

The Effect of Using Competitive Learning Strategy on the Development of Physical Fitness among Students in the Physical Fitness Course

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Abstract

The study aimed to identify the effect of using competitive learning strategy on the development of physical fitness among students in the physical fitness course. The experimental curriculum was used. The sample consisted of (60) students of the students of the faculty of Physical Education at Hashemite University during the second semester of the university academic year 2022/2023 who were randomly method chosen. The sample was divided into two equal groups control group (n=30) and experimental group (n=30). Physical fitness tests were applied: (strength, speed, agility, flexibility). The means, standard deviations, and T-test were calculated to determine the differences between the groups. The results showed an effect of the competitive learning strategy on improving physical fitness; and statistically significant differences in favor of the experimental group. The researchers recommended applying cooperative learning while teaching physical education.

Keywords: *competitive strategy, learning, physical fitness, students.*

Introduction

The process of development of education in all aspects is very important because of its impact on human behavior. Countries with high technology set their focus on providing very high technologies to modernize education methods and patterns (Salameh & Oudat, 2013). The Countries have attached an important role to the educational process because of its great role in the future, so they directed all their efforts to work on it, and the teaching process received a considerable attention.

The educational institutions seek to achieve the objectives of the educational process with a high efficiency, and accuracy, through new teaching styles that help the student to make a positive participation in the educational process. This development in the teaching styles aims to get the learner to approach high efficiency and achieve the anticipated goals. Learning is influenced, to a far extent, by the teaching styles used by the teacher (Omar & Oudat, 2018). Therefore, teaching based on experimentation and application with its effects are transferred easier and faster than learning indoctrinated to the learner. Good teaching is the teaching that works toward creating teaching situations that contribute to the achievement of the desired targets.

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New methods of teaching emerged which help in the learning process from the teacher to the learner (Al -Haliq et al, 2014). It is necessary to use more than one way to transfer the information to the students through diversification and development of physical education teaching styles, in order to address the individual differences by better methods. There is no single ideal method to teach physical education, and the selection of the method is primarily based on the educational status of each educational setting. The physical education lesson success relies on the method and the style or strategy applied in teaching, through which the students acquire motor skills (Oudat, 2012).

Physical education is one of the important aspects of the educational and teaching processes, especially in the current era, in which high values were set for physical activity, as it has many positive effects on the individual. Physical education teacher is one of the basic pillars of the educational process, and its level and status in the community depends, to a wide extent, on the role and level of the teacher's performance and his/her achievement of the tasks and educational responsibilities, the job of the teacher is no longer confined to providing information and facts. Rather, he is the organizer of the educational experiences that facilitate the teaching process to fit the student's abilities (Oudat et al, 2022).

Physical education witnessed many changes to keep pace with the recent developments for the students to acquire some of the Physical, motor, and physiological traits (muscular strength, speed, cardio-respiratory endurance; kinetic, harmonic abilities (flexibility, agility, harmony, balance, accuracy) that help them perform their daily life requirements efficiently and distinctly (Oudat & Al-Luwaici, 2022). The significance of the study is of using competitive learning strategy for the development of physical fitness among students on physical fitness courses (strength, speed, agility, flexibility). This study aims to provide sports education strategies, and how to make the competition beneficial for all students involved.

Objectives

- 1- Identifying the effect of using the traditional learning strategy on development of physical fitness among students on physical fitness course.
- 2- Identifying the effect of using the competitive learning strategy on development of physical fitness among students on physical fitness course.
- 3- Identifying the differences Between the two learning strategies on development of physical fitness among students on physical fitness course.

Questions

- 1- Is there an effect of using the traditional learning strategy on development of physical fitness among students on physical fitness course?
- 2- Is there an effect of using the competitive learning strategy on development of physical fitness among students on physical fitness course?
- 3- Are there statistically significant differences Between the two learning strategies on development of physical fitness among students on physical fitness course?

