

THE RELATION BETWEEN THE ATTITUDE TOWARD PHYSICAL EDUCATION LESSONS AND THE ENJOYMENT IN PRACTICING PHYSICAL ACTIVITY IN STUDENTS AGED BETWEEN 18 AND 22

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ABSTRACT. Introduction: Physical activity is an important factor in the lives of young people once they complete their high school studies. Subsequent participation in adult life in physical activities will be done independently. However, we can assume that the low participation rate of Romanians in physical activities is due to a negative attitude regarding the lesson of physical education and compulsory sports throughout schooling but also to a discomfort regarding participation in physical activities. At the West University of Timisoara, the Physical Education and Sports lesson is compulsory included in the curriculum from all faculties, coming in continuation of high school. The aim of this study is to analyze how the attitude towards the PE lesson correlates with the enjoyment of students to perform physical activity. **Material and Method:** The participants in this study were 400 students (77% female and 23% male) aged 18-22 years ($M = 20.1$, $SD = .71$) from the Western University of Timisoara. To carry out this study, the questionnaire survey method was used. Two questionnaires that explored the students' attitude towards the PE lesson and the students' enjoyment in practicing physical activities were applied. The data obtained was analyzed using the SPSS Statistics program. **Results:** The score obtained ($r = .342$, $p < 0.001$) indicates a significant correlation, with a positive score between the attitude towards PE and the enjoyment of practicing physical activities in the students at the West University of Timisoara. **Conclusions:** It is found that both the attitude towards PE and enjoyment of practicing physical activities are increased.

Keywords: attitudes, enjoyment, Physical Education, physical activity, students.

REZUMAT. Relația dintre atitudinea față de lecțiile de educație fizică și plăcerea de a practica activitatea fizică pentru elevii cu vârsta cuprinsă între 18 și 22 de ani. Introducere: Activitatea fizică este un factor important în viața tinerilor chiar și după încheierea ciclului de studii liceale. Participarea

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ulterioară la activitățile fizice în viața de adult se va face în mod independent. Totuși, putem presupune că rata scăzută de participare a românilor la activitățile fizice se datorează și unei atitudini negative privind lecția de educație fizică și sport obligatorie pe toată durata școlarizării dar și a unei neplăceri privind participarea la activitățile fizice. La Universitatea de Vest din Timișoara, disciplina Educație fizică și sport este o disciplină obligatorie cuprinsă în planul de învățământ de la toate facultățile, venind în continuarea liceului. Scopul acestui studiu este de a analiza modul în care atitudinea față de lecția de Educație fizică se corelează cu plăcerea studenților de a efectua activități fizice. **Material și Metodă :** Participanții la acest studiu au fost 400 de studenți (77% de gen feminin și 23% de gen masculin) cu vârsta cuprinsă între 18-22 ani ($M=20.1$, $SD= .71$) din cadrul Universității de Vest din Timișoara. Pentru realizarea acestui studiu s-a folosit metoda anchetei prin chestionar. S-au aplicat două chestionare care au explorat atitudinea studenților față de lecția de Educație fizică și plăcerea studenților de a practica activitățile fizice. Datele obținute au fost analizate folosind programul SPSS Statistics. **Rezultate:** Scorul obținut ($r = .342$, $p<0.001$) indică o corelație semnificativă, cu scor pozitiv între atitudinea față de lecția de Educație fizică și plăcerea de a practica activitățile fizice la studenții Universității de Vest din Timișoara. **Concluzii:** Se constată că atât atitudinea față de lecția de Educație fizică cât și plăcerea de a practica activitățile fizice sunt crescute.

***Cuvinte-cheie:** atitudini, plăcere, Educație fizică, activități fizice, studenți.*

Introduction

The public health problem of physical inactivity and the risk of obesity has proved resistant to all efforts by researchers to elucidate the causes and seek solutions to change its course (Blair, 2009). In most industrialized countries, the population is physically inactive or insufficiently active (Piko, 2000). In Romania, even if the proportion of adults who reported participation in physical activity increased in 2017 (13.5%) compared to 2014 (4%) it still ranks last in Europe, along with Malta, Austria and Portugal (Situation analysis, September 2020). Also, 63% of the Romanian population never participates in physical activities or a sport (New Eurobarometer on sport and physical activity, 2018).

