



Methods of stimulating motor performance in students during physical education and sports classes.

Touahria NACER

University of Algiers3 (Algeria)

Email, nacirdoc@yahoo.com

Alouane WISSEM

University of Algiers3 (Algeria)

Email, wissamedoc@yahoo.fr

Abstract.

Education is considered the foundation of an individual's success and is necessary in their life, as this need is evident in all different scientific fields, especially physical education and sports. The latter is considered broad and is characterised by technological developments and rapid changes that individuals are witnessing around the world. Many groups have taken an interest in physical education and sports, as research in this field has been conducted in sociology, motor psychology, medicine, anatomy, etc. This is in order to keep pace with progress and advancement and to provide individuals with cultural, physical and social functions.

With the significant development of educational psychology, which emphasised the need to focus on the learner and make them the centre of the educational process, those in charge of education and teaching have realised that it is no longer enough for teachers to master the scientific material in order to carry out their tasks effectively and successfully. They are no longer mere imparters of knowledge, but must rely on a variety of methods, including: motivation, reinforcement and pedagogical intervention, in order to stimulate the students' minds and make most of them respond to the various educational situations proposed by the teacher with physical performance, whether good or bad. This prompted me to research the proposed methods that teachers can rely on during physical education and sports classes.

Finally, we conclude that these proposed methods have a significant impact on the students' psychology to perform the motor skills required by the teacher during physical education and sports classes.

Keywords: *Arousal, motor performance, physical education and sports class, method.*

Résumé.

L'éducation est considérée comme le fondement de la réussite d'un individu et est nécessaire dans sa vie, car ce besoin est évident dans tous les domaines scientifiques, en particulier l'éducation physique et le sport. Ce dernier est considéré comme vaste et se caractérise par les développements technologiques et les changements rapides dont les individus sont témoins dans le monde entier. De nombreux groupes s'intéressent à l'éducation physique et au sport, car des recherches dans ce domaine ont été menées en sociologie, en psychologie motrice, en médecine, en anatomie, etc. Ceci afin de suivre le rythme des progrès et des avancées et d'offrir aux individus des fonctions culturelles, physiques et sociales.

Avec le développement significatif de la psychologie de l'éducation, qui a souligné la nécessité de se concentrer sur l'apprenant et de le placer au centre du processus éducatif, les responsables de l'éducation et de l'enseignement ont pris conscience qu'il ne suffit plus que les enseignants maîtrisent la matière scientifique pour mener à bien leurs tâches de manière efficace et fructueuse. Ils ne sont plus de simples transmetteurs de connaissances, mais doivent s'appuyer sur diverses méthodes, notamment la motivation, le renforcement et l'intervention pédagogique, afin de stimuler l'esprit des élèves et d'amener la plupart d'entre eux à réagir aux différentes situations éducatives proposées par l'enseignant par des performances physiques, qu'elles soient bonnes ou mauvaises. Cela m'a incité à rechercher les méthodes proposées sur lesquelles les enseignants peuvent s'appuyer pendant les cours d'éducation physique et sportive.

Enfin, nous concluons que ces méthodes proposées ont un impact significatif sur la psychologie des élèves pour exécuter les habiletés motrices requises par l'enseignant pendant les cours d'éducation physique et sportive.

Mots clés : *Excitation, performance motrice, cours d'éducation physique et sportive, méthode.*



Introduction

Social life has become increasingly complex in recent years and decades, with various societies, whether advanced or underdeveloped, witnessing radical changes in their lifestyles and ways of life, transforming them into post-industrial societies or what is known as the technological and information revolution based on democracy, freedom and respect for the opinions of others. Perhaps one of the most important areas affected by this rapid development is education, which is the driving force that propels individuals and nations towards progress and prosperity. Given that this vital field encompasses a range of scientific disciplines, physical education, as a scientific and practical subject included in educational programmes, is one of the important elements that must be adapted and imposed by contemporary life based on rapid change, whether in terms of sports facilities and structures, programmes and content, or the training of teachers involved in the educational process, or providing them with various experiences, including how to stimulate different behaviours in students, especially motor performance, which is considered the basic factor in the educational process in physical education and sports. Therefore, we find that various educational theories call for the need to pay attention to the learner so that they become an active part of the teaching and learning process and make them the focus of the learning process. These trends also called for the inevitability of developing and modifying the behaviour and role of the teacher to become very

important and efficient for the educational environment. (Duffy.T. M.Jonssen.D1991..p12)

Believing in this principle, we must consider innovating and designing special methods to stimulate students to perform motor skills that are appropriate for different educational situations. Therefore, teachers involved in the educational learning process must be given a set of teaching methods and competencies through which they can achieve the various motor skills expected of learners at differentiated educational levels, starting with primary education, through to middle and secondary education and finally university education. In order to determine these methods, especially in physical education and sports, it is necessary to know the various techniques that the teacher or instructor relies on in the lesson or in the physical education and sports class to put the learner in a good environment to highlight their abilities and demonstrate the various competencies expected of them.

