# 166 - ATTITUDE, PERSONAL PERCEPTIONS AND THE STUDENTS' BELIEF: HOW ARE THEY RELATED IN THE PHYSICAL EDUCATION?

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#### 1. Introduction

The research on the teaching crossed different development stages. Initially, it was searched for to define the good teacher's profile with the fundamental premise that the learning gain would be underlying to the teacher's personal profile (Hart, 1934 and Barr, 1979 in Medley, 1979). Afterwards the attentions moved for the study of the teaching method. By the comparison of classes taught through different teaching methods it was expected to find evidences to relate them with students' learning gain (Siedentop, 1998; Graham & Heimerer, 1981).

The study of teacher's behavior under the perspective of the process-product paradigm allowed a great progress of the research on the teaching, because it became possible to describe and to understand the complexity that characterizes the teaching-learning process in physical education context (Siedentop, 1998; Carreiro da Costa, 2006). However, in the last decades the research on the teaching developed from a mainly behavior perspective to consider, as well, the dimension interns of the individual involved in teaching-learning process. Thus, the process-product research, of behaviorist sight, it was enlarged by the consideration of pupils and teacher's cognitive processes (Clark & Peterson, 1986; Wittrock, 1986). Under the denomination of thought's paradigm, it emphasizes the role of the individual's beliefs, values, attitudes, motivation and the personal perceptions about your behavior during pedagogic relationship (Henrique, 2004).

Considering that the teaching-learning process is a human activity, the relation between thought and action assumes decisive importance. Teacher and pupil are seen as active individuals of this process, interacting and influencing each other in cognitive and behaviorist domains (Henrique, 2004).

# 1.1. The student's thought

The research about the student's thought has its basis in cognitive psychology, underline the attitudes, personal perceptions, beliefs and values like a mediator element between the teaching and learning, so it highlight the mutual influence that there's between the professor's behavior, the student's behavior and learning product in classroom. The studies accomplished under the focus of the student's cognitive mediation intends to contribute for the best comprehension of the teaching, examining how the teacher's behavior influences what the student speak, think, believe, valorize and the reflexes of this myriad of personal components about the academic performance. The process of construction of the knowledge depends in the active way as the pupils engages in the school activities, therefore, demanding your cognitive and motor involvement. The student's active role establishes when while processing the information, determine which stimulus will be treated and what learning will be accomplished.

### 1.2. Attitude, beliefs and personal perceptions

In the motivational model proposed by Iso-Aloha & St. Clair (2000), the attitude appears associated to values determinant of the motivation. According to the authors, the assumption of determined attitude is preceded the biological predisposition, social experiences and pupils' beliefs on the own competence. In Treavor, Graber, Hourner & Wiegand study (1998) amongst the 456 students from 6th, 7th and 8th grade, 85,5% of the students demonstrated a positive attitude toward physical education (PE). Dyson (1995) also identified pupil's positive attitudes toward PE because of the pleasant and funny atmosphere in which the activities occurred. The PE mobilized more positive feelings than other school experiences and, in the students' opinion, it should occupy more larger space in the school activities. Tjeerdsma, Rink & Graham (1996) found out a cultural hierarchy about the student's preferences for specific activities, explaining because they demonstrate more favorable attitudes to some contents. Motivation results from the interaction among volition need for achievement, perception of performance causes (attributions) and perceived competence to achieve performance (Piéron, 1999). The belief about the proper competence is associated to the conceit of self and refers to the student's judgment about the proper competence to accomplish different activities in a specific domain (Xiang e Lee, 1998). The belief about the proper competence influences steadily the way that the student react to the teaching (Bibik, 1999; Weiss). There are evidences of existence of relation among perceived competence, student's motivation, persistence and academic results (Xiang e Lee, 1998). According to Weiss (2000) the support and demonstration of confidence in children's capacities produce, generally, positive perception and consequently more motivation in order to maintain active.