Study Limitations

- Temporal domain: The second semester of the academic year 2022/2023.
- Spatial domain: Faculty of Physical Education and Sports Sciences - The Hashemite University.
- Human domain: Faculty of Physical Education and Sports Sciences - The Hashemite University.

Methods

Variables of Study

The independent variable (The strategy learning). And the dependent variable (development of physical fitness among students on physical fitness course).

Statistical Analysis

The researchers used the statistical significance of the SPSS program and carried out the required statistical processing after collecting the data: (Means (M), Standard deviations (SD) of the pre and post-measurement, (t-test) of Independent samples.

Study Sample

The sample consisted of (60) students of the students of the faculty of Physical Education at the Hashemite University during the second semester of the university academic year 2022/2023 who were randomly method chosen. The sample was divided into two equal groups control group (n=30) and experimental group (n=30). Physical fitness tests were applied: (strength, speed, agility, flexibility). The means, standard deviations, and T-test were calculated to determine the differences between the groups. To ensure the parity of the groups in the pre-measurement of the physical fitness elements, the researchers obtained the means and standard deviations of the pre-test. They further applied the independent sample t-test according to the growth indicators (age, height, weight), and the pre-tests, table (1) illustrate it.

Results and Discussion

Table (1). sample responses in the pretest to reveal the differences between the control and experimental groups in indicators of growth and physical fitness elements (N = 60).

Skills	Group	M	SD	T Value	Sig
Age (year)	Control	20.45	0.74	2.123	0.823
	Experimental	20.37	0.34		
Height (cm)	Control	177.10	4.45	2.432	0.684
	Experimental	179.60	4.32		
Weight (kg)	Control	75.00	3.79	2.465	0.349
	Experimental	78.55	4.52		
Strength	Control	10.40	2.14	1.045	0.561
	Experimental	11.20	1.05		
Speed	Control	10.24	0.72	1.089	0.202
	Experimental	11.01	0.39		
Agility	Control	4.68	0.67	1.0463	0.795
	Experimental	4.47	0.84		
Flexibility	Control	4.35	0.68	1.047	0.387
	Experimental	4.99	0.57		

Table (1) shows that there is no different statistically significant at (0.05) level between the two groups (control and experimental) in indicators of growth and physical fitness elements. This indicates the parity between the two groups in the pretest.

Q1: Is there an effect of using the traditional learning strategy on development of physical fitness among students on physical fitness course? To answer this question, the MD and SD and T value, table (2) illustrate it:

Table (2). sample responses between the pretest and posttest of the control group (N = 30)

Skills	Pretest		Posttest		T Value	Sig
	M	SD	M	SD		
Strength	10.40	2.14	10.62	0.89	1.842	0.621
Speed	10.24	0.72	11.04	0.84	2.147	0.284
Agility	4.68	0.67	5.21	0.62	0.758	0.346
Flexibility	4.35	0.68	4.80	1.02	1.691	0.505

Table (2) shows that there is no different statistically significant at ($\alpha \leq 0.05$) level between the pretest and posttest of the control group in physical fitness (Strength, Speed, Agility, Flexibility). There is also an improvement between the pre-measurement and the post-measurement, in favor of the post-measurement. This is consistent with Oudat (2002) that learning using the traditional strategy has a positive impact on improving and developing physical fitness, as the teacher is considered the focus of the teaching process, which contributes to students' involvement in physical education lessons. This, in turn, leads to a sense of satisfaction, and thus the implementation of the skills of the physical education lesson.

The researchers' attributes this to that the learning in traditional strategy lacks the group cooperation and competition spirit among the students. Consequently, it does not allow them compare their performance to know how far are they from the goal they are seeking to reach. It further does not allow them to take any of the teaching process decisions, as all the decisions are only those of the teacher. In addition, the creative aspect of the learner in this method is determined by the teacher. This result is in line with the study of Al-Noubani (2015), who provided that all these points, collectively, were less effective and influential in the traditional strategy at students' level during the physical education lesson.