Hence, a general question was posed for the study on methods of stimulating motor performance in students during physical education and sports classes, highlighting their types and how they are applied.

How can the stimulation methods used by teachers during physical education classes motivate students to perform motor activities?

Do stimulation methods play a role in motivating students to perform motor activities outside of physical education classes in secondary school?

The main objective of this study is to identify the effect of using certain motivation techniques on the level of physical performance among secondary school students during physical education classes, in addition to a set of secondary



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objectives and motivations directly related to the research topic.

It also aims to provide various methods that teachers can rely on to motivate students to perform well during physical education and sports classes.

1.Theoretical background

1.1. Definition of concepts and terms

Method: Language: "The line of imagination" as stated in Lisan al-Arab by Ibn Manzur, which is the face, the doctrine and the way; the way is the method.

Convention: It is certain that the term "style" is much older than what is referred to in modern times as stylistics, which branched off from linguistics, as style has existed since the time of Aristotle and is known to Arab rhetoricians. The article "style" in the Universal Encyclopaedia is based on what resembles the two meanings we have extracted from Lisan al-Arab. Style in this case and in this article means:

the pattern of traces: Here, the term is used in a general sense as a language, a form of literature, or a literary genre, such as the style of a novel, the style of poetry, or the style of an era, such as the style of pre-Islamic or Abbasid poetry, or the like.

Definition of "bouffoun" in terms of style: it is the person himself, and here the discussion is limited to a specific style rather than an absolute style.

Arousal: Considering arousal as a physiological process that varies in intensity, degree and requirements according to the player's performance of motor skills in training and competition, arousal is described as the degree of activation of the organs and mechanisms of the body that are under the

control of the nervous system. Arousal includes the concept of extension and the continuous chain of intensity levels that releases the latent energy stored in the body's tissues, which manifests itself in the form of activity and response. It ranges from its lowest level in deep sleep to the highest degree of excitement (Abdul Rahman, Muhammad Issawi, 1991, p. 59).

Motor performance: Motor performance is the outward manifestation of motor learning, and since motor learning is nothing more than an internal process aimed at bringing about changes in the nerves (changes in behaviour) towards the better, motor learning is an intangible internal process that cannot be indicated through internal dissection, but can be inferred through motor performance, which is described as the apparent result that reflects these internal changes in behaviour. Motor performance is therefore nothing more than a reflection of one of the forms of internal motor learning Through which we can ascertain the degree of motor learning achieved by the individual. It is a set of movements or a series of motor activities performed at a level below what we call skill. (Marwan Abdulmajeed Ibrahim 2002, p. 127).

Physical education and sports classes: Physical education and sports classes differ from other academic subjects in that they are unique in nature due to the information they contain, which is one of the most important topics that researchers have been paying close attention to recently. Physical education classes represent the most important part of the educational programme, as they provide all the information about the units that are understood and the educational materials that achieve the educational learning objectives set by the teacher.



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From another perspective, "physical education and sports lessons are consistent with other lessons in various ways, as evidenced by the teacher's use of different teaching methods and scientific educational tools, the educational progression included in the periodic and quarterly plans, and the methods of measurement and evaluation..." (Adlan Darwish Jaloun et al. 1994, pp. 127, 128).

1.2. Previous and similar studies

- Study by Labban Karim, 2011: This is an unpublished doctoral thesis on the theory and methodology of physical and sports education at the University of Algiers, Institute of Physical and Sports Education, Sidi Abdallah. - Study by Labban Karim: "Feedback from teachers and its relationship to student motivation during physical education and sports classes in secondary school." Between pedagogical objectives and the competency-based approach. The study aimed to provide a correct understanding of feedback as a pedagogical technique for educators, as well as to highlight the concepts of motivation and pedagogical stimulation and how to provide the general foundations for these concepts and link them to encouragement and reinforcement by educators. The study thus addressed the following hypotheses:

General hypothesis: There is a difference between the forms of feedback given by educators and the degree of motivation of students during physical education and sports classes in secondary school.

Sub-hypotheses: There are three sub-hypotheses, all of which address forms of feedback and the difference between these forms in motivating students, depending on the activity and the periods of implementation. To analyse these

hypotheses, a descriptive correlational approach was followed, using observation and questionnaires as tools for collecting information. The data were statistically processed using Student's t-test (T) and Fisher's F-test (F) and Parson tests, as well as arithmetic means and percentages. The researcher then reached the general conclusion that there is a significant difference between types of feedback in terms of motivation and students' motivation to learn motor performance. (Laban Karim, PhD thesis in physical and sports education theory and methodology, 2010).

