



The importance of Physical Education classes in the socialization and interaction of children at school in relation to time in the classroom and break

A importância das aulas de Educação Física na socialização e interação das crianças na escola em relação ao tempo em sala de aula e intervalo

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DOI

10.12820/rbafs.27e0288



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ABSTRACT

The study aimed to identify the influence of physical education on socialization among students in relation to classroom time and recreation. Quali-quantitative observational research was carried out with descriptive analysis of the data in a private school in Petrolândia, Pernambuco, Brazil. The results of the research show that Physical Education classes promote greater interaction among students. In conclusion, it is observed that physical education classes are of fundamental importance for the interaction of students within the school environment.

Keywords: Early childhood education; Social development; Physical education.

RESUMO

O estudo teve como objetivo identificar a influência da Educação Física na socialização entre os escolares em relação ao tempo de aula e do recreio. Foi realizada pesquisa observacional quali-quantitativa, com análise descritiva dos dados, em uma escola particular de Petrolândia, Pernambuco, Brasil. Os resultados da pesquisa mostram que as aulas de Educação Física promovem maior interação entre os alunos. Em conclusão, observa-se que as aulas de Educação Física são de fundamental importância para a interação dos alunos dentro do ambiente escolar.

Palavras-chave: Educação infantil; Desenvolvimento social; Educação física.

Introduction

School, in its educational environment, has been seen as a tool for socialization and interaction among individuals. The activities that can be developed within this environment favor the interaction of the child with the environment in which he/she is inserted^{1,2}.

It is worth pointing out that school is not the only place for the development of the child's interaction process. It is understood that the family, media, work, community, and school environment influence the interactions that the child can develop³.

Among the various activities developed in the school

environment, physical education classes stand out. In this subject, children are subjected to contact with other children, which allows them to develop values, attitudes, self-confidence, strategies, and group work^{4,5}.

Physical education classes have proven to be an effective tool for social relationships. Through sports activities, values and behavior, personality, and socializing are worked on. It is noteworthy that it is through play that the child begins to express himself more easily, in which he reflects and elucidates his daily life⁶. However, it is necessary that the classes are structured by the teacher because in this way, all these issues mentioned above will be addressed⁷.

Physical education ensures that content such as cultural manifestations, sports, dance, wrestling, games, sports, and gymnastics are worked on⁸. Physical education classes allow children to manifest their personality in a group through their movements and actions⁹.

Given the above, the objective of this study is to identify the socialization of students through interpersonal interactions at different times within the school environment (time in the classroom before and after break, during break and during physical education classes). We hypothesize two situations: 1) that children will have greater interaction during break and in physical education classes than time in the classroom, 2) that physical education classes will promote greater interaction than break.

Methods

A quali-quantitative observational study with descriptive data analysis was carried out in a private school in Petrolândia, Pernambuco, Brazil.

The research lasted 15 days, and in a class of 20 children, only 8 were authorized by their legal guardians to participate in the data collection by signing an Informed Assent Form (IAF) and Informed Consent Form (ICF), respectively. The study followed all standards involving research with human beings, according to resolution 466 of 2012 of the National Health Council. This study was submitted to the Research Ethics Committee of the *Faculdade Sete de Setembro* and was approved under protocol number 23286019.4.0000.8166.

The population consisted of 20 children, but only 8 children of both sexes aged 05 years old participated in the sample, 06 boys and 02 girls in total. As a criterion for inclusion in the study, regular attendance at school and being duly enrolled in the regular education sys-

tem were adopted.

A sociometric test elaborated by Moreno¹⁰ was used with the purpose of identifying, in terms of preference and rejection, the social position that each individual emits. The method is characterized by being systematic and objective; in this sense, it provides information about the social adjustment of the interpersonal relationship existing among a certain group, which was planned and conducted according to a previously defined objective¹¹.

Observations were made of classroom behavior during and after the children's recess and in physical education classes. The observations were conducted for a period of 15 working days and were subdivided into 4 moments: I) before recess (in the classroom), II) during recess, III) after recess (in the classroom in the classroom) and IV) during Physical Education classes. Observing from the whole school routine, the playful moments, physical structure, the children's resourcefulness, the children's interest in sharing the space with other children, the socialization aspects, until the formation of possible groups among the children.

The data collected were analyzed through observations and presented descriptively using figures that illustrate the students' interactions at each observed moment.

Results

The data collected were analyzed descriptively and presented by means of graphs, following the criteria of the sociometric test protocol, that is, formal or informal situations potentially experienced by the group members, respective to their routines to be analyzed, for the study of closeness or distance within the group¹¹.

According to Figure 1, one notices little interaction among the students. Only three interactions occurred with reciprocal exchange between peers, while two other children independently kept away from each other, showing stable behavior.

Figure 2 shows that there is still little interaction between the students. However, it is noticeable that the reciprocity pairs formed in Figure 1 changed at recess time and there was also more interaction demand than the first moment (Figure 1), and only two students remained without interactions, i.e., stable.

