

PORTUGUESE AND BRAZILIAN CHILDREN'S PLAY IN SCHOOL

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Abstract:

Introduction: The present study aimed to characterize and compare schoolchildren's play in two samples from different countries (Brazil and Portugal). **Methods:** In each context 11 children participated in the study. All participating children had been attending the second grade of elementary school. Observations were carried out at school in a room, which had toys available. In order to register children's behaviors, it was used observations of the focal child and time sampling. **Results:** Similar results were found in the two contexts regarding both the types of social interactions and children's choices of toys and plays. In terms of social interactions, children preferred to play in dyads. Boys showed a higher tendency to sex segregation in their activities than girls. The types of toys most used by children were the ones in the motor category, followed by the ones in the cognitive category. Educational toys, in turn, were the least used in children's play. Stick to the rules was the play activity most observed by researchers. However, when children were not sticking to the rules, the two samples showed different results. Brazilian children preferred to engage in games/rules, whereas Portuguese children preferred to engage in make-believe play. In both contexts boys preferred rough and tumble play more than girls. When Brazilian children were not playing, they preferred to engage in talking, whereas Portuguese children were more engaged in onlooker activity. **Conclusion:** Similarities between the two samples suggest common aspects in play behavior, while their differences refer to particularities of each social-cultural context.

Key words: play behavior; children; cross-cultural psychology; development.

INTRODUCTION

Play behavior significantly influences the development of children's skills and competences. Children can exercise and acquire new skills through playing, which will bring immediate and future benefits to their lives. Furthermore, play can provide children with opportunities to socialize and to experiment with social roles. Strengthening performance in the zone of proximal development is yet another benefit of playing, described by Vygotsky¹ as an essential aspect in children's learning.

Considering the benefits of play for child development, it is verified that this activity is not only a pastime, as supposed by some adults, but a necessity for the child². Based on this premise, several researches, such as the works of Benenson, Apostoleris and Parnass³, Bichara⁴, Bjorklund and Pellegrine⁵, Bomtempo², Brougère⁶, Carvalho, Alves and Gomes⁷, Friedmann⁸, Gosso⁹ and Ruiz¹⁰, have focused on play.

However, as observed by Cordazzo, Martins, Macarini and Vieira¹¹ and Biscoli¹² play has been frequently researched within the framework of preschool and toddlers. Schoolchildren's play, in turn, has been often neglected by child development researchers. This demonstrates the existence of a gap in researching play as an element promoting development and learning in school-age children. Cordazzo and Vieira¹³ demonstrated that schoolchildren still show strong motivation for playing. Hence, there is the need to fill the gap in play studies by researching play for schoolchildren, considering its characteristics and peculiarities.

Based on the need mentioned above, this study aims to characterize schoolchildren's play and to compare the differences and similarities in playing between Brazilian and Portuguese children. Comparison of observational data between two distinct social and historical contexts allows for the investigation of play characteristics and its influences in child development and social interaction. This kind of study can contribute to a

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better understanding and use of play as a strategy to stimulate child development and learning.

The play

Children from all over the world play. Although playing may differ in different places, Gosso⁹ and Pontes and Magalhães¹⁴ argue that there are some universal standards in it. The authors have reported that some kinds of plays found in different cultures, places and times, have similar rules. Therefore, it can be argued that play has a universal character, and that the differences in their structure are influenced by children's culture, social aspects and personal characteristics.

One child is a developing being; his/her activities and behaviors are changing and maturing. As child grows and acquires new skills and competences, play and play behavior also change. This does not mean that play disappears; it simply evolves to higher levels, and require greater social, cognitive and motor skills¹⁵. Elkonin¹⁶, in agreement with Vygotsky¹, formulated the play development law. In his play theory, Elkonin¹⁶ considers two phenomena that generally are interrelated: child's maturation and play's evolution. In other words, play has evolutionary processes that follow children's growth and maturation.