The researcher reached some conclusions that reveal the reality of the lack of information on the teaching side in both approaches, and emphasises the need for continuous training in order to develop the dialogue and interactive aspects of teaching pedagogy.

- Dave's study, 1997:

This study indicates that student participation in the educational process, positive responses to their questions, praise and encouragement, the provision of stimuli that create a kind of challenge for the learner, and the evaluation of student work are all methods that enhance the intrinsic motivation of primary and secondary school students even among students with learning difficulties or disabilities.

2. Practical background

2.1. Methodology

The methodology used in the research is descriptive and analytical, based on describing a phenomenon in order to identify the methods and factors that control it and draw conclusions for generalisation.

The relationships between variables. The descriptive methodology goes beyond simply collecting descriptive data



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about a phenomenon to analysing, linking and interpreting this data, classifying and measuring it, and utilising the results. (Mohammed Hassan Al-Alawi, Mohammed Nasr Al-Din Radwan 2000, p. 17).

Research community.

This study will focus on all secondary schools in Algiers, where we will take educational institutions (secondary education level) affiliated with the Ministry of National Education. The research community will be the number of physical education and sports teachers in the administrative districts of Algiers, i.e. approximately 122 secondary schools.

Research sample and how it was selected.

Our study sample is the source of the information being researched. Our research sample consists of teachers and students, and the observation network for stimulation methods and questionnaires is applied to physical education and sports teachers in the administrative districts of Algiers.

Number of teachers: 10% or more of the total number of teachers of the subject in secondary schools in Algiers. The research sample included the number of secondary schools, i.e. we took 13 (thirteen) of the original community of secondary schools in Algiers, which is more than 10% and estimated at 122 secondary schools.

Table (01) represents the sample of secondary schools and teachers in which the study was conducted, as follows:

Number	Administrative districts	Secondary schools	Number of teachers
01	Cheraga	New Cheraga Secondary School	02
02	Chargha	Muttaqana Ain Al-Binyan	01
03	Dararya	Al-Ashour Secondary School	03
05	Bir Murad Rais	Said Hamdin Secondary School	01
06	Bouzria	Al-Mokrani Secondary School (1)	03
07	Bouzria	Al-Mokrani Secondary School (2)	01
08	Bab El Oued	Prince Abdelkader Secondary School	04
09	Bab El Wadi	Ibn Khaldoun Secondary School	02



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10	Bab Al Wadi	Al-Arqam Al-Makhroumi Secondary School	02
11	Sidi Ahmed	Arouj and Khairuddin Secondary School	02
12	Hussein Day	Hassiba Ben Bouali Secondary School	01
13	El Harrach	Jnan Mabrouk Secondary School	02

Table No. (01): Represents secondary schools and teachers

The method of selecting secondary schools was intentional and based on the specific characteristics of each school, such as the availability of the minimum facilities required for physical education and sports classes.

The method of selecting the sample of teachers was randomised and organised, whereby we entered the secondary schools and took the number of teachers we needed from the subjects they taught.

- Research tools.

Given the nature of the study, a questionnaire was used for the teachers, and a chi-square test was used to analyse the results.

3. Analysis of results

- Presentation and analysis of the results of the questionnaire for teachers.

Theme No. (01): Motivation techniques and their role in stimulating motor performance among students during physical education and sports classes.

Table No. (02): Represents teachers' responses regarding the importance of using motivation techniques to stimulate motor performance in students during physical education and sports classes.

Proposa 1	Frequen	Percent age	Ka ² Calculat	Signific	Degree	Ka ² Schedul	Signific
Very important	19	%73.08	12.65	0.05	0	5.99	Function
Average importanc e	07	%26.92					
Not important	00	%00					



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Total	26	%100					
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From the results in Table 2, we observe that there are statistically significant differences in favour of the greater value at a significance level of 0.05 and a degree of freedom (2), where the calculated chi-square value (12.65) is greater than the tabulated chi-square value (5.99). This means that the use of motivation is very important in stimulating motor performance among students in physical education and sports classes. We find that a large percentage, estimated at 73.08% , of the sample believe that the use of motivation is very important in stimulating motor performance among students in physical education and sports classes, and this is reflected in the pedagogical educational process. As Kimble (1961) states, "Every stimulus, whether internal or external to the individual, is followed by a change in behaviour, and this change is called a response," meaning that providing a stimulus to the student stimulates their performance. (Robert J. Vallerand, *Les fondements de la psychologie sociale*, Ed: Ga et Anmorio, Québec, Canada, 1994, p. 40). 2692.% of teachers believe that the use of motivation techniques is of moderate importance in stimulating motor performance.

