

ARTICLE

**THE RELATIONSHIP BETWEEN COMPETENCE, AUTONOMY, AND RELATEDNESS
SATISFACTION AND DISINTEREST IN PHYSICAL EDUCATION CLASSES IN
ELEMENTARY SCHOOL**

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ABSTRACT: This study shows causes for the lack of interest of sixth and ninth-grade students in physical education classes based on the satisfaction of Basic Psychological Needs (BPN) and by the interpretation of reasons given by students for being apart of subject classes. The sequential mixed method was used. The sample of the initial phase of quantitative characteristics (extensive) was composed of 153 students, followed by the intensive phase of qualitative nature, which had 12 students. The result shows that girls feel less attended to their BPN compared to boys, in sixth grade, with an emphasis on the competence dimension, expanding to autonomy and relatedness in the ninth grade. In line with the research objectives, this study indicates that lack of ability (competence), lack of diversification of contents beyond popular collective sports (competence/autonomy), and lack of opportunities to participate in decision-making (autonomy) are some of the reasons that lead to students to develop disinterest in physical education classes.

Keywords: motivation, basic psychological needs, teaching, learning, scholar physical education.

**RELAÇÃO ENTRE A SATISFAÇÃO DA COMPETÊNCIA, AUTONOMIA E VÍNCULOS SOCIAIS E O
DESINTERESSE PELAS AULAS DE EDUCAÇÃO FÍSICA NO ENSINO FUNDAMENTAL**

RESUMO: O artigo apresenta causas do desinteresse dos alunos de sexto e nono anos do Ensino Fundamental pelas aulas de Educação Física a partir do índice de satisfação de suas Necessidades Psicológicas Básicas (NPB), bem como da interpretação dos motivos atribuídos pelos alunos para o afastamento das aulas na disciplina. Recorreu-se ao método misto sequencial, em que a amostra da fase inicial de característica quantitativa (extensiva) foi composta por 153 alunos, seguida pela fase intensiva, de natureza qualitativa, que contou com 12 alunos. Os resultados demonstraram que as meninas sentem as suas NPB menos atendidas quando comparadas com os meninos, no sexto ano, com ênfase na dimensão competência ampliando para as dimensões autonomia e vínculos sociais no nono. Em sintonia

com os objetivos da pesquisa, este estudo indica que a falta de habilidade (competência), a falta de diversificação dos conteúdos para além dos esportes coletivos mais conhecidos (competência/autonomia) e a falta de oportunidades de participação na tomada de decisão (autonomia) se apresentam como motivos que levam os alunos ao desinteresse pela disciplina, incidindo na abstenção da participação nas aulas de Educação Física.

Palavras-chave: motivação, necessidades psicológicas básicas, ensino, aprendizagem, Educação Física escolar.

RELACIÓN ENTRE COMPETÊNCIA, AUTONOMÍA Y RELACIÓN SATISFACCIÓN Y DESINTEREST EM LAS CLASES DE EDUCACIÓN FÍSICA EM LA ESCUELA PRIMARIA

RESÚMEN: El artículo presenta las causa del desinterés de los estudiantes de sexto y noveno grado por las clases de educación física em función del índice de satisfacción de sus Necesidades Psicológicas Básicas (NPB), así como la interpretación de las razones dadas por los estudiantes para abandonar las clases en la disciplina. Se utilizo el método mixto secuencial, en el que la muestra de la fase inicial de característica cuantitativa (extensiva) estuvo compuesta por 153 alumnos, seguida de la fase intensiva, de carácter cualitativo, que contó com 12 alumnos. Los resultados mestran que las niñas se sientem menos atendidas en su NPB em comparación com los niños, en el sexto grado, com énfasis en la dimensión competencial, expandiéndose a las dimensiones de autonomía y vínculos sociales en el noveno. En línea con los objetivos de la investigación, este estudio indica que se presenta la falta de habilidad (competencia), la falta de diversificación de contenidos más allá de los deportes de equipo más conocidos (competencia/autonomía) y la falta de oportunidades para participar en la toma de decisiones (autonomía) como motivos que llevam a los estudiantes al desinterés por la disciplina, enfocándose en abstenerse de participar en las clases de educación física.

Palabras clave: motivación, necesidades psicológicas básicas, enseñanza, aprendizaje, educación física escolar.

INTRODUCTION

The lack of interest in physical education classes has been widely addressed in the literature (SILVA; SILVA; PAULA, 2016; CARDOSO; RICARDO; NUNEZ, 2014; SILVA; COFFANI, 2013), with greater emphasis on high school, since this is still the phase in which the phenomenon is more consistently presented. The investigations about the students' lack of interest in Physical Education classes in Elementary School, both in the international scenario (ŠTEMBERGER, 2014; SPENCER-CAVALIERE; RINTOUL, 2012;) as well as in Brazil (ANISZEWSKI *et al.*, 2019) suggest that this phenomenon is happening earlier and earlier, making it necessary to know in greater depth, from the students' perspective, the reasons, causes, and arguments that justify their attitudes and behaviors in school Physical Education at this level of education.

Studies looking at motivation in Physical Education in the last decade report the close relationship between basic psychological needs (BPN) satisfaction and increased intrinsic motivation and self-determined behaviors, in effect to participation and engagement in Physical Education classes (CHEN; HYPNAR, 2015; RUTTEN *et al.*, 2015). From the Self-Determination Theory perspective, the basic psychological needs of autonomy, competence, and relatedness must be satisfactorily met for the individual to develop and thrive (RYAN; DECI, 2000).

Although demotivation in Physical Education classes is a phenomenon with multifactorial causes, the literature points out the close connection between meeting the needs of competence,

autonomy, and relatedness with the increase of intrinsic motivation, propitiating self-determined behaviors prone to participation and engagement in activities. Thus, understanding the motivational aspects that converge to practices aimed at meeting the BPNs and that lead to involvement in educational activities is fundamental to promoting the adoption of effective strategies by teachers with a view to greater student engagement in the classroom.

Therefore, the objective of this study, in the first moment, was to characterize the magnitude of attention to the BPN perceived by the students of sixth and ninth years of Elementary School in school Physical Education, comparing it according to students sex and grade. In the second moment, having as reference the students who perceive themselves as more and less attended in their BPN, it is proposed to interpret the causes attributed to the behavior of students' withdrawal or abstention from Physical Education classes.

SELF-DETERMINATION THEORY

Self-Determination Theory (SDT) has been the theoretical framework most used in researches on motivation in physical education classes in contemporary times (ANISZEWSKI *et al.*, 2019; CHANG *et al.*, 2016; CHEN; HYPNAR, 2015; RUTTEN *et al.*, 2015; COSTA *et al.*, 2015). SDT is a dialectical approach to human behavior organized under six mini-theories that contain distinct theoretical features and are connected by the unifying concept of basic psychological needs satisfaction (BHAVSAR *et al.*, 2020).

According to SDT, self-determination comprises behaviors and skills that enable individuals to be the causal agents of their own future through intentional behaviors. Self-determined behavior needs to be autonomous and self-regulated, express psychological empowerment, and result in self-actualization. From this perspective, every individual has the innate propensity to develop self-determined behavior, meaning "since birth, people engage in activities that enable them to satisfy basic psychological needs: competence, autonomy, and relationship" (COSTA, 2015, p. 20). In this perspective, the individual's motivation is related to the satisfaction of these three components, which, when satisfactorily met, lead to health and well-being (RYAN; DECI, 2000).