Fishbein and Ajzen (1975) defines the attitude as “a predisposed learning to respond in a way considered favorable or unfavorable in relation to a particular topic.” An attitude towards something is a behavior learned as positive or negative. An important analysis on the causes that lead to physical inactivity can be made from the perspective of the attitude towards the PE lesson. Understanding how

students form their attitudes toward physical education can help improve their later participation in physical activity in life (Subramaniam & Silverman, 2007). Numerous studies have been done on this topic (Carlson, 1995, Luke & Sincliar, 1991). Some studies have shown that an increase in student attitude for physical education may be attributed, in part, to the influence attitude may have on future participation in physical activity among youth (Subramaniam, Silverman, 2002; Prochaska et al. 2003). Also, there is evidence to suggest that students who experience unfavorable attitudes for physical education will be less involved in physical activities later in life (Carlson, 1995, Enis, 1996). A study by Mowatt, DePauw, and Hulac (1988) assessed students' attitudes toward physical activity. The aim of this study was to see the opinions of students who have already been enrolled in physical education classes in university education regarding physical activity. The results of this study showed that the students agreed that there is a scientific basis for the quality of physical education. Students expressed neutral attitudes about the value of physical education in public schools, but believed it was important to offer physical education courses. Most students indicated that it is important to be "fit" and that physical activity is important and worth the effort.

But in the same way with the attitude, the pleasure (enjoyment) has a determining role in the participation in the physical education lessons. Some studies have shown the link between self-efficacy and physical activity enjoyment with body mass index (BMI) and gender between university students (Gençay, Gençay, Aydin, Akkoyunlu & Demir, 2016) or the link between time trends in fitness and enjoyment of physical practice (Brunnquell, Spaeth, Casalegno, Gatzke, Mateski, Wiggins, Braun, 2016). However, there are very few studies that analyze the connection between the attitude towards the physical education lesson and the enjoyment of participating in physical activities. This study could create the premise of analyzing the connection between physical activities imposed by the school system and their independent practice in adulthood.

Objectives

The objective of this study is to analyze the relationship between the attitude towards the physical education lesson and the enjoyment generated by practicing physical activities in these lessons that are mandatory in the curriculum of students. It is assumed that there is a statistically significant correlation between the attitude towards the PE lesson and the pleasure of practicing physical activities in the students participating in the study.

Material and methods

Participants

This study involved a number of 400 students (77% female and 23% male) aged 18-22 years ($M = 20.1$, $SD = .71$) from the West University of Timisoara, enrolled in the 1st and 2nd year of studies, participants in the compulsory discipline of Physical Education and Sports.

Procedure

Two questionnaires were applied in this study. The first questionnaire created by Mowatt, Depauw, and Hulac (1988) contains a number of 20 items on a 5-point Likert scale. This questionnaire was translated into Romanian by a specialized translator. The 20 items are classified into 3 categories (dimensions): General Knowledge (5 questions), Physical Education Attitudes (6 questions) and Scientific Basis (9 questions). For this study, only the answers provided in the Physical Education Attitudes section were considered.

The second questionnaire used was the PACES “Physical Activity Enjoyment Scale” developed by Kendzierski and DeCarlo (1991) which contains a number of 18 items and a 7-point, bipolar Likert response scale. Eleven items are marked in reverse. Higher PACES scores reflect a higher level of pleasure. This questionnaire was also translated into Romanian by a specialist translator.

Results

a. Cronbach Alpha Fidelity Coefficient

For the PACES questionnaire (Kendzierski and DeCarlo, 1991), following its translation into Romanian, the Cronbach alpha fidelity coefficient was calculated for the complete version of 18 items. It is observed that all 18 items are focused on the same topic, looking for the same answer.

Cases	N	%	Cronbach's Alpha	Cronbarch's Alpha Standard items	No. of items
Validated	400	99.8	.921	.925	18
Excluded	0	.0			
Total	400	100.0			

Table 1. Cronbach's Alpha Index

The Cronbach Alpha coefficient of validity of the 18-item scale has a value of .921, with a strong percentage of 99.8%, which proves that the scale has a very good level of fidelity. A Cronbach's alpha coefficient greater than .800 is considered satisfactory.

b. Pearson Correlation Between the Variables Attitude and Pleasure

Out of the total respondents, 76% of the averages were registered between 3.50 - 4.00 points, 20% were between 4.00 - 5.00 points and only 4% had an average of 3.00 points. The total average in the field of attitudes towards physical activity is 3.70, a significant score that shows us that the students have a positive attitude towards physical activity.