In Figure 3, when the students return from recess, it is observed that the students did not maintain reciprocity during the search for the other students. However, compared to the first moment of the evaluation

(Figure 1), there was a greater demand for interaction between the students, and when compared to the second moment (Figure 2), there was less interaction between all the students analyzed.

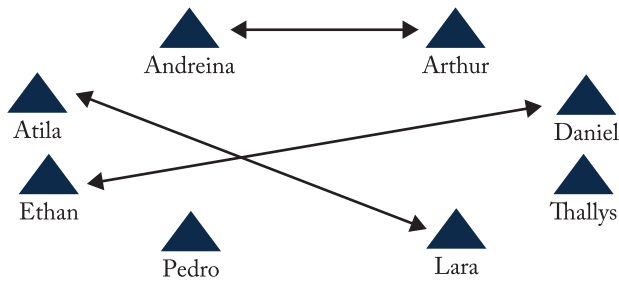


Figure 1 – Socializing during class before recess.
 Legend: Reciprocity (↔), Searched (→), Wanted (←), Searched Others (↗), Searched Few Times (↘) no arrows (Stable).
 Note: The names are fictitious.

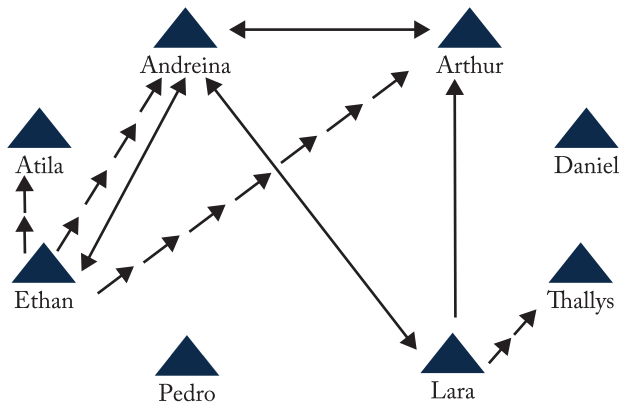


Figure 2 – Children socializing during playtime.
 Legend: Reciprocity (↔), Searched (→), Wanted (←), Searched Others (↗), Searched Few Times (↘) no arrows (Stable).
 Note: The names are fictitious.

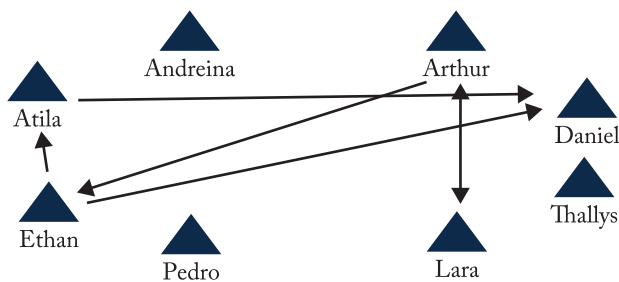


Figure 3 – Children socializing in the classroom after recess.
 Legend: Reciprocity (↔), Searched (→), Wanted (←), Searched Others (↗), Searched Few Times (↘) no arrows (Stable).
 Note: The names are fictitious.

In Figure 4, the observations were made during Physical Education classes. From the results observed

from the previous moments (Figures 1, 2 and 3), it is possible to notice that in moments outside the classroom, there was a greater interaction among students, with increased reciprocity and demand, and only one student sought interactions outside his own group. In relation to the moment of recess, there was one more interaction among the students.

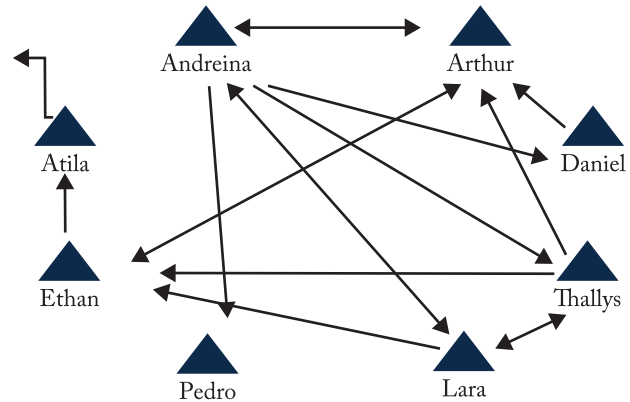


Figure 4 – Socializing during physical education classes.
 Legend: Reciprocity (↔), Searched (→), Wanted (←), Searched Others (↗), Searched Few Times (↘) no arrows (Stable).
 Note: The names are fictitious.

Discussion

The objective of this research was to identify the influence of the school environment on the students' interpersonal interactions. We hypothesized two situations, that physical education classes and break time would promote greater interaction between students and that physical education classes would exceed the number of interactions during breaktime. Our hypotheses were accepted, and as the main result of the research, it is possible to observe that physical education classes are the moment during the school environment that children are most socialized (Figure 4).