From the perspective of SDT, the BPNs need to be satisfactorily met for the individual to develop and thrive (RYAN; DECI, 2000), with "Autonomy" being associated with the individual's perception of being responsible for their behavior; "Competence" being the engagement to participate in activities and accomplish tasks; and "Relationships" being the social relationships that are established between the subject and the community in which they live (DECI; RYAN, 2000). Chang *et al.* (2016) refer to the need for competence as feeling competent and capable in performing activities; autonomy as the possibility of having choice and control; and the need for relationships as feeling affiliated and belonging to the social context where one is inserted.

Research about motivation in physical education classes indicates that BPN satisfaction is related to self-determined behaviors and increased intrinsic motivation of individuals, bringing them closer to participation and engagement in the activities developed in the classes (CHANG *et al.*, 2016; CHEN; HYPNAR, 2015; RUTTEN *et al.*, 2015).

METHODOLOGICAL PROCEDURES

The method adopted in this research was the mixed sequential method. Both quantitative and qualitative approaches were used, as we understood that both were necessary to answer the study's questions. From this perspective, the research was structured in two phases: an extensive, quantitative phase, which falls within the assumptions of descriptive, explanatory research with resources such as questionnaires and mathematical treatment of the data, and another intensive phase, qualitative, of interpretative nature, in which the Dialectical Hermeneutic Circle (DHC) technique was used (GUBA; LINCOLN, 2011), followed by content analysis of the interview transcripts.

In the extensive phase, the research of descriptive and comparative nature was concerned with describing the characteristics of a certain population or phenomenon (elementary school students and motivational indicators) and also comparing the motivational parameters according to the year of schooling and sex of the participants. In the intensive phase, of interpretative nature, the Case Study

under the multicase typology (FLETCHER; MACPHEE; DICKSON, 2015) was adopted to deepen the knowledge about the perception of students regarding the satisfaction of BPNs, in addition to interpreting their beliefs about the causes they attribute to the lack of interest in school Physical Education.

The research sample was characterized according to the phases of data collection. In the extensive phase, 153 students from three schools in the Municipal Education of Rio de Janeiro answered the proposed questionnaire. Among these students, 69 (45.1%) were female and 84 (54.9%) male, as well as 68 (44.4%) from the 6th grade and 85 (55.6%) from the 9th grade (table 1).

The choice of educational units for the research development was made intentionally by the researchers meeting the criteria of accessibility both geographically and to the management team and teachers to ensure research development and optimize data collection. The choice of classes was made according to the schedule of the Physical Education classes, the teacher's work days, and the days set aside for collection by the researchers.

In the intensive phase, the dialectical hermeneutic circle technique was performed by 12 students from the sixth (n=6) and ninth (n=6) school years, who were selected by conjugating the personal scores of BPNP satisfaction and the profile of participation in Physical Education classes.

The selection of subjects for the qualitative phase of the research had the satisfaction score of the BPNs as a reference. The calculation of quartiles allowed the identification of the students with the lowest and highest feelings of satisfaction of basic psychological needs in each class, identified in the lower quartiles (below 25%) and upper quartiles (above 75%), respectively. Associated with this step, teachers were asked to rank, in each class, three students who participated most and three who participated least in physical education classes.

Then, the students selected in these quartiles were associated with the teachers' indication of the students who participated more and less in the classes, allowing, in the intensive phase of the research, to compose the sample with: a) three students from the sixth and ninth grades who combined high indices of satisfaction of basic psychological needs and higher participation in physical education classes; (b) three students from the sixth and ninth grades who combined low indices of satisfaction of basic psychological needs and lower participation in physical education classes (Table 1).

Table 1. Reference data for sample selection

School	Class	Participative Students ¹	Non-participative students ¹	BPN score quartiles ²	Students with high BPN scores ³	Students with low BPN scores ⁴	Selected Subjects ⁵	
							P	NP
School 1	Class 1 6th grade	119;120;128	112;122;123	≥48,5/ ≤37,5	115;119;121;127	117;122;125;133	119	122
	Class 2 9th grade	37;53;47	31;35;32	≥49,8/ ≤28,5	37;38;43;44;45 48;49;51;54	34;35;36;40;52; 56;59;62;65	37	35
School 2	Class 3 6th grade	91;96;106	110;101;103	≥45,0/ ≤36,0	92;95;96;98;99	94;102;103;104; 106; 107	96	103
	Class 4 9th grade	83;80;82	79;84;70	≥45,5/ ≤32,0	68;70;73;77;83	69;74;75;76;79;87	83	79
School 3	Class 5 6th grade	10;22;30	2;27;21	≥41,0/ ≤32,3	7;11;14;19;20;22	3;15;16;18;21;26;29	22	21
	Class 6 9th grade	139;142;150	136;144;149	≥48,5/ ≤28,8	139;146;148;154;15 8;160;161	144;145;147;152;15 5;162	139	144

Note: The numerical identification of the students corresponds to the order of their presence in the database; 1- Indication of the teachers preserving the order provided; 2- BPN scores in the upper and lower quartile limits; 3- Identification of the students in the upper quartile; 4- Identification of the students in the lower quartile; 5- P = Participants + high BPN satisfaction; NP = Non-participants + low BPN satisfaction. BPN = Basic Psychological Needs.

Source: Research data.

The instrument used in the extensive phase of the research was the BPNs in Exercise Scale (BPNES), adapted for the Portuguese language by Costa (2015), aimed at characterizing the satisfaction of the basic psychological needs of the 153 participants in the first phase of the research. In the intensive

phase, whose objective was to analyze subjective elements inherent to the perceptions of the subjects, we used the interview dynamics adapted from the DHC technique (GUBA; LINCOLN, 2011), in which each individual interviewed has the opportunity to express his or her interpretation of reality and, additionally, to position themselves before the manifestations of other subjects previously interviewed, through syntheses previously prepared by the researchers between each of the interviews conducted. The first interviewee, in the end, expressed himself about the summaries of all the interviewees.

The research project was approved by the Ethics Committee of the Federal Rural University of Rio de Janeiro (COMEP-UFRRJ) through opinion no. 895/2017, attached to process no. 23083.006865/2017-69, attesting to compliance with the ethical principles of the research following Resolution 466/12, which regulates research procedures involving human beings.

For descriptive statistical analysis, measures of central tendency and dispersion were used to characterize the level of satisfaction of the BPNs. The comparison of students by schooling and sex were verified through the non-parametric U Mann Whitney test given the absence of normality of the sample distribution. For the acceptance of significant differences, a probability of $p \leq 0.05$ was considered. Qualitative data were submitted to content analysis (BARDIN, 2011), aiming to interpret the causes and reasons explained by students for the behaviors observed in Physical Education classes. The cataloging and classification process of the qualitative data were performed in the MaxQda software, licensed and distributed by Verbi[®], Berlin.

RESULTS AND DISCUSSION

The presentation and discussion of the results are organized in two parts, considering the nature of the data. The first refers to the descriptive analysis of the general indices of satisfaction of basic psychological needs, followed by comparisons according to years of schooling and sex. The second part is dedicated to interpreting the causes that the participants attribute to the student behaviors of withdrawal or abstention from Physical Education classes.

Motivational indicators and attention to basic psychological needs

Considering the whole sample, the overall average obtained by the questionnaire indicates a moderate magnitude of 3.3 ± 0.78 . The general average reached by female students was 3.0 ± 0.69 , considered moderate, while, among boys, it was 3.5 ± 0.78 , considered moderate to high, denoting significant differences. By year of schooling, the overall averages were 3.3 ± 0.60 for the sixth grade and 3.2 ± 0.89 for the ninth grade, therefore denoting no significance of the difference found regarding the sense of BPN attendance from the perspective of the students of both years of schooling. Considering the overall results of the BPN dimensions, we found averages of 3.4 ± 1.09 in the competence dimension, 2.9 ± 0.92 in the autonomy dimension, and 3.5 ± 0.99 in the relatedness dimension.

