

LEARNING PREFERENCES BETWEEN BOYS AND GIRLS IN PHYSICAL EDUCATION CLASSESMIRIAM PALOMO NIETO¹ - VIRGINIA GARCIA COLL²Marcos Perez Barrio³ - Pol Lorente Sola³¹Palacky University, Czech Republic²Universidad Internacional de la Rioja, Spain³Universidad de Castilla La Mancha, Spain**ABSTRACT**

The study of participative preferences are being increasingly explored (Ruiz, Graupera, Rico and Mata, 2004; Ruiz Moreno Graupera and Rico, 2010), supporting the importance that many of the educators recognize about knowing the preferences of learners and self-perception in learning motor skills (Lintunen, 1999). The aim of the study was to know, understand and compare the participative preferences in the learning of physical education between boys and girls in the primary and secondary education. The aim of the study was to determine and compare participative preferences on the process of learning physical education among students of elementary and secondary education. 561 students from 6 to 18 years old (277 boys and 284 girls) filled out the Graupera/Ruiz Preferences Scale of Social Interaction in PE Learning (GR). This instrument has 28 items divided into four categories: affiliation, competition, cooperation and individualism. The analysis shows how students score higher in boy's competition category than those done by girls. Data analysis shows how male students score higher in the factor of competitiveness versus the values presented by female students. The differences regarding the sex appear in numerous investigations showing how the girls are less competitive than the boys coinciding with Ruiz, Graupera, Moreno and Rico's research (2010)

Keywords: social interaction, learning preferences, affiliation, competition, gender.

INTRODUCTION

The role of personal preferences when facing learning tasks has been an issue that has concerned psychologists and educators. The study of significant preferences is becoming more widely explored (Ruiz, Graupera, Rico and Mata, 2004; Ruiz Moreno Graupera and Rico, 2010), endorsed by the importance, that many educators recognize, of knowing the preferences of apprentices, and self-perception in learning motor skills (Lintunen, 1999) and by the idea that understanding the social preferences of students in learning may have important implications for teaching and learning (Ellison, Boykin, Tyler and Dillihunt, 2005).

Johnson and Engelhard (1992) define them as inclinations toward the kind of strategies and structures that students create to optimize their learning. Those preferences are much more than mere appearances and are the result of the dynamic and complex interaction of the natural dispositions of the individual and their experiences and past learning, and they reveal in dimensions ranging from the cognitive to the physiological, through the affective and social.

Echeita and Martinez in 1992 distinguish two types of research in the field of learning interactions, a first line based on the pair student-teacher, and a second one which focuses its attention on the interactions that occur among students, showing how the relational processes that occur between them might have a positive or negative effect on the process of acquisition of different skills (motor, social and cognitive).

The learning that occurs in Physical Education is a complex psychosocial phenomenon that involves a learner's relationship with peers and the teacher and that in recent years has received special attention (Martinek, 1991; Cervello and Santos-Rosa, 2000). In this rising in works focused on learning P.E is seen as cooperative learning was the most interesting point of researchers, explaining ideas such as that competition is the antithesis of cooperative learning, not being supported in its entirety, since researchers such as Midura and Glover (1999) propose an intermediate point where they talk of a more enjoyable and effective learning with the presence of both kind of activities, either competitive or cooperative.

Despite the wide range of measuring instruments in the field of sport and physical activity offered by Ostrow (1996) and the latest innovations, there is a shortage of research seeking to know what the interactive preferences of students are when learning Physical Education (Ruiz et al, 2010), mainly due to the almost absence of valid instruments for them.

In this research we used the most complete instrument found in our field to measure perceptions and cognitions of schoolchildren about their interactive preferences or social interaction, which is GR Scale of Social Participation in Learning (Ruiz and Graupera 1997). These preferences were classified into four interactive dimensions or forms of interaction preferred, following the existing Echeita and Martin's theory (1992). The cooperative dimension, where individual achievement is contingent upon the whole, the competitive dimension, where collective goals are contingent on individual; individualistic dimension, that seeks to achieve an individual result and benefit, negating the importance of the rest of the members, and finally a new dimension that Graupera and Ruiz, (1997) contribute called affiliative, whose goal is the pursuit of happiness and acceptance.