Another focus from researches accomplished on the perspective of the student's thought looks for to analyze as the students interpret the pedagogic stimuli transmitted by the teacher. This is very important in the scheme in which the student perceives the happenings in class. In the scholar environment the teacher's behavior represents the fundamental element to influence the student's personal perceptions. The perception about teacher's behavior and expectations are critical while feeding student's feelings and personal beliefs, with straight consequences to students' self conceit and performance (Martinek, 1989). The climate, feedback and the support are factors that transport the teachers' expectations during the pedagogic relationship (Tauber, 1998). Climate refers to the socio-emotional atmosphere created by the professor usually transmitted in a verbal and a non-verbal way, for example, praise, smiles, moves of the head, visual contacts, or more intimacy with the students. The feedback transmits information of cognitive, motor and affective characters compliments and criticism to the performance. The support concerns to the encouragement and opportunities of the student's elucidation. On this basis, this research proposes to analyze the attitudes, beliefs and the student's personal perceptions in the PE.

The objective of this study is to characterize the students' attitudes, personal perceptions and belief in PE, as well as, to relate them in the search for explanatory associations that allow the inference about correlations among these variables

- 2.1. To describe the student's attitudes toward PE, their personal perceptions about the affectivity and pedagogical support given by the professor and the belief about their capabilities in PE.
  - 2.2. To analyze the correlations among student's attitudes, belief about the own competence, personal perceptions on

the affective climate and pedagogic support supplied by the teacher in PE.

#### 3. Materials and Method

This is a descriptive and correlation study. The descriptive research is to obtain information about the existent conditions regarding variables and conditions in a given situation. However, this is not restricted to the collection of data for description of the reality, but it can also be used for correlations and comparisons.

#### 3.1. Sample

The sample is convenient and it was constituted by 334 students of 6th, 7th and 8th grades (N=161 boys; N=173 girls) in public schools of Rio de Janeiro City, with age between 12 and 15 years. The realization of the study was authorized by the directors of schools, teachers and participant students.

#### 3.3. Instrument and data collection

We used previously validated questionnaire for brazilian samples with closed questions and option of answers in scale of type likert. The students were asked about attitudes toward PE (I like a lot... I don't like), personal perceptions about affectivity and pedagogic support supplied by the teacher (Always or almost always... Never or almost never) and their personal beliefs about competence in PE (Very good... Very weak). The questionnaire validation involved the analysis from specialists' jury and language validation for 6th, 7th and 8tn' language teachers. The reliability was obtained through test-retest (Carmo & Ferreira, 1998).

#### 3.4. Data collection and procedures

The questionnaire was applied by the researcher at the regular class time. Was established a protocol that involved the presentation of the research's aims, reading and elucidations about the questions. During your application the researcher was the disposition to elucidate doubts. The time of the students' answer varied between 15 and 20 minutes.

### 3.5. Data analysis

The analysis of the data comprised two stages. The first was the descriptive characterization through absolute frequency and percentage. The second involved association analysis among the variables through a correlation matrix.

#### 4. Results

We present initially the results concerned to the descriptive characterization of the variables in study and, afterwards, the relations between the student's beliefs and attitudes and their personal perceptions.

Concerning the attitude toward PE, 58,3% from the students answered that they like or like very much PE, while only 17,4% informed like a little or don't like PE (Table 1).

	Tabl	e 1. Var	iables c	characte	rization					
	1		2		3		4		5	
	N	%	N	%	N	%	N	%	N	%
e toward PE 1	26	7,8	32	9,6	81	24,3	107	32,0	88	26,3
ved competence 3	17	5,1	25	7,5	67	20,1	129	38,6	96	28,7
ved physical condition <sup>3</sup>	7	2,1	27	8,1	77	23,1	144	43,1	79	23,7
ption of pedagogic support 2	60	18,0	50	15,0	66	19,8	94	28,1	64	19,2
vity perception <sup>2</sup>	39	11,7	47	14,1	72	21,6	88	26,3	88	26,3
ntion of praises 2	65	10.5	60	18.0	128	38.3	16	13 8	3.5	10.5

n of praises 65 | 19,5 | 60 | 18,0 | 1 1= Don't like; 2= Like little; 3= Like so , so ; 4= Like; 5= Like very much.