The comparison between the indices of satisfaction of basic psychological needs by year of schooling (Table 2) indicated no significant difference in the dimensions of autonomy ($U=3,042.000$; $p=0.575$) and relatedness ($U=2,825.500$; $p=0.812$). However, concerning satisfaction in the competence dimension, the difference between sixth- and ninth-grade students was significant ($U=2248,500$; $p=0.018$), in which the attention to the competence needs to be perceived by sixth-grade students was higher than that reported by ninth-grade students, showing that younger students felt more contemplated in their competence needs in Physical Education classes.

Table 2. Comparison of overall BPN satisfaction scores by year of schooling

BPN	6th grade	9th grade	p-value
General	3.3±0.60	3.2±0.89	0.269
Competence (±DP)	3.6±0.89	3.2±1.19	0.018*
Autonomy (±DP)	2.8±0.82	2.9±0.99	0.575
Relatedness (±DP)	3.5±0.97	3.5±1.00	0.812

BPN = Basic psychological needs; = Sample mean; SD = Standard deviation; * Sig. to $p < 0.05$

Source: Research data.

According to the values presented in table 3, the perception of attention to BPN was significantly higher among boys compared to girls in the dimensions of competence ($U=1646,5000$; $p=0.000$), autonomy ($U=2170,000$; $p=0.007$) and relatedness ($U=2150,000$; $p=0.006$). These results indicate the need to observe the context of Physical Education classes and, from the girls' perspective, reflect on the detracting causes of the feeling of attention to their BPN. When investigating adolescent girls' perceptions, Yungblut, Schinke, and McGannon (2012) found that limited sports experiences and low perceived competence kept them from physical activity because they felt less skilled than their peers. The results also showed the positive influence of friends in practice environments, reinforcing the importance of relatedness in activities characteristic of Physical Education. Although the investigation did not take place in Physical Education, the activity's nature still resembles the discipline's context.

Table 3. Comparison of overall BPN satisfaction scores between male and female students

BPN Dimensions	Sex		p-value
	Male	Female	
General	3.5±0.78	3.0±0.69	0.000**
Competence (±DP)	3.7±1.08	3.0±0.95	0.000**
Autonomy (±DP)	3.1±0.89	2.7±0.91	0.007*
Relatedness (±DP)	3.7±1.00	3.3±0.92	0.006*

BPN = Basic psychological needs; = Sample mean; SD = Standard deviation; * Sig. to $p < 0.05$; **Sig to $P < 0.001$

Source: Research data.

The changes that happen in the classroom environment (i.e., the increase in the number of students per class, classmates who are not familiar, and teachers who are specialists in the subjects) were the reasons found by Knowles, Niven, and Fawkner (2011) for the decrease in girls' participation in physical activities. The authors emphasize the importance of students' participation in content choice (autonomy); the creation of a less competition-focused environment/climate - reducing the exacerbated demand for competence but prioritizing successful practices; and the recognition of the importance of the social support offered in the activities (relatedness). These strategies can increase BPN satisfaction and mitigate the withdrawal of adolescent girls from Physical Education classes.

When comparing the results achieved by sixth and ninth-grade male students, no significant differences were found between the indices of satisfaction of needs for competence ($U=833.500$; $p=0.714$), autonomy ($U=979.500$; $p=0.341$) and relatedness ($U=1.079.500$; $p=0.64$). Regarding the female students, considering schooling, significant differences were found in the satisfaction of needs for competence ($U=264.500$; $p=0.000$) and relatedness ($U=367.000$; $p=0.008$), in which sixth-grade students demonstrate feeling more met in these two dimensions than their ninth-grade peers. In the autonomy dimension, no significant difference was found ($U=579.500$; $p=0.947$) between the satisfaction indexes of sixth-grade students (2.7 ± 0.9) and ninth-grade students (2.7 ± 0.9), a dimension in which the lowest averages were observed among the three BPN in both school years (table 4).

Table 4. Comparison of BPN satisfaction considering students sex and grade

BPN Dimensions	Sex	6th grade	9th grade	p-value
Competence (±DP)	male	3.8±1.06	3.7±1.11	0.714
	female	3.5±0.59	2.6±1.02	0.001**
	p-value	0.015*	0.001**	---
Autonomy (±DP)	male	2.9±0.73	3.2±0.99	0.341
	female	2.7±0.92	2.7±0.92	0.947
	p value	0.135	0.024*	---
Relatedness (±DP)	male	3.5±1.17	3.9±0.91	0.064
	female	3.6±0.83	3.0±0.92	0.008*
	p value	0.664	0.001**	---

BPN = Basic psychological needs; = sample mean; SD = Standard deviation; * Sig. $p < 0.05$; Sig. ** $p < 0.01$.
Source: Research data.

These results show that between the sixth and ninth grades of Elementary School, there is a significant decrease in the perception of meeting the needs of competence and relatedness by girls in Physical Education classes. This result indicates that physical education classes become demotivating as girls develop cognitive ability and start to evaluate their sense of competence in tune with contextual and social factors (DIGELIDIS; PAPAIOANNOU, 1999) as they do not provide a positive motivational climate for their engagement. The feeling of inability to perform tasks generates emotional instability, influences social relationships, and leads to progressive withdrawal from the classes. The study of Knowles, Niven and Fawkner (2011) identified that the competitive climate and the level of demand of developed activities are factors that keep girls away from physical education classes, because they do not feel able to perform the activities successfully. The authors also suggest that more collaborative environments focused on developing competence and mastery would increase the feeling of well-being during the practice and the intrinsic motivation of girls in Physical Education.

The literature indicates that the evolution of age is associated with a decrease in perceived competence and the establishment of relatedness, besides emphasizing that physical inactivity and lack of interest in the practice are more observed in females (SALAZAR-AYALA; GASTÉLUM-CUADRAS, 2020).

Comparing the satisfaction of basic psychological needs between male and female students, exclusively in the sixth grade, the only significant difference occurred in the competence dimension, in which boys (3.8 ± 1.06) feel more met in their needs than girls (3.5 ± 0.59), with $U = 374.500$ for $p = 0.015$. Looking at the ninth grade results, statistical significance is observed in the differences of all BPN dimensions as a function of the sex of the participants. Thus, in ninth grade, boys felt more met than girls in the needs for competence ($U = 431.500$; $p < 0.001$), autonomy ($U = 641.500$; $p = 0.024$), and relatedness ($U = 457.000$; $p < 0.001$) (table 4).

Given these results, it is plausible to infer the divergence between the pedagogical and situational contexts between the sixth and the ninth grade, which show a flagrant disfavor in the attention to the girls' needs as they evolve in schooling. This may be due to the evident dichotomy between the playful-motor-recreational activities common in the initial grades of Elementary Education and that are still evident at the beginning of the second phase of this stage of education, in addition to the growing sportive, technician, and competitive approach adopted by most teachers in school Physical Education (FARIA; CAREGNATO; CAVICHIOLLI, 2019), as the years of schooling, evolve in this stage of education. The prioritization of contents that cater mostly to boys, the adoption of pedagogies overly focused on technical learning, and the competitiveness fostered in games (*ibidem*) induce an environment that stimulates social comparison and, consequently, excludes those who do not match the standard of competence valued in the school context established under this dynamic.

Knowles, Niven, and Fawkner (2011) argue that the transition between schooling stages becomes an important event in children's lives, as they have to deal with larger classes, establish social bonds with new peers, and have to deal with multiple classrooms that demand relationships with teachers from different curriculum areas. These changes significantly affect self-esteem, self-confidence, and perceived

competence, both academically and in body skills. For girls, the combination of factors inherent to the change of teaching segment and, in the scope of Physical Education, an environment with little diversification of contents and/or that stimulates the social comparison may result in low perceived competence, with consequences for other dimensions of the BPN.