METHODS**Sample**

Primary schoolchildren (N = 415) and Secondary Education (147) of both genders (277 boys and 285 girls) and aged between 6 and 18 years (M = 10.53, SD = 2.69) took part in this study. Out of the total, 402 were from metropolitan area, while the remaining 160 were from rural area. All were informed of the research applying the relevant permits for proper development. The application was carried out in PE classes using a research team member, not being any problems to note.

Instrument

In this study we used the GR Scale of Social Participation in Learning developed and validated by Ruiz and Graupera in 1997 and re-evaluated years after to improve its internal consistency and maintaining the same factor solution (Rico, 2003, Ruiz et al., 2001) to establish the social preferences of subjects at school age. The scale consists of 28 items and is divided into 4 dimensions of 7 items each: cooperative (I like to participate in group work), competitive (I like to do things better than the rest), affiliative (I work for a team so that they want to be with me) and individualistic (I like to work my way, without worrying about what others are doing). Each item is presented in a Likert scale of 4 points, in which 1 indicates strongly disagree and 4 the entire agreement

RESULTS AND DISCUSSION

After a descriptive and differential analysis, using as dependent variables the four dimensions that make up the instrument and the gender as the independent variable, tables 1 and 2 show how the male gender obtains significantly higher scores than girls in the competitive dimension.

Table 1 Descriptive Data

Dependent Variable	sex	Mean Limite inferior	Standard error Limite superior	Confidence interval 95%	
				Lower limit	Upper limit
COOPERATIVE	Boy	3.604	.035	3.536	3.672
	Girl	3.592	.034	3.526	3.658
COMPETITIVE	Boy	2.713	.062	2.591	2.835
	Girl	2.421	.060	2.302	2.540
INDIVIDUALISTIC	Boy	2.405	.058	2.290	2.520
	Girl	2.435	.057	2.323	2.548
AFFILIATION	Boy	3.010	.046	2.919	3.101
	Girl	3.020	.045	2.931	3.109

Table 2 Multivariate Contrasts

Effect		Valor	F	Gl de la hipótesis	Gl del error	Sign.
Sex	Traza de Pillai	.047	4.716(a)	4.000	379.000	.001
	Lambda de Wilks	.953	4.716(a)	4.000	379.000	.001
	Traza de Hotelling	.050	4.716(a)	4.000	379.000	.001
	Raíz mayor de Roy	.050	4.716(a)	4.000	379.000	.001

The data obtained do not venture into a field where there are many researches that provide information that helps us understand and endorse the reasons for these differences found.

After analyzing the differences in sport-physical practice among men and women aged 10-12 years, Cantó, García, López, & Miñarro, (2013), indicate that sports promotion in our country is run in an unbalanced way, as it responds to motivational orientations centered on competition and for subjects with high motor skill levels, which helps to explain our results, where the boys show a preference towards tasks that are more competitive, compare to the data obtained by the female gender. Not only the study of Canto et al, (2013) supports our results, but Moreno, Villodre and Galindo, (2006) also observed how males show a preferences for physical and sport practice corresponding to collective and competitive activities, such as football and basketball, while female teenagers and women show, both during and post-educational education, positive attitudes towards individual and aesthetic activities.

Studies such as those from Saenz-Lopez, Sicilia and Manzano (2010), show us how Physical Education teachers themselves show special emphasis on the development of content much more oriented to the preferences showed by the boys.

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CONCLUSIONS

We conclude that gender is a discriminating variable about preferences that physical education students show in the type of task and its social organization, during physical education classes.

These data encourage us to continue working in this direction, where students with a different educational stages can be compared, and so we can unveil a very relevant and useful information when facing the planning of a process of learning in a concrete level of education.

This is research is about supporting a research line carried out by Professor Ruiz and his research group for several years, adding variables that may affect the students' interactive preferences in Physical Education classes.

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