In relation the belief in their own capacity, 67,3% of the students relates high feeling of competence in PE, considering themselves good or very good. On the other hand, 12,6% informed low feeling of competence, considering themselves weak or very weak. These results denote coherence with the belief about the physical condition for the performance in PE because 66,8% of the students believe to possess good or very good physical condition, while only 10,2% considered to possess insufficient physical conditions for the performance in PE.

Regarding the personal perceptions, the students were questioned how they perceived the pedagogical support (help during the activities development) and the affectivity manifestations (praises and affective relationship) from the teacher. In relation to perception of pedagogical support, 47,3% of the students answered that the teachers give help many times or always, and 33,0% perceive that "never or almost never" the teacher help them during the practices.

More than the half of sample perceives in a positive way the affective climate in relation to the teacher. In the investigated group, 52,6% perceive "many times or always" the occurrence of affective manifestations during classes while, contradictorily, 25,8% perceived "never or almost never". Although the positive sensation in relation to the affective climate with the teacher prevails, the results led us to believe that this feeling doesn't based exclusivity in praise uttered by the teacher in class. The results show that only 24,3% of the sample perceive as high the frequency of praises in class, while for 38,3% of the pupils perceive "sometimes" and 37,5% perceive that praises are uttered "never or almost never"

The analysis of correlation of attitude toward PE and perceived competence in PE with the other variables indicate a multiple association between the variables (Table 2).

Table 2. Correlation between variables											
	Attitude toward PE	Perceived competence in PE	Perception of pedagogic support	Perception of Affectivity	Perception of praises	Perceived physical condition					
ude toward PE	1	.45(**)	.26(**)	.31(**)	.33(**)	.21(**)					
eived competence in PE	.45(**)	1	.17(**)	.19(**)	.31(**)	.38(**)					

We can observe significative positive relations (p < .01) between the attitude toward the PE and the perceptions of pedagogical support (r = .36); and affectivity provided by the teachers, through praises (r = .33) or affectivity manifestations (r = .31) during the classes. We also verify significative positive correlation between the attitude toward PÉ and the feeling of competence of pupils in PE (r = .45). Beyond the relation verified with student attitudes, the belief in PE competence also appears significative positive correlation (p < .01) with the belief in the own physical conditions (r = .38); with perception of pedagogic support (r = .17), and affectivity manifestations (r = .19) and praises (r = .31).

<sup>1=</sup> Never/ almost never; 2= Rarely; 3= Sometimes; 4= Many times; 5= Always/ almost always.
1= Very weak; 2= weak; 3= Enough; 4= Good; 5= Very good.

#### 5. Conclusions

The results of the present study in general corroborate the previous others. Thus theoretical and empirical supports are obtained. The majority of the students manifested positive attitudes in relation to PE (Tannehill & Zakrajsek, 1993; Dyson, 1995; Gonçalves, 1998 and Pereira, 1995). The analysis of this variable is important because the attitude is directly related with the student's involvement in teaching activities and that is an important learning predictor.

Also in a correspondence with previous studies, the large majority of the students manifested the belief of possessing high competence and physical conditions in PE. In spite of correspondences between the real competence and that perceived by the student, in general these variables are predictors of the attitudes in PE and practice of extracurricular physical activities. The students with high feeling of competence tend to have a more affective involvement in these activities (Henrique, 2004). In this line, Silverman e Subramanian (1999) affirms that attitudes are formed from the beliefs, thus, the belief about object is determinant for the formulation of positive or negative attitudes in relation to the respective object. The significative relation between the beliefs and the attitude toward PE verified in this research confirm this idea, assuming that the student with high scores of perceived competence also maintained more positive attitudes in relation to PE.