However, as already mentioned, the choices in types of plays are not governed only by the child's maturity level; environment and social conditions influence playing as well. Gosso, Salum, Morais and Otta¹⁷ found significant differences when investigating children at play in different cultural contexts. The authors observed groups of indigenous, urban and seashore children in Brazil. Among the analyzed samples it was found that the observed indigenous children played less than the other children. The authors explain that deprivation of either social partners or play times might have been responsible for the reduced amount of play among the indigenous, when compared to the other groups. High and mixed social-economic status urban groups engaged more in make-believe play. Gosso et al¹⁷ explain that this is because groups of low social-economic status are more concerned about survival and finding immediate solutions to their problems than to playing. These findings suggest that differences in children's play are often referred to the social-cultural context in which they live.

When a child uses his/her imagination to create and recreate the rules of play, he is expressing the active and changing character of his own development. In make-believed play this expression is more visible. Papalia, Olds and Feldman¹⁹ suggest that in make-believe play children develop the concept of perspective-taking, exercise language and experiment with different social roles.

Gender differences and segregation in play activity

Gender distinctions among children begin to appear around the third year of life and tend to

intensify over the years²⁰⁻²². Silva et al²² argue that from the age of three years-old, gender is one of the main criterion used by children to form playgroups. From the age of five years-old, boys show a greater tendency to play in segregated groups than girls²¹. Martin and Fabes²⁰ claim that during school-age this trend towards segregated play increases. In addition, these same authors discuss that segregation by sex canalizes children's interest, and limits the types of activities they develop.

The types of play, the behaviors displayed in the group and the numbers of partners involved in playing episodes are related to children's gender^{22,13}. Boys and girls show differences in their choices for types of play. Silva et al²², in accordance with Martin and Fabes²⁰, argue that boys prefer plays that involve intense physical activity, challenge, competition and confrontation. Girls, in turn, prefer calm and focused make-believe play. Fighting play, known as rough and tumble play, is considered by some authors as significantly more frequent within group of boys²³⁻²⁵. However, Silva et al²² observed this type of play in mixed groups, where girls and boys play together. The authors justify these findings stating that they are probably an indication that girls are more successful than boys in extending spaces and enjoying the expanded possibilities of engaging in social interactions and learning.

Rough and tumble play, despite being very similar to aggressive behaviors, has several benefits to children. Souza and Rodrigues²¹ have argued that this kind of play offers the child the opportunity to acquire skills to better deal with dangerous situations, which can cause harm to his physical integrity. Moreover, Smith²⁶ had already indicated that rough and tumble play offers a host of benefits for children, such as strengthening social ties, exercising conflict resolution, practicing skills for coding and decoding social signals, and establishing relationships of dominant and controlled.

Independent on the types of play used by children, several benefits can be observed²⁷. Thus, based on the assumption that schoolchildren are still strongly motivated to play, this study aims to characterize and to compare schoolchildren's play in two different social-historical contexts: one in a developing country (Brazil), and the other one in Europe (Portugal), a continent characterized by a traditional economic, cultural and religious history, and by high degree of industrialization. Despite the strong historical link between the two countries, including the similarity between the spoken language, Brazil has greater cultural diversity, which is provided, in part, by its continental dimension.

With these goals, we hypothesized that (a) despite the context, children's play improve social interactions and stimulate several aspects in children's development; (b) similar characteristics are expected to be found in children's play in the

different contexts, and the differences observed would directly reflect social-cultural peculiarities of each context; and finally that (c) boys and girls would show significant differences in how to play and to interact, regardless the context they are inserted.

METHODS

Participants

Participants were 22 children (14 boys and 8 girls), ages from 6 to 8 years-old from two different countries (Brazil and Portugal). In each country there were 11 children (7 boys and 4 girls) in the sample. Brazilian children were pupils of a second grade classroom in a private elementary school located in Florianopolis, a city in the south of Brazil. Portuguese children were of a second grade classroom in a public elementary school located in Braga, a city in the north of Portugal. In both contexts children were randomly selected to compose the samples.