In the investigated context, it is inferred that Physical Education has not contemplated the basic psychological needs of girls, especially at the end of Elementary School, showing coherence with the evidence that most individuals who withdrew from Physical Education classes were female. Perceived competence is associated with intrinsic motivation and engagement in learning tasks (SALAZAR-AYALA; GASTÉLUM-CUADRAS, 2020). These data indicate the need to reflect on pedagogical practices in the discipline, pedagogical isonomy to the specific needs of boys and girls, in order to ensure opportunities that guarantee them the development of motor and socio-affective skills in a democratic and socially supported environment, conducive to learning since the early grades of elementary school.

Implications of BPN in participation: listening to and interpreting student voices

This second part of the results deals with the interpretative analysis of 12 students' expression in the interviews in the dynamics adapted from the dialectical hermeneutic circle. To ensure the anonymity of the participants, codes were adopted to characterize the students who combined high and low perceptions of the BPN and profile of higher and lower participation in classes, respectively (table 1).

In the sixth grade, the criterion adopted for identifying participants with low sense of attention to BPNs and who did not frequently attend classes was the selection of three students, named 6thR1, 6thR3 and 6thR5. On the other hand, the criterion for identifying participants with a high sense of attention to BPNs and who frequently attended classes involved selecting three students, named 6thR2, 6thR4, and 6thR6.

In ninth grade, three students with low BPN satisfaction and infrequent class attendance were selected, named 9thR1, 9thR3, and 9thR5; and three students with high BPN satisfaction and frequent class attendance, named 9thR2, 9thR4, and 9thR6.

It is clarified that there was no manipulation by the researchers in the sampling procedure for the categorization of the students; therefore, representing the characteristics of the participants reflected in the answers to the questionnaire and in the identification of class attendance by the teachers (who did not have access to the results of the questionnaire), to which the gender dichotomy in the categorization of the participants is perceived per se.

Competence Dimension

The results described in the competence dimension by sex and grade of the students denote that this is a fundamental aspect in Physical Education classes, to the extent that it influences emotional stability, participation in the classes, the interaction among peers, the sense of social acceptance (as a criterion for inclusion or exclusion in the activities), affecting profiles directed to the participation or abstention in the classes according to the students' perception of their abilities and competence for the tasks.

It is noticed a higher competence and reports of positive experiences among male students in both school years, in general, correspond to the most participatory students in Physical Education classes. The girls did not infrequently present a feeling of low competence toward the tasks, and this may be due to the gap between the perceived competence and the competence required to perform the tasks.

Among the sixth-grade girls, it was assertively observed the valorization of competence as a parameter for participation in the activities. The positive aspects raised by the students refer to the mastery of elementary skills characteristic of playful activities, which are not always consistent with the systematic development, progressive in complexity and generalization of skills and competencies alluded to in the curriculum guidelines for the subject. The few positive manifestations denote that they are associated with the performance of common activities in previous years of schooling, such as burning, and are therefore the result of previous experiences.

Ah! I learned that I've been taking P.E. classes since I was a little girl, and it's something that all

the schools always do, right? It is a very famous game. So, since I was a little girl I've been playing, I'm always improving my skills (Female, 6thR₃, line 152-153).

When I don't understand the game very well, I stay out. I don't play, because I might mess up. Then I just stay here in the bleachers (Female, 6thR₃, line 215-216).

I've [been excluded] ... I think everybody goes through this. There is always that little game. Ah, you don't play well, you are not going to be on my team. There always is! (Female, 6thR₃, line 142-143).

Because we were playing a game of burn, so the ball was with me. But I kind of slipped and fell on the floor by accident, so I lost the ball. Then I never, never again, no, I didn't play for a while because I got shy, embarrassed, because people said I wasn't playing well (Female, 6thR₃, line 147).

The student's manifestations clearly show the relevance attributed by the young woman to the skills and competencies for the sense of success in the discipline. This sense is shown in two aspects, the first explicitly linked to the gap between her own skills and the demands required in the tasks, and the second concerns the association between the sociomotivational climate in the classes and the triggering of exclusionary contexts, connotation, to a large extent, resonant from interactions and social evaluations about the past experiences and, consequently, interpreted as negative.

A similar picture occurs with the ninth-grade girls. The negative reports about their own competence in the teaching tasks demonstrate their low feeling of competence, besides perceiving it as out of phase with the demands imposed by the proposed tasks that were considered to have a high level of difficulty. This perception may be generated by the greater cognitive capacity to evaluate themselves (compared to younger partners) in the context of the classes and the demands of the activities developed.

I don't do it because I have difficulty doing these things, I can't play ball, play volleyball (Fem. 9thR₃, line 128-129).

I particularly am like that, I don't like to do it because I don't know how to play soccer, I don't know how to play volleyball, I don't know how to do anything, so I stay there (Female 9thR₃, line 58).

In PE I don't do anything because I don't know how to do anything (Fem. 9thR₃, line 83).

It is important to consider that the lack of competence to master the contents is reflected in the progressive consolidation of a negative attitude towards the activities and, perhaps, the discipline. These excerpts also lead to reflection about previous experiences in the subject, which did not result in the development of skills and competencies necessary for learning. Therefore, schools and teachers of the subject should prioritize the systematization of content and curriculum development to progressively develop the basic skills required for the development of the tasks throughout the years of schooling. It was mentioned by 9R₁ that the difficulty in meeting the demands of the subject, especially in the sports content, contributed to the distance and lack of interest in the classes because she mentioned that if she felt competent in the activities, she could not sit still, just watching.

The feeling of inability and the feeling that they fall short of the requirements generate a negative emotional consequence from the interpretation of the impossibility of succeeding in the activities and lead to a lack of commitment to the subject, since they don't believe it is possible to learn and succeed during the classes, generating a negative attitude towards Physical Education.

It's very hard for me to give up something and feel weak, like I'm incapable of doing it. It's hard, you know? And I used to feel bad when I couldn't do the activities (Female 9thR₁, line 170).

I was never good at dancing, so I think I said I was going to come, but I thought it wouldn't do any good, that I would come and not learn anything. I think that was it... Ah, I don't know, I didn't really like dancing, so, I guess... (Fem. 9thR₃, line 296).

The positive manifestations in relation to previous experiences among the ninth grade students are presented in reports that refer to a higher level of participation in the previous years of schooling. However, the speeches refer to the feeling of incapacity to face the tasks, which leads us to reflect if the planning of the teaching contexts considering the students' level of development/knowledge. Unfortunately, research on school Physical Education has allowed us to observe practices characterized by low pedagogical intentionality in the treatment of the contents. Menech and Cardoso (2021) investigated the "non-class" for not being able to identify pedagogical principles in classes in the internship context. Machado *et al.* (2010, p. 132), already a decade ago, investigated the pedagogical disinvestment in school PE, or as they called it: the "non-classroom," treating them as "pedagogy of the shadow," represented by unpretentious teaching practices and little pedagogically objectified, that incur, among others, in the deprivation of students' learning of contents/skills. The development of the sense of competence and its consequences for student motivation involves the promotion of teaching environments identified with the five factors present in the concept of "class" proposed by González and Fensterseifer (2006, p. 739-740)¹. Educational contexts of this nature restrict the dedicated and committed engagement of a legion of students to the extent that the activities, due to the limited level of systematization and complexity, do not provide them with sufficient challenges for the cognitive and motor mobilization for new and more significant learning.

Well, here there are no demands because the boys just play soccer and don't demand anything. The teacher doesn't demand anything (Fem. 9thR₁, line 152).