Recent research of Majewska and Vereen¹² has shown that the classroom environment promotes interaction among students. These data corroborate those of our research because when observed in Figures 1 and 3, it is evident that even in the classroom, there is interaction among students. Another study showed that practical activities within the classroom increased the interaction process between students and between teachers¹³.

In short, the school environment is very important because it presents varied physical structures that enable the child to develop in the physical environment and in the process of primary socialization¹⁴.

Regarding recess, the Institute of Medicine¹⁵ reports that it is a time when children participate in physical activities that can contribute substantially to increasing levels of physical activity as well as to increasing interaction among students. This context was observed in our research because when we evaluated Figure 2 in relation to 1 and 3, it is possible to observe that the number of interactions between students was higher (Figure 2, there were 8 searches with 2 reciprocities; Figure 1, there were 3 searches with 3 reciprocities; Figure 3, there were 5 searches with no reciprocities). For Pasi et al.¹⁶ the interactions at recess time occur due to the support of their peers and their own autonomy, thus enabling motivation for a social relationship and the performance of physical activities. For Couto, Couto, and Brunherotti⁶, we must consider that the diversity of activities and stimuli that are inviting to play and the flexibility to rearrange and include different age groups in these spaces also depend on the quality of the environment.

Still from the perspective of the aforementioned authors, understanding that in fact the environment can influence the interactions among children, Giugliani et al.¹⁷ reinforce that the existing physical space at school contributes to better learning, whether affective, cognitive, or motor. The physical space encourages the exploration of spaces, enhancing emotional and social skills that promote interaction with other children who are able to turn anything and anywhere into play¹⁸.

Physical Education in the school environment is a subject that plays a key role in contributing to citizenship, having differentiated instruments and knowledge that awaken a new look at young people¹⁹. It is noticeable in our research, when we observe Figure 4, that the socialization among students was greater than in the other moments of the research (classroom before recess [Figure 1], recess [Figure 2], and classroom after recess [Figure 3]). For Belmont, Osborne and Lemos²⁰, the methodologies used in Physical Education classes, if planned according to the teaching phases, promote social interaction and learning, influencing the educational process. This statement reinforces how important physical education is for the formation of a human being because it directly interferes with the most varied representations of body culture, with the purpose of maintaining the quality of life²¹.

In review of Batista and Moura²² identified that the methodological basis of teaching physical education provides interaction, valuing students experiences,

diversity of experiences, problematization, autonomy and creativity, playfulness, understanding, and transfer of skills, among others.

It is emphasized that there should be an effort to ensure access to school physical education classes in all cycles of education, considering that it provides numerous benefits for physical, psychological, and socio-environmental health and contributes to the incentive to remain physically active throughout life²³.

Given this information, we understand that physical education is of utmost importance for this school audience. Campanhã et al.²⁴ show that physical education can positively influence children and young people, especially in psychological aspects, which consequently contributes to the development of students, especially the social profile, improving their relationship with themselves and others. The authors also state that the physical education professional is necessary within the school environment, especially regarding interventions for physical, mental, psychological, and social health.

Despite the originality of the research, we understand that some variables should be better analyzed, in our study some limits should be taken into account. Only public school children were evaluated, we believe that sociodemographic data such as: family income, race, gender, parents' education level and public/private education system may interfere with the socialization of children. Another important factor is the sample size, although it is possible to observe a higher socialization pattern during physical education classes, further studies with a larger N sample are necessary for possible agreements or negatives with our work.

Through the obtained results, it is observed that there was a greater socialization during the physical education classes, reinforcing the importance for the interaction of students within the school environment. Future studies are suggested, with a larger sample size, that present longitudinal approaches and that verify the possible sociodemographic interferences previously exposed in the socialization of children.

Conflict of interest

The authors declare no conflict of interest.

Author's contributions

Silva TC participated in the planning and substantial contribution to the design of the study; methodology; data collection; data analysis and interpretation; writing of the preliminary version; critical analysis of the

manuscript and approval of the final version. Vieira-Souza LM Vieira-Souza LM contributed to the study design; methodology; data analysis and interpretation; writing of the preliminary version; review and approval of the final version. Mota-Getirana M participated in the elaboration of the methodology; data collection; data analysis and interpretation; critical review of the content; review and approval of the final version. Rosa JL participated in the analysis and interpretation of the data; critical review of the content; review and approval of the final version. Conti LF and Moraes-Filho JA participated in the critical review of the content; review and approval of the final version. Costa LFGR participated in the planning and substantial contribution to the study design; data analysis and interpretation; writing of the preliminary version; review and approval of the final version.

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Received: 28/07/2022
Approved: 16/01/2023

Quote this article as:

Silva TC, Vieira-Souza LM, Getirana-Mota M, Rosa JL, Conti LF, Moraes Filho JA, Costa LFGR. The importance of physical education classes in the socialization and interaction of children at school in relation to time in the classroom and break. *Rev Bras Ativ Fis Saúde.* 2022;27:e02888. DOI: 10.12820/rbaf.27e0288