The student's personal perceptions about the manifestations of affectivity uttered by the teacher were proportionally superiors to praises perception and pedagogical support. In fact, the informal environment PE classes; the largest intimacy and the interaction between students and teachers, favors the opportunity for the establishment of a more positive climate in these classes. This factor effectively incentives and contributes to the formulation of positive attitudes in relation to this discipline.

The personal perceptions about the praises given by teachers seemed fully justified. Thus the teacher should use this procedure in a parsimonious way, based on the student's performance and behavior in classes. The affectivity manifestation of the teacher influences the climate of the class and stimulates the student's participation, while the majority of praises assume the character of feedback. Consequently, considering the impact on the performance, we can't use frequently, because the indiscriminate emission can be perceived in a negative way by the students, considering that he also searches for external sources of feedback to evaluate the own performance, and formulate the belief about the competence in relation to the object.

Finally, the distribution of answers in relation to the perception of pedagogical support indicates that one third of the students perceived in a insufficient way the behavior of the teacher assigned to help the students with information which can permit them accomplish the tasks with success. Certainly the excessive number of students and scarce material in PE classes, limit teacher's effectiveness. However, this imposes the necessity of reflection by the teachers, searching methodological alternatives. For the institutions, the consequence is a necessity to provide better conditions to the development of the PE at school. Beyond these aspects, we believe that results of this study can contribute to sensitize the teachers about the importance of hearing student's aspirations in PE classes.

### 6. References

BIBIK, J. M. Factors Influencing College Students' Self-Perceptions of competence in Beginning Physical Education Classes. **Journal of Teaching in Physical Education**, *18*, p.255-276. 1999.

CARMO, H.; FERREIRA, M. M. **Metodologia da Investigação: guia para auto-aprendizagem**. Lisboa: Universidade Aberta.1998, 353p.

CARREIRO DA COSTA, F. Produção científica na área da educação física em Portugal. In: SIMPÓSIO LUSO-BRASILEIRO DA EDUCAÇÃO FÍSICA E DO ESPORTE, 2006, Seropédica. **Revista Universidade Rural: série ciências humanas e sociais**, v. 28, suplemento, 2006, Rio de Janeiro: Seropédica, 2006. p.1-38.

CLARK, C. M., & PETERSON, P. Teachers' thought processes. In WITTROCK, M (Ed.), Handbook of research on teaching. 3 ed. New York: Macmillan Publishing Company, 1986. p. 255-296.

DYSON, B. P. Students' voices in two alternative elementary physical education programs. **Journal of Teaching in Physical Education**, *14*, p.394-407.1995.

GÓNÇALVES, C. A. D. C. B. **Relações entre características e crenças dos alunos e os comportamentos nas aulas de educação física**.1998. Tese. 332p. (Doutorado em Ciências da Educação) - Faculdade de Motricidade Humana, UTL, Lisboa.

GRAHAM, G. Physical Education Through Students' Eyes and Students' Voices: implications for teachers and researchers. **Journal of Teaching in Physical Education**, *14*, p. 478-482. 1995.

HENRIQUE, J. **Processos mediadores do professor e do aluno**: uma abordagem quali-quantitativa do pensamento do professor, da interação pedagógica e das percepções pessoais do aluno na disciplina de educação física. 2004. Tese. 628 f. (Doutorado em Ciências da Educação) - Faculdade de Motricidade Humana, UTL, Lisboa.

ISO-AHOLA, S. E.; ST.CLAIR, B. Toward a theory of exercise motivation. Quest, 52,p.131-147.2000.

MARTINEK, T. J. Children's Perceptions of Teaching Behaviors: an attributional model for explaining teacher expectancy effects. **Journal of Teaching in Physical Education**, *8*, p. 318-328.1989.