What did I learn in Physical Education? Oh, I learned... Ah! I don't know, I learned nothing (Fem. 9thR₃, line 155).

Among the sixth-grade boys, an appreciation of competence was observed from reports expressing a high perceived competence and recognition of the importance of the ability to perform tasks, as well as a concern with performance. However, in some statements, the relativization of the feeling of competence became explicit, for a while the perceived competence is high in the practice of some contents, it was refuted when confronted with less favorable practice situations in other contents. The sixth-grade students recognize the importance of competence in Physical Education classes and relate it directly with the inclusion or exclusion of students in the developed activities, as well as identify the lack of ability as an obstacle to the participation of a part of the students.

I can do enough things, in this case it is easy, but also for that you need the skill (Male 6thR₂, line 142-144).

When I can't perform an activity, I get nervous. I get nervous² (Male, 6thR₆, line 84-88).

No, not everything I play well. Only in soccer I am good (Male 6thR₂ line 171-172).

Students are excluded from activities because they are bad, they don't know how to participate, you know?! Those things (Male 6th Rth₆, line 44-45).

They even want to play but can't do it, so they just sit there (Male 6thR₄, line 190).

The speech of 6thR₆ demonstrates that the contents restricted to the practice of traditional team sports (especially soccer) compromise the students' perception of success and, therefore, their engagement in the activities, implying a negative self-assessment of their learning progress in class.

¹ For the authors, the five parameters that define the "class" are: a) a living phenomenon; b) endowed with intentionality; c) the learnings and/or developments sought are fundamental for all students in the class; d) a class happens when it plays its role in the project that articulates the work in the medium and long term; e) a class supposes, on the part of the teacher, a project of mediation of that knowledge that it is intended that its students build and/or of the capacity that it intends that the students develop (GONZÁLEZ; FENSTERSEIFER, 2006, p. 739-740)

² Slang used by young people that means to be surprised or upset by something or a certain situation.

I consider our progress more or less, because we only play soccer, and sometimes we play volleyball... this kind of stuff (Male, 6thR₆, line 94).

Among the ninth-grade students, the incidence of reports showing high perception of competence was observed, however, relativized according to the content developed. In addition, one of the reports demonstrates the students' difficulty in performing activities in which they expected failure, influencing their attitudes toward Physical Education.

Ah! Some sports I'm good at, others I'm bad at: soccer I play more or less, handball I play well, volleyball I don't play very well, I don't know how to play properly (Male 9thR₄, line 99-100).

Some students have no ability, who are embarrassed to come in. There are grumpy students who like to talk, don't like to do anything, who participate and are grumpy. This student has no ability and is afraid because he doesn't like to be spanked (Male, 9thR₂, line 188).

The sources of information coming from the teaching context influence the competence perceived by the students in school Physical Education. For the ninth-grade boys, choosing teams for the sportive practice in the lessons represents a relevant source of information about their competence in the tasks, contributing positive or negative aspects. Those chosen first notice the appreciation of their skills, while those chosen last feel belittled. This event often leads students to associate their level of competence with contexts of inclusion or exclusion in the activities developed in class.

As argued by Digelidis and Papaioannou (1999) and Almeida, Valentini and Berleze (2009), the perception of ability tends to be self-assessed with greater accuracy as age advances. In the research conducted by Almeida, Valentini, and Berleze (2009) in the Brazilian context, the plateau for stabilization of perceived competence occurred markedly after the age of 11, resembling the age range of sixth graders in this study. This change is associated with the development of cognitive skills, mediating evaluations about past experiences, contextual and social factors determining their performance, as found in this study according to the nature of the activities, judgment of ability to perform tasks and emotional affectation by the social context promoted by peers.

Research under the Achievement Goal Theory adds important foundations to the understanding of motivation by clarifying the relationship of more or less differentiated conceptions about the notions of effort and success, as well as task complexity and skill level, being important to understand the conception of competence formulated by people (NICHOLLS, 1984). The less differentiated conception implies that skill level and task difficulty are interpreted based on one's own understanding and mastery of the task (mastery orientation). On the other hand, the more differentiated conception references normative evaluation in relation to group members (ego orientation).

Research is not conclusive about the differences in mastery or ego orientations as a function of age (BAENA-EXTREMERA; GRANERO-GALLEGOS, 2015; HIROTA, VERARDI; DE MARCO, 2012), but in relation to gender they suggest evidence that male individuals tend to show greater ego orientation (BAENA-EXTREMERA; GRANERO-GALLEGOS, 2015), to which they are presumed to cope better with the competitive environment. However, the more differentiated conception between ability and effort tends to keep them away from tasks in which they foresee imminent failure. In this case, the climate determining a competitive environment perceived by the girls may have been restrictive to their participation in class, since they evaluated that their abilities did not match the demands of the tasks and, thus, they deprived themselves of participation in order not to be ridiculed by their peers. As Duda and Nicholls (1992) indicate, a task-oriented climate is positively associated with satisfaction with school activity, and negatively associated with feelings of boredom in class.

Autonomy Dimension

In the autonomy dimension, the students' attitude towards the content and participation in decision-making during the educational process was taken into consideration. Among the sixth-grade girls, it was assertively observed the negative attitude and dissatisfaction regarding the soccer content frequently developed in the classes, reflecting a "soccer culture," accessible exclusively for boys. The privilege given to boys by giving them space to practice soccer seems to naturalize the secondary role of

girls in the classes. Alienated from the practices, they seem to understand as normal the situations in which they become spectators or interact with their classmates outside the school context (i.e., at the side of the court or in the stands), as interpreted in the speech of 6thR1.

Because the teacher only puts soccer, girls and boys. In my classroom, only two girls play. I think I only did P.E. two or three times this year (Female, 6thR₅, line 71).

But everyone does Physical Education. Only sometimes the boys are there playing ball and the teacher lets them, so all the girls stay there talking (Fem. 6thR₁, line 46).

The boys love to play soccer and the teacher lets them, so me and some girls sit there because we are not crazy either. When the boys are playing soccer, some boys are very aggressive, you know? So we just sit there (Fem. 6thR₁, line 32).

Because it influences all dimensions of BPN, it is understood as worrisome that the voice of the students still shows processes of generification of curriculum content, with tendencies to interpersonal violence. Wenez (2013, p. 4) identified that in the universe of children, soccer is a "boys' game" because it requires "more strength," it is "very violent," it awakens the adrenaline of boys, or they attribute them greater experience for the practice. Some categorized voices in the three dimensions of BPN explicit situations of physical (throwing the ball with disproportionate force) and psychological violence (intimidation, teasing, bullying), in addition to the deprivation of interactions in the school space that is understood to be social by nature. Therefore, the deprivation of the practice represents restrictions to the development of motor skills and competencies to the excluded ones; the game limits the autonomy of the girls or the less skilled in participating in the decisions of the disciplined planning due to a supposed inability, and restricts the social relations in class given the lack of opportunities to exercise social and emotional skills among peers.

As to the "participation in decision making," the statements of the 6thR₃ demonstrated the appreciation of the participation in decisions concerning the teaching of the subject and the teacher's incentive for this practice. However, the course of the interview showed that the opportunity to share decisions about the teaching/contents of the subject did not include the students on the sidelines. It calls our attention that the student did not perceive the teacher's initiative in sensitizing them to participate in the classes by talking about the conditions/factors that would motivate them to participate.

The teacher always asks what we think about the class, because if we don't like it he will try to change it, so I think this is very essential. But we always choose a little game whenever we can [...] not everybody talks because there are always those who are not in that little circle there. [The teacher] listens more to those always participating (Fem. 6thR₃, line 115-119).

Ah! I think I would sit down with the students who don't want to, who don't make a point of participating, try to understand their side, call, like, for a trial lesson (Fem. 6thR₃, line 105).