Procedures

Observations were conducted in a room inside each school. The room had tables and chairs, where toys were placed. These toys were chosen following the guidance of ICCP (International Council for Children's Play). The chosen toys stimulate motor, cognitive and social aspects in child development²⁸. Children's familiarity with the toys was another desired feature in this study. Only toys that children knew and were familiar with were chosen. For this reason different toys have been used in the two samples, all of them belonging to the ICCP's categories.

Motor toys were: balloons, magnetic dart board, bowling, yo-yo, jump-rope, elastic jump rope, and pick-up sticks. Cognitive toys were: puzzles, building blocks, memory game, mathematics learning toy, Portuguese learning toy, Rubik's cube, checkers, board game, domino, and 'connect four'. The board game was only used in Brazil because it was not known by Portuguese children. Thus, in Portugal, this toy was replaced by 'connect four', which has similar rules. Social toys were: ludo board, checkers, board game, puppets, dolls, animal card game, domino, and UNO. Once more, because of differences between the two contexts, some toys were replaced by others, which were more familiar to children in each country. Some toys are categorized by ICCP as belonging to more than one family, because more than one categorization can be applied to the same toy.

Selected children remained for 30 minutes in the toy room. Children were told to play freely, and that they could enjoy the playroom, as long as they did not hurt one another. In Brazil, three observers registered children's behavior in each session, while in Portugal there were two observers for session.

Firstly, all observers were trained using a protocol designed specifically for playing observation. Observation techniques included both time sampling and focal child. Each observer was responsible for registering the behavior of 3 to 5 children per session. This was accomplished by observing each child briefly (for five seconds) based on a random list of children. The first session in each country was assigned to inter observer reliability test, in which all observers registered the behavior of the same children at the same time in order to evaluate their agreement level. Observers started officially registering only when a minimum agreement of 70% in each observed category was reached.

Categories

Categories were chosen and arranged according to a pilot study. Table 1 displays the categories and their means.

RESULTS

Brazilian sample engaged in 20 sessions of free play in school. Each child was observed during 20 intervals of five seconds in each session. The mean of the observed intervals per child was 325.91 ($SD = 28.40$), approximately 27 minutes of observation for each child. Portuguese sample engaged in 18 sessions of free play in school. Children were observed during 10 intervals of five seconds in each session. Each child was observed during 15 minutes. The mean of the intervals was 172.45 ($SD = 17.02$) per child.

The first group of analyzed categories was related to children's social interactions. In Brazil children were observed 81.39% of the intervals in episodes of group interactions. In 18.61% of the intervals they were either engaged in solitary activities (11.26%) or in parallel activities (7.33%). Results in Portugal showed similar distribution: the situations of group interactions were 63.23% of the observed intervals, while 27.23% were spent in solitary activities and 9.54% in parallel activities.

In relation to the number of partners in children's activities, it was found that both in Brazil and in Portugal boys and girls had preferences for playing in dyads. In Brazil, despite the preference for group activities in dyads, repeated-measures ANOVA with Greenhouse-Geisser correction indicated no significant differences among the number of observed intervals, with activities in dyads (41.5%), triads (28.98%) or with more partners (29.44%), [$F(1.3) = 3.14, p \leq .08$]. On the other hand, Portuguese children showed significant preference [$F(1.13) = 32.79, p \leq .01$] for activities with a single partner (42.7%), followed by triads (27.5%), and by more than three partners at the same time (29.6%). Children's choice for sex partners was also examined. Both in Brazil [$F(1.0) = 55.53, p \leq .05$] and in Portugal [$F(1.0) = 7.42, p = .05$] children had a preference