The average obtained in the questionnaire regarding the students' attitude towards the PE lesson and the average obtained on the scale of the pleasure to participate in physical activities register a significant level of relationship.

Sets	Statistics Index	PACES Mean
Attitude Mean	Pearson Corell.	.342**
	Sig. (2-tailed)	.001
	N	400

** . The correlation is significant if $p < 0.01$; Sig (2).

Table 2. Pearson Correlation between Attitude and Pleasure variables

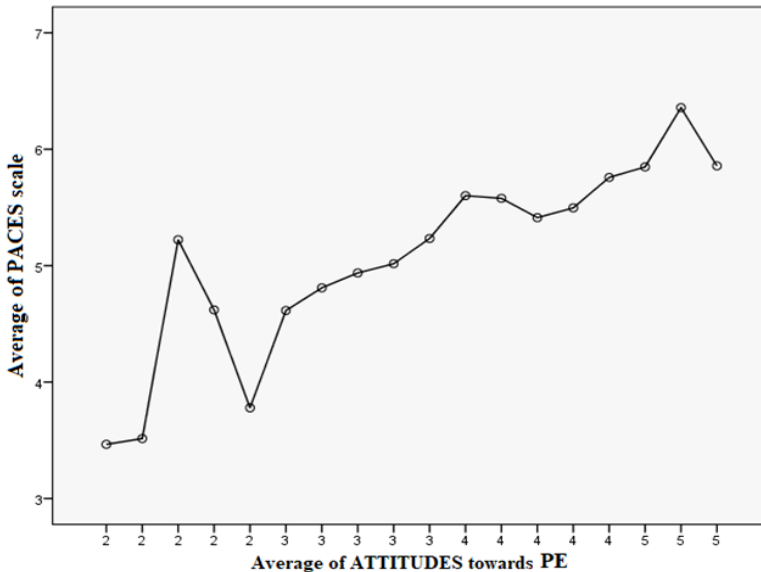
The recorded score ($r = .342$, $p < 0.001$) indicates a significant correlation, with a positive score. The two questionnaires were scored with different measurement scales and the results obtained indicate that attitude and pleasure have a significant connection on the practice of physical activity in the physical education lesson.

c. Analysis of the Anova Variant of the Variables Attitude and Enjoyment

It is observed that the value of significance ($p = .001$, $p < 0.05$) indicates that there is a statistically significant difference between the arithmetic averages recorded in the questionnaire on attitude towards PE and the arithmetic averages recorded in the questionnaire on students' pleasure in practicing physical activities. So that the null hypothesis is rejected. Following the graph generated after the ANOVA analysis of variance, we observe an increase in the score depending on both results, having a higher proportion of ascending lines than descending ones.

Sets	Sum of squares	SD	Mean Square	F	Sig.
Between groups	60.749	17	3.573	4.025	.001
Within groups	339.154	382	.888		
Total	399.903	399			

Table 3. ANOVA analysis between the variables Attitude and Enjoyment



Graph 1. ANOVA type analysis of the variables Attitude and Enjoyment

d. Linear Regression

The non-standardized regression coefficient between the variables Attitude and Enjoyment has the value of 0.200. This value means that for each increase by 1.00 of the horizontal axis the value on the vertical axis changes by 0.200. The 95% confidence interval for these coefficients is from .146 to .254. The 95% confidence interval shows the interval of regression slopes where the same percentage of the population will be found. The intersection point (a) is identified by the SPSS program as a constant. The intersection is presented as “Constant” and is 2,631 representing the point where the regression line intersects the vertical axis y.

The Beta column represents the Pearson correlation coefficient between the two variables with a value of .342, a significant positive correlation.