Among the ninth-grade girls, the excerpts extracted from the interviews made explicit the dissatisfaction with the contents developed in the classes. They indicated that the sportive character of the classes and the soccer culture kept the students away, generating a negative attitude towards the discipline. Although they recognize the alternation of the activities developed in the classes, they perceive that the contents remain restricted to traditional team sports and suggest the need for diversification beyond them.

Ah! Because I think most of the boys like soccer, but I think the girls don't like soccer, to stay, to play volleyball, that kind of thing, so most of the girls in my class sit around doing nothing (Fem. 9thR₃, line 54).

Here the teacher puts the boys on the court to play soccer and they take over the whole court. And sometimes it's volleyball for the girls, and I don't like it (Fem. 9thR₃, line 62).

Because I think that in my P.E. there is nothing but soccer, basketball and volleyball. I don't even think basketball! There is volleyball and nothing else besides that (Fem. 9thR₃, line 273).

Because every class the teacher gives a new sport, but not everyone likes sports (Fem. 9thR₅, line

193).

Sometimes, if there was this stretching thing, I think we would do it. These gymnastics I think the girls would do more (Fem. 9thR₃, line 62).

The female students do not perceive opportunities to participate in the Physical Education classes and attributed importance to the possibility of being heard in relation to the class contents. The reports denote that giving their opinion about the contents would provide more comfort to the students who do not take the class, stimulating their involvement in the activities.

I would put some exercise that they like to do in Physical Education, you know? Like, what do you like to do? Ah, I like to dance. So, dance class in P.E. for the girls and soccer for the boys. Yeah, I want to do gymnastics. So you do gymnastics, understand? These are things that were done before, but in other schools (Fem. 9thR₃, line 105).

I would change, I think the classes, what they go through in Physical Education. I would try to give more chances to those who don't want to do anything, understand? (Fem. 9thR₃, line 101).

I would try to talk to the students to see what they think, what they want! No? Ah! Ok, here I don't know what [a certain activity] for whoever wants it! I would make them feel as comfortable as possible in PE class (Fem. 9thR₁, line 212).

The students' speeches allow us to deduce the lowest value given to Physical Education and lack of commitment to classes, showing a gradual lack of interest in the subject. This may be related to the concept of meaninglessness³ which represents the lack of meaning attributed to the subject by the students, generated from experiences in contexts where Physical Education did not result in significant learning.

I think that, after a while, I lost the will to participate, because I really liked Physical Education. I think that I lost the will to participate. I just kept falling and falling and today I don't do anything, you know? Then time went by, and I started to leave Physical Education aside (Female 9th grade₁, line 190-201).

Ah! physical education for us nowadays is to go up there [court] to stay on our own time, because we don't do anything! Just talking and that's it! It is a free time for us. We don't get there and exercise, that kind of thing (Fem. 9thR₃, line 191).

The boys in the sixth grade were selective in their attitudes towards the contents developed in the classes, which became determinant for the option of participating or not in them. Such attitudes may be related to the relativization of the sense of competence, as seen in the analysis of the competence dimension in the previous section of this work. The degree of engagement in the tasks varies, therefore, according to the content of the class, not infrequently with soccer being the most preferred modality.

Depending on how the class is, for example, the kids in the classroom, the boys in the classroom, if it's volleyball, any other kind of sport other than soccer, they don't do it. They think that Physical Education is just playing ball, just playing soccer (Male, 6th grade₂, line 57-63).

The ninth grade boys also showed a positive attitude towards the contents developed in Physical Education classes, however, they recognize different attitudes according to gender, besides that the prevalence of sport in the classes leads some students to withdraw. They also showed they perceive opportunities to share the decision making in the classes, although they express casual and opportunistic opinions shared with the teacher. Thus, the students' perception of the openness provided by the teacher does not necessarily mean the sharing of teaching decisions, but rather interlocutions focused on practical situations that denote the teacher's receptive attitude aimed at favoring interactions with the students and establishing a positive atmosphere during the class.

³ Concept used by Carlson (1995) to understand the process of alienation of students in Physical Education classes that refers to the lack of attribution of personal meaning to what is developed in the discipline.

Ah! Because it is cool, there are sports, several activities to do. I like PE classes, sports, soccer, handball, volleyball, basketball [...] the teacher does several weekly activities. One week handball, another week soccer (Male 9thR₄, line 50).

[...] male students like sports much more, they like Physical Education more, right? When the teacher takes the court and gives it to the girls, burns, volleyball, handball, the students start to dislike it (Male 9thR₂, line 33).

Those who don't do [the class] never give an opinion (Male 9thR₄, line 35).

The professors usually listen to opinion, and I will tell you, it even seems that the students are professional technicians because they talk a lot. Have you never seen a student talking? Ah, he has to go there, teacher, I don't know what. On the bench, then, when he's on the bench [...] (Male 9thR₂, line 105).

In the game, there is a lot [of student opinion], but in class we also give our opinion [...] there is a lot of student opinion. The teacher listens. Sometimes he listens, so, sometimes the opinions are a little clueless (Male 9thR₂, line 109-113).

Analyzing the content of the codified segments in the autonomy dimension, it was noticed that girls of both school years showed dissatisfaction with the contents developed in Physical Education, not feeling their needs contemplated with the activities developed in the classes. Regarding the boys, they show more positive attitudes towards the contents and discipline when compared to the girls. However, they also show negative attitudes towards the contents that are not their preference.

The manifestations of the boys and girls did not reveal the existence of spaces provided by the teacher for sharing decisions about how teaching is developed or the nature of the curriculum contents developed in the classes.

The less favorable attitude to certain contents of Physical Education, in addition to being due to issues related to their competent domain, derives from their repetition during the stages of schooling, as well as the inadequacy of pedagogical strategies for their development, therefore, determinants for the students' disinterest in classes (BETTI; USHINOHAMA, 2014; MACÊDO *et al.*, 2018). The study of Tenório and Silva (2013) identified the lack of content diversification as one of the factors for the students' disengagement from Physical Education classes. The diversification of the contents implies the possibility of expanding the attendance to the student's needs and, thus, involving him/her in the teaching tasks. Although the curriculum proposals of the education systems for Physical Education currently present more content diversification, teachers still evaluate them as insufficient (MARANI; SANCHES NETO; FREIRE, 2017). However, teachers still enjoy autonomy that allows them to dialogue with students to adjust the content planning and the way activities are developed according to the students' interests and needs.

The attitude represents a pre-command of the behavior, being necessary to consider it in the discipline's selection and development of the curriculum. Confirming this assertion, in Nascimento *et al.* (2007), the lack of affinity with the contents, among other factors, was determinant for the students' disaffection from Physical Education classes. The cited studies suggest the adoption of an open attitude by teachers so that the choice of contents happens through a participatory planning process, from the expansion of communication channels with students so that they have more possibilities to express their interests and expectations regarding Physical Education.

Increased student participation in decisions regarding the development of physical education classes is related to increased intrinsic motivation and self-determined behavior of students, as presented in the study by Chang *et al.* (2016). Increased intrinsic motivation and self-determined behaviors lead to increased predisposition for participation in activities and sense of responsibility for their school performance.

Adopting collaborative planning would mitigate the problems of identifying the students with the contents developed in the classes. However, it is worth mentioning that the imminently negative perception of the contents by the students who do not participate in the classes may be related to the lack of adequacy of the level of demand of the activities to their ability, requiring a systematized planning of the classes in order to increase the chances of success.