MEDLEY, D. The effectiveness of teachers. In. PETERSON, L.P.; WALBERG, H. J. (Eds.), **Research in Teaching: concepts, findings, and implications**. Berkeley, California: McCutchan.1979. pp. 11-27.

PEREÍRA, P. A. S. **O Pensamento e Acção do Áluno em Educação Física**. 1995. Dissertação. 341p. (Mestrado em Ciências da Educação) - Faculdade de Motricidade Humana, UTL, Lisboa.

PIÉRON, M. Para una enseñanza eficaz de las actividades físico-deportivas. Barcelona: INDE. 1999. 314p.

SIEDENTOP, D. Aprender a Enseñar la Educación Física. Barcelona: INDE Publicaciones. 1998. 397p.

SILVERMAN, S.; SUBRAMANIAM, P. R. Student attitude toward physical education and physical activity: a review of measurement issues and outcomes. **Journal of Teaching in Physical Education**, *19*(11), p. 97-125. 1999.

TANNEHILL, D.; ZAKRAJSEK, D. Student attitudes towards physical education: a multicultural study. **Journal of Teaching in Physical Education**, *13*, p. 78-84. 1993.

TAUBER, R. T. Good or bad, what teachers expect from students they generally get!. **ERIC document** (ED 426 985), 1998. Disponível em: <a href="http://www.eric.ed.gov">http://www.eric.ed.gov</a> Acesso em 15Mar. 2006

TJEERDSMA, B.; RINK, J. E.; GRAHAM, K. C. Student perception, values, and beliefs prior to, during, and after badminton instruction. **Journal of Teaching in Physical Education**, *15*, p. 464-476.1996.

TREANOR, L.; GRABER, K.; HOUSNER, L. D.; WIEGAND, R. Middle School students' perceptions of coeducational and same-sex physical education classes. **Journal of Teaching in Physical Education**, *18*, p. 43-56. 1998.

XIANG, P.; LEE, A. The development of self-perceptions of ability and achievement goals and their relations in physical education. **Research Quarterly for Exercise and Sport**, *69*, p. 231-241.1998.

WEISS, M. R. Motivating Kids in Physical Activity. President's Council on Physical Fitness and Sports. **Research Digest**, 2000. Disponível em: <a href="http://www.fitness.gov/digest900.pdf">http://www.fitness.gov/digest900.pdf</a>> Acesso em 26,mai, 2002.

WITTROCK, M. C. Students' Thought Processes. In WITTROCK, M. (Ed.), **Handbook of Research on Teaching.** 3ed. New York: Macmillan Publishing Company, 1986. p. 297-314.

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# ATTITUDE, PERSONAL PERCEPTIONS AND THE STUDENTS' BELIEF: HOW ARE THEY RELATED IN THE PHYSICAL EDUCATION?

#### Abstract

The research on the pupil's thought highlights the attitudes, personal perceptions, beliefs and values as elements mediators between the teaching and the learning, as well as it points out the existent mutual influence between the teacher's behavior, the student's behavior and the product of the learning. The objective of this research was to characterize the attitudes, personal perceptions and the students' belief in the physical education, as well as to relate them for search of explanatory inferences. The sample was composed by 334 pupils of 6th, 7th and 8th grades. The data collection was accomplished through questionnaire with closed questions and answers in scale of the type likert. The results reveal attitude, beliefs and positive perceptions in relation to the objects in study. Relationships were significantly positive between attitude toward PE and perceived competence with the pupils' personal perceptions. This reinforces the importance of the positive interactions in teaching-learning process to stimulate attitudes and pupils' positive beliefs in PE.

Key words: Physical education; attitudes; beliefs.