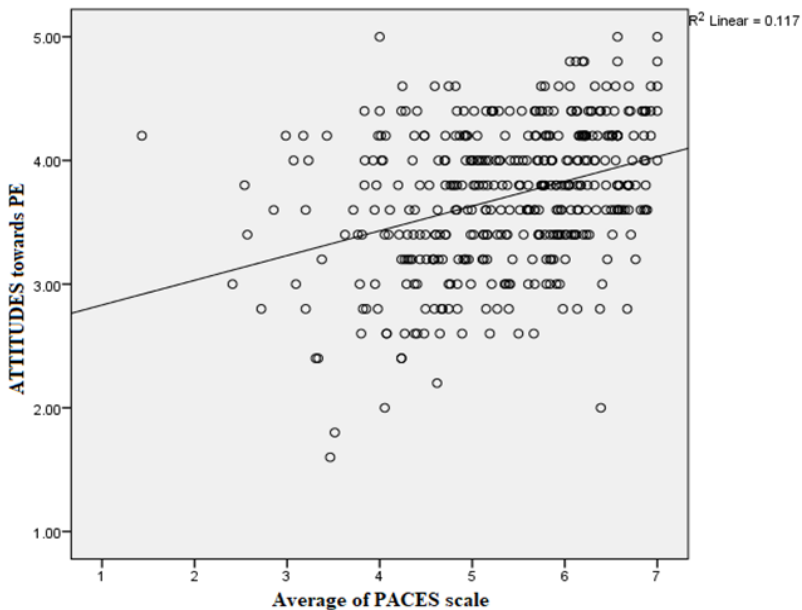
Coefficients^a

Model	Non-standardized coefficients		Standardized coefficients	t	Sig.	95.0% Confidence interval for B	
	B	Std. Error	Beta			Inf.limit	Sup. limit
1 (Constant)	2.631	.150		17.485	.000	2.335	2.927
1 PACES	.200	.028	.342	7.268	.000	.146	.254

a. Dependent variable: ATTITUDES

Table 4. Linear regression between Attitude and Pleasure variables

The regression line generated in the scatterplot diagram is oblique, from bottom right to top left, which indicates a positive relationship between the variables. The points seem relatively close to the line, which suggests with Beta (.342) it is positively significant with a relatively small confidence interval. The scatterplot diagram of the relationship between Attitude and Pleasure suggests a positive linear relationship between the two variables.



Graph 2. Linear regression

Discussions

Initially, the internal consistency index of the PACES questionnaire (Kendzierski and DeCarlo, 1991) recorded high indices (Cronbach alfa from .93 to .96). Subsequently, it was used in other foreign languages, so that many studies were done to validate it. Study by Yan, Berger, Tobar & Cardinal (2015) reported high internal consistency (Cronbach alpha = 0.93) for Chinese translation. For the French translation (Deligners & Perez, 1998) they obtained a high Cronbach's alpha index (.927), an index close to that obtained by the authors of this questionnaire. In the present study, the internal consistency index obtained (Cronbach alfa = .921) allows us to use it in Romanian.

To discuss the statistically significant link between the results of the Attitudes and Pleasure questionnaires, we will make a comparison with the study conducted by Caroll & Loumidis (2001). This study analyzes the relationship between perceived competence and enjoyment in physical education and physical activity outside school. The results indicate moderate positive and significant relationships between enjoyment in PE and perceived competence in PE ($r = .39$, $p < 0.001$). In our study, the relationship between PE attitude and the pleasure of participating in the PE lesson is also significant ($r = .342$, $p < 0.001$). Although in this study the results show that most students have positive attitudes about the PE lesson, previous studies found that students tended to become less physically active when they reach higher education (Hildebrand & Johnson, 2001).

Conclusions

Accurate and valid measurement is essential for the comparison and integrity of research. Consistent with the analyzes performed in the study, we found that the 18-element PACES used in this study was a valid model.

The results show that overall, the students participating in the study had positive attitudes regarding the participation in the physical education lesson conducted within the university program. Significant relationships were found in attitudes related to the PE lesson and the pleasure resulting from physical activity. These results may indicate that the attitude towards the PE lesson and the pleasure of participating in PE lessons are not the causes of the poor participation of adults in Romania in physical activities. Future studies will investigate using qualitative methods, the causes of the difference between a positive attitude towards the PE lesson and poor participation in physical activities.

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