Relatedness Dimension

Among the sixth-grade girls, the incidence of negative aspects was observed in the categories of analysis called "reaction in practice situation" and "relationship among peers," showing that they seem to be more sensitive to this context. Although a student's speech showed the recognition that the reactions in practice situations are more intense among boys, the girls expressed greater susceptibility to unfavorable contexts for participation in their reports. When social environments do not offer emotional security, interactions tend to generate anxiety and stress.

Sometimes, when it's a boy they make fun of him more than a girl, because girls don't care, people [...] (Female, 6th grade₅, line 119).

There are people who, like that, when they lose they get all sad, and even more when they are teased. And if a person makes fun of you? How do you feel? Like this, first day of school, your team lost and the person you've never seen in your life made fun of you, then for the rest of the year you'll feel bad for that person and you won't want to make friends with them (Female, 6th grade₅, line 134).

The other day there was a case where the boy caught the ball and hit it so hard that he hurt his classmate, that was like, people! (Female, 6th grade₁, line 60).

Regarding teacher-student relations, the sixth-grade girls recognized the importance of the bonds established with the teacher to establish a safe and favorable environment for participation and learning. The speeches of some students indicated that they perceive the teacher's attention focused on the more skilled students who participate in class, showing some resentment and causing insecurity for those who do not feel contemplated by the teacher's attention and stimulus. Students feel secure when the teacher shows they care, listen to their demands, and try to meet their expectations.

Ah! It's that there are usually a lot of students, the experimental class would be for those who don't want [certain content] and he [the teacher] would dedicate himself more to them, show that he cares, it would be different (Fem. 6thR₃, line 106-107).

Ah! He pays a lot of attention. There are some students who are not dedicated, then he stays in the middle, then there are students who are dedicated, then he pays a lot of attention... he always shows that he likes the student (Fem. 6thR₃, line 20).

Ah, it depends on the teacher. There is that student that every teacher always 'pulls the bag'⁴, right, because he plays well, because he always makes sure to participate, shows interest (Fem. 6thR₃, line 175-177).

So when he sits down and talks to us, tries to understand our side a little, gets into our world, then I think he ends up influencing us a lot [...] he says: Ah! The teacher is cool, let's play (Fem. 6thR₃, line 214).

Among the ninth grade girls, negative aspects were observed regarding reactions in practice situations and peer relationships. The contexts of criticism and mockery in class as a reaction to unsuccessful activities conveyed insecurity and caused them to withdraw from class due to embarrassment. It was noticed that the influence of peers for the withdrawal from classes happens intensely, indicating that friendships can induce participation or the withdrawal from classes and influence the attitude towards discipline.

Sometimes you don't know how to play. Then the others make fun of you and you don't do it, you get embarrassed. I think this is ridiculous, making fun of others because you can't do it, because you have difficulty. (Female, 9th grade₅, line 32)

But when one can't [do some activity], they get teased (Fem. 9thR₁, line 230).

Ah! They always make fun of their classmates, they make fun of them a lot, they talk about them a lot (Female 9th grade₃, line 161).

⁴ An expression used to refer to students who make an effort to please their teacher.

I think if all my friends that I talk to did it, I think I would too! I don't know, I think I would, but they don't, so... (Fem. 9th R₃, line 185).

I think so, if my friends participated more, I think I would want to participate yes (Fem. 9thR₁, line 268).

The manifestation of the ninth-grade students about the teacher-student relationship makes clear two apparently antagonistic interpretations. One indicates the recognition of the influence of the teacher and its importance in the definition of the attitude toward the subjects, while the other denotes that this influence was not enough for the participation of these students in the lessons of Physical Education. The report of one of the girls indicates that in Physical Education the influence of the teacher for the participation in the lessons is successful only with the boys.

The teacher influences, helps. Especially teacher João⁵, who is cool, the teacher teaches well (Fem. 9thR₅, line 163-167).

The teacher relationship I think helps a lot too. In the subjects, in general. I think it influences (Fem. 9thR₃, line 292).

José tries very hard to get us to do things, to ask us to do things, but we really don't do them. But it doesn't work with the girls. Only for the boys really (Fem. 9th grade₃, line 191-195).

Only one student clearly demonstrated that, although she perceives the positive influence of the teacher in other subjects, the same does not apply to Physical Education. In her reports, the student says that any attitude from the teacher would not be enough to make her participate in the classes.

I don't know, maybe it's the teacher, the way he explains it, I end up liking the subject (Female 9th grade₁, line 21).

In what way? None, because I don't have much contact with her, with the teacher [...] even being close, I wouldn't have incentive to take the class (Fem. 9thR₁, 269-272).

In relation to the sixth grade boys, one can see that there is an interdependence of relatedness with competence, in which the students who are able to meet the demands of the activities developed, show greater security for the establishment of bonds and sense of belonging, recognizing the sports activities as a means of socialization; on the other hand, for the less skilled students, the environment lacks security for them to develop socially, connoting a negative motivational climate and the withdrawal from classes.

Because we are playing ball like that. Then there's the enemy next to us, and if we give them a pen⁶, a dribble like that, they start to laugh and get along (Male, 6th grade₆, line 134).

Yeah, kind of bullied by his friends, and the kids, because he doesn't know how to play well, so they get upset because he doesn't know how to play (Male, 6th grade₄, line 220).

The speeches of two students showed differentiated behavior by overlapping relatedness to competence in some moments, valuing emotional security, realizing the importance of offering security to the less skilled - dissonant from the negative climate that others try to implant; and reaction of respect to *fair-play* and human values with peers, being these factors that positively influence the motivational climate of the class.

I would call him to play, if the others were making fun of him, I would take those who were making fun of him and let him sit there (Male 6thR₄, line 232).

I would choose based on the kids I get along with the most in class, because when I'm playing ball with them, I always play with the ones I get along with the most (Male 6thR₂, line 77).

Among the ninth-grade boys, the interdependence of skill with social bonding was even more evident. The reports express that the students who attend the classes and are considered skilled have

⁵ To preserve the identity of the individuals quoted in the interviews, all names used in the text are fictitious.

⁶ A type of soccer dribbling in which the player throws the ball between the opponent's legs to overcome him.

more possibilities to socialize. This endorses the perception of Physical Education as a favorable space for the establishment of social bonds. However, for this to happen, it requires the establishment of a motivational climate that values learning in an environment where students have the possibility of being successful in the practices and feel capable.

He played on my team, I didn't even talk to him and started talking to him because of PE (Male 9thR₄, line 126).

The skill. It doesn't matter if the kid is cool as a person, if he is great as a person, if he is smart, if he is clever, that he is going to be popular [if he is skilled] (Male 9thR₂, line 150-151).

I didn't talk to the kid, I never talked to him, until one day he called me to join his team, and he started talking to me and I talked to him, until a friendship was created, you know? (Male, 9th grade₂, line 157).

Students recognize that negative reactions to practice situations restrict participation and are one of the excluding factors in Physical Education classes. By the incidence of reports which point complaints and curses as reactions to unsuccessful activities, this seems to be prevailing in the atmosphere of Physical Education classes, especially in this year of schooling. It is worth mentioning that the students' manifestations express narratives in the third person, which presupposes that they perceive occurring with the less skilled pairs in class, and not exactly experienced by them. Even though they supposedly consider themselves more competent, they recognize the motivational climate unfavorable to the less skilled.

If he doesn't know how to do the activity well, if he doesn't really have the ability, if he has no notion, they laugh, they make fun of him, they make fun of him (Male 9thR₂, line 147).

They get a little irritated, saying that the person is bad, doesn't play anything, they keep saying that (Male 9thR₄, line 111-112).