Q2: Is there an effect of using the competitive learning strategy on the development of physical fitness among students on physical fitness course? To answer this question, the MD and SD and T value, table (3) illustrates it:

Table (3). Sample responses between the pretest and posttest of the experimental group (N = 30)

Skills	Pretest		Posttest		T Value	Sig
	M	SD	M	SD		
Strength	11.20	0.58	15.02	0.89	5.245	0.000
Speed	11.01	1.01	15.24	1.20	4.631	0.000
Agility	4.47	0.47	9.35	0.76	4.926	0.000
Flexibility	4.99	0.86	9.28	0.64	3.849	0.000

Table (3) shows that there are statistically significant differences at ($\alpha \leq 0.05$) level between the pre and posttest of the experimental group in physical fitness elements (Strength, Speed, Agility, Flexibility). From the researchers' point of view, this is due to the effectiveness of the competitive learning strategy on the physical performance level. This is also due to proper planning during the lesson preparation according to the applicable scientific bases of competitive learning strategy, which improved the acquisition level of physical fitness.

Furthermore, the differences were in favor of the posttests through using the competitive learning strategy, which helped in improving the student's performance. In this concern, the competitive learning strategy focuses on giving the students more applied, and competitive opportunities.

The result of this study is in agreement with that of Mosston and Sara (1999) who indicated the effect of the competitive learning strategy on learning of skills, and improving the performance. This result is also in line with that of Munene, et al (2017), which pointed to the positive effect of the competitive learning strategy that contributed to giving sufficient time for practical on the proper skill and application far from the teacher's instructions, which created a noticeable improvement in skills performance. This result is also in line with that of Ismaiel & Oudat (2019), which pointed to the use of the competitive learning strategy in teaching leads to an increase in learning time; and that the use of this method in teaching group games skills is better than teaching the individual games skills.

Q3: Are there statistically significant differences Between the two learning strategies on development of physical fitness among students on physical fitness course? To answer this question, the MD and SD and T value, table (4) illustrate it:

Table (4). Sample responses in the post-test to reveal the differences between the control and experimental groups (N = 30).

Skill	Group	M	SD	T value	Sig
Strength	Control	10.62	0.89	4.562	0.000
	Experimental	15.02	0.89		
Speed	Control	11.04	0.84	5.879	0.000
	Experimental	15.24	1.20		
Agility	Control	5.21	0.62	2.687	0.000
	Experimental	9.35	0.76		
Flexibility	Control	4.80	1.02	3.196	0.000
	Experimental	9.28	0.64		

Table (4) shows that there are statistically significant differences at ($\alpha \leq 0.05$) level in posttest between the control and experimental groups in physical fitness elements (Strength, Speed, Agility, Flexibility) in favor of the experimental group. The researchers attribute these differences to the use of the competitive learning strategy in teaching the experimental group. As well as decisions related to increasing application time and competition between students when teaching in a competitive learning strategy.

The teacher's role is to monitor the groups' performance and provide feedback to each group according to its performance. This result is consistent with Wanyama & Quay (2014), who indicated that teaching using the competitive learning strategy allows students to apply it more, and gives the learner the opportunity to demonstrate his abilities in taking into account individual differences among students.

These results are in agreement with the study of Zerouali & Ibriam (2020) whose results emphasize the effectiveness of the competitive learning strategy. And agreement this study with Oudat (2019), the competitive learning strategy has an effect of utilizing the maximum time to apply on the skill to improve it and make it perfect. In addition, they contribute to the growth of the students with different directions and to varying degrees in the physical, skill fields. In this regard, the traditional strategy learning, which proved its effectiveness, is no longer the only method applied in teaching, as the workers in the physical education field can apply and utilize other teaching methods that have their effects in the learning-teaching process. The results of this study are in line with that of (Yacoub & Al-luwaici, 2023; Ginanja, et al, 2018), that there is a positive effect of the competitive learning strategy in the posttest on development of physical fitness among students on physical fitness course.

Conclusions

In the light of the study discussion and results, the researchers concluded the following:

- There is a positive effect of the competitive learning strategy in improving some elements of physical fitness for the students.
- The competitive learning strategy is the optimal one for the development of physical fitness.