Based on the results obtained, we conclude that teachers' opinions range from very important to moderately important regarding the importance of this method in stimulating motor performance among students in physical education and sports classes. This demonstrates the significant role of

motivation in stimulating motor performance among students in physical education and sports classes..

Focus No. (02): The reinforcement method and its role in stimulating motor performance in students during physical education and sports classes.

Table No. (03): Shows teachers' responses regarding students' reactions when they use reinforcement during class.

Significance	Function			
Ka ² Scheduled	5.99			
Degree of freedom	0			
Significance level	0.05			
Ka ² Calculated	23.04			
Percentage	%84.61	%0	%15.4	%100
Frequency	22	0	04	26
Proposal	Always	Never	Sometimes	Total

From the results in Table 3, we observe that there are statistically significant differences in favour of the greater



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value at a significance level of 0.05 and a degree of freedom (02), where the calculated Ka^2 value calculated (32.29) is greater than the Ka^2 value tabulated, which is (5.99). This means that 92.30% of teachers believe that using reinforcement in physical education and sports classes elicits a positive response from students. Dr. Jaber Abdul Hamid Jaber describes reinforcement as an essential means of eliciting the positive behaviour expected by the teacher. (Dr. Jaber Al-Hamid Jaber, p. 15). Meanwhile, 7.7% of teachers believe that the use of reinforcement in physical education and sports classes elicits a normal response from students.

Based on the results obtained, we conclude that most of the research sample believes that the use of reinforcement generates a positive response from students, which shows that reinforcement plays a major role in stimulating motor performance in students during physical education and sports classes.

Theme No. (03): Pedagogical intervention and its role in stimulating motor performance among students during physical education and sports classes.

Table No. (04): Teachers' responses regarding the positive and negative role of student assessment increase student motivation to perform motor skills.

Proposals	Always	22	%84.61
	Never	0	%0
	Sometimes	04	%15.4
	Total	26	%100
Ka ² Calculated	23.04		
Level of significance	0.05		
Degree of freedom	02		
Ka ² Scheduled	5.99		
Function			

From the results in Table 4, we observe that there are statistically significant differences in favour of the higher value at a significance level of 0.05 and a degree of freedom (02), where the calculated chi-square value (23.04) is greater than the tabulated chi-square value (5.99). This means that 84.61% of teachers believe that when a student is evaluated positively or negatively, it always increases the student's motivation to perform motor tasks. As PieronM (Pieron M.), in order to develop the connection between their behaviour and performance, teachers must encourage their students, correct them and motivate them while they are performing a motor



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action (Pieron M. Enseignement des A.P.S. Observations et recherches. Ed. Université de Liège. 1983). As for the 15.4%% , they believe that when a student is evaluated positively or negatively, it always increases the student's motivation to perform the motor activity.

From the results obtained, we conclude that most of the research sample believes that the use of assessment on students always increases the student's motivation to perform motor skills. This shows that the pedagogical intervention method plays a major role in stimulating motor performance among students in physical education and sports classes.

Conclusion

Highlighting some of the methods that teachers can use to stimulate motor performance in students during physical education and sports classes is important and very difficult, due to the overlap of several uncontrollable variables. The educator plays the role of a guide to identify obstacles to the implementation of pedagogical approaches to achieve the objectives set out in the curriculum. On the other hand, the inclinations and aspirations of students, who are at the centre of the pedagogical process, must be taken into account by highlighting their pedagogical abilities and behaviours and employing them in unfamiliar and problematic situations to demonstrate some of the competencies they acquire through practice and participation.

This prompted me to investigate how to stimulate motor performance in students and whether it can be said that the methods studied have a positive role and are relied upon by

teachers to stimulate student performance during physical education and sports classes.

Through this study, we have come to understand the importance of employing all the methods studied, including motivation, reinforcement and pedagogical intervention, which are considered to be at the core of the educational process due to their importance in motivating students to apply the required pedagogical situations with enthusiasm and excitement. This is due to the feedback relationship that the teacher receives from the student after applying the various required motor skills, whether positive or negative in terms of quality, as this helps the teacher to evaluate and assess the student's performance. by the teacher after applying the various motor skills required of them, whether positive or negative in terms of quality, to help them assess and evaluate students after performance.

Finally, I reached a positive conclusion in that the majority of secondary school teachers use motivation, reinforcement and pedagogical intervention to stimulate motor performance in students during physical education and sports classes. This means that we can rely on this study to achieve success in physical education and sports classes in all three educational stages after introducing the age group variable.

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