3,10 ± 1,00 бала, а приріст результатів за більшістю тестів коливався в межах 0,15-0,25 бала. Практичне значення дослідження полягає у можливості використання розробленої корекційної програми фізичної культури в системі фізичного виховання закладів вищої освіти та під час удосконалення оздоровчих програм для студентів

Ключові слова: функціональний стан організму; індивідуальні особливості студентів; рівень фізичної активності; навчальний процес; адаптаційні можливості