Website:https://worldsiencepub.com/index.php/Imc Volume:5,Issue 02,September-2026

APPLICATION OF MOTIVATION AND INCENTIVE METHODS IN DEVELOPING STUDENTS' PHYSICAL FITNESS WITHIN THE PEDAGOGICAL PROCESS

Sevinov Abu-Yahyo G'ulom o'g'li
Assistant Lecturer, Department of Physical Education and Sports,
Karshi State Technical University
sabuyahyo@gmail.com
https://doi.org/10.5281/zenodo.23040858

This article examines the effective use of motivation and encouragement methods in developing students' physical fitness within the pedagogical process. The study focuses on the importance of motivational approaches in increasing students' participation in physical education classes, strengthening their interest in physical activity, and developing regular exercise habits. Particular attention is given to pedagogical, psychological, and practical forms of encouragement, including positive assessment, praise, competitive activities, recognition of individual achievements, and peer support. The article also emphasizes the importance of considering students' individual characteristics and physical abilities when selecting appropriate motivational methods. The findings indicate that the purposeful combination of motivation and encouragement can contribute to increasing students' interest in physical education and improving their physical fitness.

: pedagogical process, physical fitness, motivation, encouragement, physical education, students, physical activity, pedagogical approach.

INTRODUCTION

Nowadays, in the higher education process, developing not only students' knowledge and professional skills but also their physical fitness is considered one of the important tasks. A student's physical activity is closely related to their mobility in daily life, work capacity, and the formation of a healthy lifestyle. Therefore, it is necessary to organize physical education classes not merely as a process of performing physical exercises, but also as a pedagogical process that develops students' personal activity and volitional qualities.

In developing physical fitness, along with the content and volume of exercises, students' attitudes toward them are also of great importance. If a student understands the purpose of training, evaluates their abilities correctly, and develops a desire to achieve results, the likelihood of regular participation in physical activity increases. In this regard, motivation is considered one of the important pedagogical factors in the physical education process.

According to the recommendations of the World Health Organization, adults aged 18–64 are recommended to engage in at least 150–300 minutes of moderate-intensity aerobic physical activity or 75–150 minutes of vigorous-intensity physical activity per week, as well as muscle-strengthening exercises involving the major muscle groups on at least two days per week. These recommendations demonstrate the relevance of regularly organizing physical activity among students.

However, in practice, not all students participate in physical education classes with the same level of interest. Some students may lack confidence in their physical abilities, feel uncomfortable comparing themselves with others, or fail to fully understand the purpose of training. Therefore, the teacher's task is not limited to teaching exercises; it also includes developing students' positive attitudes toward physical activity.

Scientific studies also emphasize the importance of motivation in the physical education process. For example, a systematic review of the Sport Education Model in physical education analyzed 14 studies involving a total of 2,146 student participants. The majority of the studies found that this model was positively associated with motivation, particularly autonomy and enjoyment of physical activity.

© 2026 International Conference on Artificial Intelligence and Applications . All Rights Reserved.

Based on this, the aim of this article is to examine the content, significance, and practical possibilities of using motivation and encouragement methods in developing students' physical fitness within the pedagogical process.

MAIN PART

1. The Role of Motivation in Developing Students' Physical Fitness

Motivation is a combination of internal and external factors that encourage a person to begin a particular activity, continue it, and strive toward a goal. In the physical education process, motivation is manifested in students' attitudes toward training, their interest in performing exercises, and their desire to develop their physical abilities.

When students perform physical exercises not merely to receive a grade, but because they understand that physical activity is necessary for their health, physical development, and future professional activities, such participation can become more sustainable. A review of systematic reviews published in 2025 analyzed studies based on Self-Determination Theory and reported that feelings of competence, as well as intrinsic and personally meaningful forms of motivation, were positively associated with physical activity. The authors emphasized that, in developing long-term habits, supporting intrinsic motivation and confidence in one's abilities is more important than relying solely on external pressure or rewards.

Therefore, a teacher should not limit their approach to telling students that they "must perform the exercise"; rather, they should explain why the exercise is necessary.

For example, when performing endurance exercises, explaining their effects on cardiovascular function, overall work capacity, and daily activity may positively change students' attitudes toward exercise.

INTRODUCTION

Nowadays, in the higher education process, developing not only students' knowledge and professional skills but also their physical fitness is considered one of the important tasks. A student's physical activity is closely related to their mobility in daily life, work capacity, and the formation of a healthy lifestyle. Therefore, it is necessary to organize physical education classes not merely as a process of performing physical exercises, but also as a pedagogical process that develops students' personal activity and volitional qualities.

In developing physical fitness, along with the content and volume of exercises, students' attitudes toward them are also of great importance. If a student understands the purpose of training, evaluates their abilities correctly, and develops a desire to achieve results, the likelihood of regular participation in physical activity increases. In this regard, motivation is considered one of the important pedagogical factors in the physical education process.