Table 1: Categories of observations and their definitions

Kinds	Categories	Description
Interaction	Solitary	Child is separated from others, with no reference to what others are doing.
	Parallel	Child is playing with similar objects than others, clearly beside others but not with them. They are close (until 1 meter), but not with others.
	Group	Child is with others. They are talking and/or playing. Everyone has a role.
Toy	Without toy	Any type of activity that a child is doing without toys.
	Motor	Motor toys are those which belong to categories of toys for physical activity proposed by the ICCP. The child must be manipulating or interacting in any way with the toys.
	Cognitive	Cognitive toys are those which belong to categories of toys for intellectual and creative activity proposed by the ICCP. The child must be manipulating or interacting in any way with the toys.
	Social	Social toys are those which belong to categories of toys for social relations proposed by the ICCP. The child must be manipulating or interacting in any way with the toys.
Activity Play	Stik to the rules	Child is following the rules of toys. In this case the child can be not only playing, but also taking or keeping the toy.
	Construction	Child is making a building or construction. Any kind of construction with toys.
	Make-believe	A pretend situation that a child creates. It requires that the child enacts familiar and imaginary activities and situations that are not real.
	Games/Rules	A set of rules imposed and approved by the group. The failure in following the rules is usually penalized.
	Rough and tumble	Play physically vigorous, such as chasing, jumping and fighting, accompanied by players' positive affect towards one another.
	Disengagement	Child is not engaged in activities. Child is not playing, talking or looking.
No Play	Onlooker	Activity in which the child who is the target is only observing children around him/her.
	Exploration	Child is looking at a toy and manipulating it or reading the toy's instructions. Child is verifying the features and the functionality of the toy.
	Talk	Child is speaking with other person. There are no toys or play in this activity.
	Aggression	It refers to behavior that is intended to cause harm or pain to another. Aggression can be either physical or verbal. Property damage and other destructive behavior may also fall under the definition of aggression.

for same-sex peer play. Boys in the two countries showed a strong tendency to segregation, regardless the number of partners in the activities.

Results in the *t* test for paired samples showed that, in all comparisons between the number and sex of the partners in the activities, there were highly significant preferences ($p \leq .01$) by the boys for same-sex partners. However, results found among girls were different. In the observations of Brazilian girls, significant differences were found only in the variable related to various partners involved in the activity [$t(3) = 11.90, p \leq 0.01$]. This result indicates that Brazilian girls prefer to play with several partners when they are of the same sex. On the other hand, in Portugal there were not statistically significant differences in the variable related to the number and sex of partners. Hence, girls in the Portuguese sample do not play in a segregated way.

The choices in types of toys used by children were also analyzed. Play rooms in both contexts had 22 toys previously classified into three categories: motor, cognitive and social toys. Cognitive toys had a subcategory indicating educational toys. Because the observations were conducted in the school environment, educational toys were recorded as a special category. Table 2 shows the means and percentage of observed intervals related to the type of toys used by children in Brazil and Portugal.

Table 2 shows that both Brazil in and Portugal children had preference for activities with toys in comparison to those that do not involve toys. Motor toys were mostly used by children, followed by cognitive toys. Educational toys were the least used by children. These data have been also tested with repeated-measures analysis of variance (ANOVA) using Greenhouse-Geisser correction. This analysis

Table 2: Mean (\pm Standard Deviation) and percentages of the different kind of toys used by children in Brazil and Portugal

Kind of toys	Brasil		Portugal	
	M \pm DP	%	M \pm DP	%
Motor	120,18 \pm 66,69	33,12	81 \pm 35,47	43,48
Cognitive	87,73 \pm 45,99	24,18	59,27 \pm 32,56	31,81
Social	76,91 \pm 37,28	21,19	13,82 \pm 7,18	7,41
Educational	13,91 \pm 15,90	3,83	5,91 \pm 9,20	3,17
Withiut toy	64,09 \pm 42,76	17,66	26,27 \pm 17,34	14,10

indicated the difference among the means in the five categories to be significant in Brazil [$F(2.21)=7.05, p \leq .05$]. In Portugal, the differences among the same five categories were also significant [$F(1.33)=16.68, p \leq .01$].

Regarding the type of activity performed by children, it was observed that Brazilian children were engaged in play activities in 77.4% of intervals, while in 22.6% of the intervals they were engaged in other kinds of activities. Results were similar for Portuguese children: in 87.8% of the recorded episodes they were engaged in play activities, while in 12.2% they engaged in non-playing activities.