Recommendations

The researchers recommended the following:

- Increasing the use of modern educational aids in explain the skill, and toward reducing the use of traditional ones.
- Using competitive learning strategy in teaching physical education.
- Applying the competitive learning strategy in teaching different skills.

References

- Ginanja, A.; Suherman, A.; Juliantine, T. & Hidayat, Y. (2018). Competitions in Physical Education Using Sports, Education Model, *Advances in Health Sciences Research*, Vol (11), 282-284.
- Al -Haliq, M. A., Oudat, M. A., & Abu Al-Taieb, M. (2014). The Effect of Using Video on Developing Physical Fitness of Physical Education Students at the Hashemite University, *Asian Social Science*, Canada, 10(1), 21-27.
- Ismail, M. & Oudat, M. A. (2019). The effect of using the competitive & cooperative teaching styles in learning some track and field events, *Sport Science*, Bosnia & Herzegovina, 12(1), 75-81.
- Mosston, M. & Sara A. (1999). *Teaching Physical Education*”, 4th ed. New York.
- Munene, J. N., Peter, K. R., & Njoka (2017). Influence of remedial program on academic performance of pupils in Public Primary Schools in Nyahururu district, Kenya. *Journal of Research & Method in Education*, 7(5), 45-50. doi:10.9790/7388-0705024550
- Al-Noubani, S. (2015). Effect of using certain teaching strategies on the development of certain basic skills with the Olympic Center players”, Jarash. Unpublished MA Thesis, Al-Yarmouk University.
- Omar, M. & Oudat, M. A. (2018). The Impact of Some Physical Education Teaching Styles on the Mental Perception to Intermediate education stage, *Journal of Institutional Research South East Asia*, Australia, 16(1), 152-165.
- Oudat, M. A. (2002). Effect of the use of the instructional and practical teaching methods on the behaviors of the physical education teachers, a comparative study, Unpublished MA Thesis, Al-Yarmouk University.
- Oudat, M. A. (2012). Comparative study of the impact of some teaching styles applied on certain physical and skill variables in basketball for the Faculty of Physical Education and Sport Science Students at the Hashemite University”, *International Journal of Academic Research*, Part B, 4(6), 83-89.
- Oudat, M. A. (2019). The Extent of Applying Effective Teaching Skills in Teaching Physical Education, *The Journal of Social Sciences Research*, Germany,5(10), 1507-1514. DOI: doi.org/10.32861/jssr.
- Oudat, M. A. & Al-Luwaici, N. M. (2022). The Extent of the Physical Education Teachers' Uses of the Remedial Teaching Method, *Journal of Positive School Psychology*, 6(6), 5627-5635. <http://journalppw.com>

- Oudat, M. A. & Thiyabat, M. K & Ismaiel, G. I. (2022). The effect of the practical strategy on the acquisition of Some physical attributes, *International Journal of Human Movement and Sports Sciences, United State*, 10(6), 1210-1216.
- Salameh, I. A. & Oudat, M. A. (2013). The Effect of Instructional Program on Selected Physical and Skill Variables for Physical Education Students at The Hashemite University, *Dirasat: Educational Sciences*, 40(Supplement 2), 799-808.
- Wanyama, M. N., & Quay, J. (2014). The challenges of teaching physical education: Juxtaposing the experiences of physical education teachers in Kenya and Victoria (Australia). *African Journal for Physical, Health Education, Recreation and Dance*, 20(2:2), 745-75.
- Yacoub, M. H & Nezar "Mohammed Khlar" Al-luwaici, N. M (2023). The Impact of the Competitive Learning Strategy on Receiving and Setting Skills in Volleyball, *Dirasat: Educational Sciences*, 50(2 -S1), 357–371. <https://doi.org/10.35516/edu.v50i2 -S1.1271>
- Zerouali, W., & Ibriam, S. (2020). Difficulties in teaching physical education from the viewpoint of physical education teachers in secondary schools. *Al Manzoma sport journal*, 7(18), 65-81.