According to the recommendations of the World Health Organization, adults aged 18–64 are recommended to engage in at least 150–300 minutes of moderate-intensity aerobic physical activity or 75–150 minutes of vigorous-intensity physical activity per week, as well as muscle-strengthening exercises involving the major muscle groups on at least two days per week. These recommendations demonstrate the relevance of regularly organizing physical activity among students.

However, in practice, not all students participate in physical education classes with the same level of interest. Some students may lack confidence in their physical abilities, feel uncomfortable comparing themselves with others, or fail to fully understand the purpose of training. Therefore, the teacher's task is not limited to teaching exercises; it also includes developing students' positive attitudes toward physical activity.

Scientific studies also emphasize the importance of motivation in the physical education process. For example, a systematic review of the Sport Education Model in physical education analyzed 14 studies involving a total of 2,146 student participants. The majority of the studies found that this model was positively associated with motivation, particularly autonomy and enjoyment of physical activity.

© 2026 International Conference on Artificial Intelligence and Applications . All Rights Reserved.

Based on this, the aim of this article is to examine the content, significance, and practical possibilities of using motivation and encouragement methods in developing students' physical fitness within the pedagogical process.

MAIN PART

1. The Role of Motivation in Developing Students' Physical Fitness

Motivation is a combination of internal and external factors that encourage a person to begin a particular activity, continue it, and strive toward a goal. In the physical education process, motivation is manifested in students' attitudes toward training, their interest in performing exercises, and their desire to develop their physical abilities.

When students perform physical exercises not merely to receive a grade, but because they understand that physical activity is necessary for their health, physical development, and future professional activities, such participation can become more sustainable. A review of systematic reviews published in 2025 analyzed studies based on Self-Determination Theory and reported that feelings of competence, as well as intrinsic and personally meaningful forms of motivation, were positively associated with physical activity. The authors emphasized that, in developing long-term habits, supporting intrinsic motivation and confidence in one's abilities is more important than relying solely on external pressure or rewards.

Therefore, a teacher should not limit their approach to telling students that they "must perform the exercise"; rather, they should explain why the exercise is necessary.

For example, when performing endurance exercises, explaining their effects on cardiovascular function, overall work capacity, and daily activity may positively change students' attitudes toward exercise.

2. Main Pedagogical Directions of Motivation

Intrinsic and extrinsic motivation have their respective roles in involving students in physical activity. In intrinsic motivation, students gain interest and satisfaction from the process of performing an exercise itself. In extrinsic motivation, grades, recognition, competition results, or other external factors may serve as reasons for engaging in an activity.

A large meta-analysis on student motivation analyzed data from 344 samples involving 223,209 participants. The study demonstrated that different forms of motivation were associated in different ways with students' academic outcomes, well-being, goal orientation, and persistence in activities.

In physical education classes, this approach can be implemented through the following methods:

- explaining the objectives of the training to students in advance;
- adapting exercises to students' physical abilities;
- teaching complex exercises step by step;
- setting small and achievable goals;
- evaluating individual progress;
- using group and pair exercises;
- applying competitive elements in moderation;
- providing students with opportunities to express their opinions and make choices.

The main goal should not be to constantly compare students with one another, but rather to demonstrate their progress in comparison with their own previous results.

3. The Use of Encouragement Methods

Encouragement is used in the pedagogical process as a means of recognizing students' positive efforts and motivating them to continue their activities. In physical education classes, verbal, assessment-based, competitive, and social forms of encouragement can be used.

Verbal encouragement may include constructive feedback such as "good result," "much better than in the previous training session," or "your movement technique is improving." Such feedback can help increase students' confidence in their own abilities.

© 2026 International Conference on Artificial Intelligence and Applications . All Rights Reserved.

In encouragement, it is particularly important to recognize students' efforts. For example, if a student has not yet achieved a high result but is making an effort to perform an exercise correctly, acknowledging their effort by the teacher may increase their interest in subsequent training sessions.

At the same time, encouragement should not be limited to prizes or grades. A 2025 systematic review of physical activity studies based on Self-Determination Theory identified autonomous motivation and a sense of competence as important factors. Therefore, alongside external encouragement, it is also important to develop students' internal confidence that "I can do this."

4. The Use of Competition and Team Activities

Using competitive elements in physical education classes is one of the practical methods for increasing students' activity. Relay races, physical games between small groups, and tasks aimed at improving performance time or technique can help make training sessions more engaging.

However, during competitions, it is not advisable to encourage only the winners. Students who actively participated, improved their own results, or contributed to their team can also be recognized. This approach makes it possible to involve students with different levels of physical ability more effectively in physical education activities.

Systematic studies in physical education have also shown that students' engagement in physical activity is associated with psychological factors, including intrinsic motivation and the satisfaction of basic psychological needs. Therefore, creating a supportive team environment that helps students feel free, competent, and capable is of great importance.