Although the competence is a relevant aspect for the establishment of relations in the lessons of Physical Education, some reports show that the students of the ninth year recognize the influence of personal relations in front of the activities in the subject. They express situations in which friendship prevailed, stimulating participation, and situations in which there was exclusion or withdrawal from activities due to the nature of the social bonds. The reports of the 9th grade student₂ express different reactions in which interpersonal relationships were determinant for some behaviors perceived in class, namely: solidarity - by overcoming competence in favor of peer relationships; feeling of insecurity promoted by bad relationships; difficulty in establishing relationships with individualistic peers; and, discrimination and exclusion due to the social relationships established with peers.

If a friend of mine was left out I would pick him just so I wouldn't see him sitting down (Male 9thR₂, line 43).

There are also some people who are unpleasant, who make me a little bit dislike coming to school (Male 9thR₂, line 14).

There is no teamwork, you know, they only think about the goal, they, they are very individual (Male 9thR₂, line 55).

The kids also don't like him, don't call him because they don't like him, that was very common in my classroom with Luciano... I don't know if you know... nobody chose him because he was gay and bad, he was boring and nobody liked him, so nobody chose him (Male 9th grade₂, line 59).

Some reports from the ninth grade boys allowed us to understand that girls are more susceptible to the influence of social relations in the environment of Physical Education classes, associating them with the participation profile.

Girls pick their friends first in teams. This is true. She chooses the friends who sit next to her. [...] The other friend says: Ah! Pick the one over there (Male 9thR₆, line 205-210).

Even more so among girls: Ah! Are you going to do it? No? Ah! Then I will also do no (Male 9thR₂, line 210).

Analyzing the content of the excerpts categorized in the dimension relatedness, it was observed that the social relationships established in the classes influence the participation or the withdrawal from Physical Education classes. The incidence of negative aspects is observed in reports that express vexatious or embarrassing attitudes in practice situations, existence of conflicts or difficulty of interaction with classmates in the school environment, the influence of classmates for the withdrawal from classes, negative impressions in relation to the teacher's figure, and indifference towards the teacher's actions.

Among the girls, from the sixth to the ninth grade, one notices the soul influence of friends for class participation. Regarding the teacher's stance, the sixth grade girls demonstrated a need for attention and affection, while the ninth grade girls focused only on the need for social recognition from the teacher, for example, providing space for participation in class decision-making.

Among the boys, it was perceived that the relationship between relatedness and competence becomes more evident in the ninth grade, however, they were shown to remain sensitive to friendship bonds in peculiar practice situations.

The social bonds that are established in the classroom environment are the backdrop for developing the sense of security necessary for healthy growth, understanding that people need to feel connected to and accepted by the individuals who share the same context. When these relationships are thwarted, they affect, in part, the individual's emotional balance and overall well-being. Students accepted in relationships develop a positive orientation toward school, schoolwork and activities, and teachers. Children rejected by their peers perceive school unfavorably, miss classes, and perform at lower levels.

The study by Torrado *et al.* (2016) examined the influence of perceived peer support for physical activity. The results imply that students with higher rates of physical activity also had higher perceived peer support for practice, suggesting that this influence should be considered in intervention programs for the promotion of school and out-of-school physical activity.

The support offered by the teacher directly influences students' involvement with school and engagement in school activities. The quality of this relationship is influenced, to a large extent, by the teachers' motivational style, revealing itself as the main source of satisfaction or frustration of students' psychological needs. In the educational context, the behavior of teachers and classmates influences students' motivation.

Perceived security in students' relationships with parents, teachers, and peers is associated with autonomy, internal control, good relationships with authority figures, and adequate levels of anxiety. Feeling insecure is linked to low self-concept, inability to act independently, and difficulty conforming to norms. Students who are secure with their parents and teachers are more positive about academic failure, autonomous, engaged in learning, and feel better about themselves.

CONCLUDING REMARKS

The proposal to research the motivation of students in the sixth and ninth grades of elementary school, besides the interest in investigating the second phase of this stage, aimed to apprehend perceptions, attitudes and behaviors of students inserted in different contexts (beginning and end of elementary school) and, consequently, in different stages of development because the theories and studies on motivation inform different motivational profiles in these contexts and conditions. Thus, we intended to know to what extent students feel met their basic psychological needs at the beginning and end of the second segment of elementary school.

In response to the initial objective, the first phase of the research allowed, in the investigated context, to know the magnitude in which all students conceived the fulfillment of their basic psychological needs in school Physical Education. The mean score of the BPN, gathering its dimensions and considering all participants of the research, shows moderate levels of motivation and attendance of BPN in both years of schooling. Also the magnitude of the dimensions of autonomy and relatedness were presented at moderate levels and were undifferentiated in the sixth and ninth grades; however, the moderate to high sense of competence in the sixth grade was higher than the moderate index reached by the ninth-grade students.

The interpretation of moderate levels of motivation, endorsed by the students' manifestations shows the existence of significant margins for the improvement of motivational levels, in order to stimulate more student engagement in school physical education. The students' reports lead to

conjectures of curricular practices based on ludo-recreational activities that are unsystematic or restricted to the content of classical team sports, commonly called "magic square" comprising soccer, basketball, volleyball, and handball, when not aggravated by the exclusivity of soccer. Promoting greater involvement of students in Physical Education classes requires teachers to adjust pedagogical procedures so that students perceive high possibilities of success in challenging tasks, feel valued in their positions and opinions, and emotionally supported and affiliated to social groups in class.

Comparing male and female participants, it was observed that boys felt significantly more motivated and met in their basic psychological needs than girls, with moderate to high indicators in the competence and social ties dimensions and moderate in the autonomy dimension. Girls felt moderately motivated and met in their basic psychological needs for competence and social ties, and moderate to low autonomy.

The association between the years of schooling and the sex of the participants allows for important inferences. Boys feel more competent than girls in the sixth or ninth grade. While among boys one observes the preservation of moderate to high sense of competence in both years of schooling, among girls, one observes the depreciation from moderate sense of competence in the sixth grade to low moderate in the ninth grade. The sense of attention to autonomy is moderate among boys and higher in the ninth year of schooling. In contrast, girls maintain the sense of autonomy at a moderate to low level in both years of schooling in school Physical Education. Regarding the needs of relatedness, boys show a high sense of class affiliation, being even higher in the ninth grade, phase in which the feeling of social belonging is significantly higher than that of girls.

The second part of the research answers the final complement of the proposed objective, translated into the following question: What are the causes that keep students away from Physical Education classes in the perception of students with high and low sense of attention to BPN?

The satisfaction indexes of the competence dimension presented a statistically significant difference between boys and girls, a difference endorsed by the intensive phase of the research in which it was noticed, through the reports, the girls' feeling of inability to meet the demands of the activities developed in the classes.

Thus, two conclusions for reflection emerge from this investigation: the low satisfaction of the girls' need for competence in the sixth grade may be related to the predominance of sports, more specifically the practice of soccer, in the context of the classes; and/or that the Physical Education classes have not provided adequate conditions for the development of girls' competences, even from the early years of elementary school.

It is plausible to consider that the relationships established in Physical Education classes influence the students' attitude towards the subject, however, they are not solely determinant for the withdrawal from the classes, since the negative aspects of social relationships observed in this research were mostly related to the lack of ability, and can be attenuated with the teacher's interference and the establishment of a constructive and collaborative motivational climate.

In line with the research objectives, this study indicates that the lack of ability (competence), lack of diversification of the contents beyond the most well-known team sports (competence/autonomy), and the lack of opportunities to participate in decision making (autonomy) are presented as reasons that lead students to lack of interest in the subject, resulting in abstention from participating in physical education classes.

It is also considered important to recommend research investigating the compatibility of teaching actions with the students' progress and the possibilities of their full integration into the activities and the class.

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AUTHORS' CONTRIBUTIONS

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Author 2 - Data collection, data analysis, and writing the text.

DECLARATION OF CONFLICT OF INTEREST

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