# ATTITUDE, PERCEPTIONS PERSONNELS ET CROYANCE DÊS ELEVES : COMMENT RELATIONER AVEC LA DISCIPLINE DE ÉDUCATION PHYSIQUE

#### Résumé

La recherche sur lê pensée de l'eleve met em evidence lês attitudes, perceptions personnels, croyances et valeurs comme elements médiateurs entre le enseignement et l'apprentissage, bien comme denote l'influence reciproque existante entre le comportement du professeur, le comportement de l'eleve et le produit de l'aprentissage. L'objectif de cette recherche a été de caractériser lês attitudes, perceptions personnels et croyances dês eleves dans la discipline de éducation physique, mais aussi faire dês relations avec dês inférences explicatifs. L'échantillon a été composée par 334 élèves du 6émé, 7émé et 8émé années. La collecte dês donnés été fait au travers d'um questionnaire avec dês questions fermées et dês options de réponse dans l'echelle du type "likert". Lês resultats ont révélées l'attitude, croyances et perceptions positives par rapport lês objects de l'étude. Ont été verifiées dês relations três positives d'attitude par rapport la discipline et de la croyance de la competence avec lãs perceptions personnels dês lês élèves. Ceci a renforcée l'importance dês interations positives dans lê process d'enseignement et apprentissage pour stimuler des attitudes et croyances positives des élèves dans le contour de l'éducation physique.

Mots-clé: éducation physique, attitude, croyances

# LA ACTITUD, PERCEPCIONES PERSONALES Y LA CREENCIA DE LOS ESTUDIANTES: ¿CÓMO ELLOS SE RELACIONAN EN LA EDUCACIÓN FÍSICA?

# Resumen

La investigación sobre el pensamiento del alumno resalta las actitudes, percepciones personales, creencias y valores como mediadores entre la enseñanza y el aprendizaje, así como señala la influencia mutua entre el comportamiento del maestro, el comportamiento del estudiante y el producto del aprendizaje. El objetivo de esta investigación es caracterizar la actitude, las percepciones personales y las creencias de los estudiantes en la educación física, así como relacionarlos para la búsqueda de inferencias explicativas. La muestra estuvo compuesta por 334 alumnos de 6, 7 y 8 grados. La colecta de los datos se hizo a través de la encuesta con preguntas cerradas y respuestas en la escala del tipo likert. Los resultados revelan que son positivas la actitud, creencias y percepciones personales respecto a los objetos en el estudio. Las relaciones fueron significativamente positivas entre la actitud hacia educación física y creencia en la competencia personal, con las percepciones personales de los alumnos. Esto refuerza la importancia de las interacciones positivas en el proceso de enseñanza-aprendizaje para estimular las actitudes y las creencias positivas de los alumnos en educación física.

Palabras clave: Educación física; Actitude; creencias

# ATITUDE, PERCEPÇÕES PESSOAIS E CRENÇA DOS ALUNOS: COMO SE RELACIONAM NA DISCIPLINA DE EDUCAÇÃO FÍSICA?

### Resumo

A pesquisa sobre o pensamento do aluno destaca as atitudes, percepções pessoais, crenças e valores como elementos mediadores entre o ensino e a aprendizagem, bem como ressalta a influência mútua existente entre o comportamento do professor, o comportamento do aluno e o produto da aprendizagem. O objetivo desta pesquisa foi caracterizar as atitudes, percepções pessoais e crença dos alunos na disciplina de educação física, bem como relacioná-las em busca de inferências explicativas. A amostra foi composta por 334 alunos de 6º, 7º e 8º anos. A coleta de dados foi realizada através de questionário com perguntas fechadas e opções de respostas em escala do tipo *likert*. Os resultados revelam atitude, crenças e percepções positivas em relação aos objetos em estudo. Foram verificadas relações significativamente positivas da atitude perante a disciplina e da crença de competência com as percepções pessoais dos alunos. Isto reforça a importância das interações positivas no processo ensino aprendizagem para estimular atitudes e crenças positivas dos alunos no âmbito da educação física.

Palavras-chave: Educação física; Atitude, Crenças.