5. Organizing Motivation and Encouragement Based on an Individual Approach

Students do not have the same level of physical fitness. Some students may demonstrate high performance in running, strength exercises, or sports games, while others may experience difficulties in performing certain exercises. Therefore, instead of applying identical requirements to all students, it is pedagogically appropriate to take individual abilities into account.

In this regard, the principle of "achieving a better result than yesterday" can be applied. For example, a student's running time, number of repetitions, or exercise technique can be compared with their previous performance. Even a small positive change in performance can be encouraged. This approach enables students to recognize their own progress.

The World Health Organization also recommends regular physical activity and advises individuals with low levels of physical activity to begin with small amounts of exercise and gradually increase the amount over time. This principle can also be integrated into the educational process by taking students' individual abilities into account.

In general, the proper integration of motivation and encouragement methods into physical education classes can support students' activity during training, strengthen their confidence in their abilities, and develop a positive attitude toward regular physical activity.

CONCLUSION

In conclusion, developing students' physical fitness within the pedagogical process is not limited to regularly performing physical exercises. Students' interest in training, confidence in their abilities, desire to achieve established goals, and the motivational environment created by the teacher are also important factors in this process. Therefore, it is necessary to purposefully use motivation and encouragement methods when organizing physical education classes.

Research indicates that students' opportunities to make choices regarding their activities, their sense of competence, and support from their peers can contribute to the development of a positive attitude toward physical activity. A systematic review of the Sport Education Model in physical education found that its use was positively associated with students' motivation, particularly autonomy and enjoyment of physical activity.

The teacher's relationship with students is also an important factor. A supportive and explanatory approach based on positive feedback can help students manage their own activities more independently.

© 2026 International Conference on Artificial Intelligence and Applications . All Rights Reserved.

A systematic review of physical education teachers and sports coaches reported that autonomy-supportive pedagogical approaches were associated with students' self-determined motivation.

In the process of encouragement, it is advisable to recognize not only students who achieve high results but also those who make efforts to improve their own performance. This is because students may have different levels of physical fitness. Evaluating positive changes in individual performance, recognizing small achievements, and strengthening students' self-confidence can contribute to the development of long-term motivation.

The regularity of physical activity is also particularly important. The World Health Organization recommends that adults aged 18–64 engage in 150–300 minutes of moderate-intensity aerobic physical activity or 75–150 minutes of vigorous-intensity aerobic physical activity per week, as well as muscle-strengthening activities involving the major muscle groups on at least two days per week. When working with students, these general recommendations should be applied while considering their age, physical fitness, and individual abilities.

Thus, properly integrating motivation and encouragement methods into physical education classes creates pedagogical opportunities to increase students' participation in training, gradually improve their physical fitness, and develop a positive attitude toward a healthy lifestyle. Most importantly, encouragement should focus not only on students' final results but also on their efforts, determination, and individual development.

REFERENCES

1. World Health Organization. WHO Guidelines on Physical Activity and Sedentary Behaviour. Geneva: World Health Organization, 2020.
2. World Health Organization. Physical Activity. WHO Regional Office for Europe. 2021–2026.
3. World Health Organization. WHO Guidelines on Physical Activity and Sedentary Behaviour: At a Glance. Geneva: WHO, 2021.
4. Vasconcellos, D., Parker, P. D., Hilland, T., et al. Self-Determination Theory Applied to Physical Education: A Systematic Review and Meta-Analysis. International Journal of Environmental Research and Public Health.
5. Sierra-Díaz, M. J., González-Víllora, S., Pastor-Vicedo, J. C., & López-Sánchez, G. F. Can We Motivate Students to Practice Physical Activities and Sports Through Models-Based Practice? A Systematic Review and Meta-Analysis of Psychosocial Factors Related to Physical Education. International Journal of Environmental Research and Public Health, 2019.
6. Puente-Maxera, F., et al. Impact of Sports Education Model in Physical Education on Students' Motivation: A Systematic Review. Children, 2021.
7. Teixeira, P. J., Carraça, E. V., Markland, D., Silva, M. N., & Ryan, R. M. Exercise, Physical Activity, and Self-Determination Theory: A Systematic Review. International Journal of Behavioral Nutrition and Physical Activity.
8. Howard, J. L., Bureau, J., Guay, F., Chong, J. X. Y., & Ryan, R. M. Student Motivation and Associated Outcomes: A Meta-Analysis From Self-Determination Theory. Perspectives on Psychological Science, 2021
9. Owen, K. B., Smith, J., Lubans, D. R., Ng, J. Y. Y., & Lonsdale, C. Self-Determined Motivation and Physical Activity in Children and Adolescents: A Systematic Review and Meta-Analysis. Preventive Medicine, 2014.
10. Vasconcellos, D., et al. The Effectiveness of Autonomy Support Interventions With Physical Education Teachers and Youth Sport Coaches: A Systematic Review. Journal of Sport and Exercise Psychology, 2019.

© 2026 International Conference on Artificial Intelligence and Applications . All Rights Reserved.