In contrast, there were found differences between the contexts with respect to episodes of play. In Brazil, stick to the rules was the play activity most frequently observed among children (49%), followed by games/rules (24%), rough and tumble (17%), and, finally, construction (3%). In Portugal, although the play preferred by children has also been stick to the rules, there were differences in the remaining episodes for playing (make-believe - 20%, construction - 16%, rough and tumble - 13% and, finally, game/rules with 8%).

Most children in both countries were observed sticking to the rules. However, when they were not sticking to the rules, significant

differences in the distribution of play activities were found in the two countries. Greenhouse-Geisser test (repeated-measures ANOVA) was used to verify the differences among the categories' means. Statistical analysis showed that in both contexts highly significant differences among the five variables related to the types of playing were found [Brazil: $F(2.21) = 16.73, p \leq .01$] Portugal: $F(2,33) = 28.32, p \leq .01$]. When examining the differences in playing between boys and girls, using the Student's t test for independent samples, it has been found that both in Brazil ($p \leq .01$) and Portugal ($p \leq .05$) boys have a significant preference for playing in turbulent ways, when compared to girls.

When children were not playing, they were engaged in several activities, which were divided into eight analyzing categories. Table 3 shows the percentage, means and standard deviations in each category. The type of activity most observed in Brazilian children, while not playing, was "talking", which was followed by "onlooker". In contrast, in Portugal to "observe" and to "explore" were the behaviors most frequently presented by children. Repeated-measures ANOVA (one way) with Grenhouse-Geisser adjustments revealed a significant effect in the type of activities not directly

Table 3: Mean (\pm Standard Deviation) and percentages of the distinct type of 'no play activities' exhibited by children in Brazil and Portugal

Type of activities	Brasil		Portugal	
	M \pm DP	%	M \pm DP	%
Talk	36.00 \pm 33.29	39.14	5.73 \pm 5.62	22.66
Onlooker	23.45 \pm 11.55	25.48	9.64 \pm 6.86	38.13
Exploratrion	18.73 \pm 10.72	20.36	6.73 \pm 4.75	26.62
Disengagement	3.18 \pm 2.71	3.45	2.55 \pm 2.80	10.08
Transition	2.45 \pm 1.21	2.67	.09 \pm .30	.35
Aggression	.00 \pm .00	.00	.36 \pm .92	1.42
Other activities	8.09 \pm 3.88	8.79	.18 \pm .60	.71

related to playing in both Brazil [$F(1.13) = 10.17, p \leq .01$] and Portugal [$F(2.75) = 11.40, p \leq .01$].

DISCUSSION

Overall, this study has shown similar results between the samples of Brazilian and Portuguese children, with some differences that can be related to specific social-historical contexts where the children live. Similarities were found in relation to social interactions, in the sense that children preferred to play in groups. Furthermore, boys

showed more sex segregation and preferred rough and tumble play more than girls. The types of toys most used by children were the ones in the motor category, followed by the ones in the cognitive category. Educational toys, in turn, were the least used by children in playing. Stick to the rules proposed by toys was the play activity most observed by researchers. However, when children were not sticking to the rules, the two samples showed different behaviors. Brazilian children preferred to engage in games/rules, whereas Portuguese children preferred to engage in make-believe play. When Brazilian children were not

playing, they preferred to engage in talking, whereas Portuguese children were more engaged in onlooker activity. Aggressive behaviors were observed only in the Portuguese sample.

The preference displayed by children for playing in groups confirms the hypothesis that play promotes social interactions and stimulates different aspects of child development in different contexts. Play groups are beneficial because they promote social contacts, opportunities for experimenting with different roles, and learning of limits and penalties for inappropriate behaviors. In other words, play groups act as mediators in the process of teaching and learning social and cognitive rules of a culture²². Moreover, Pontes and Magalhães¹⁴ have argued that a group often has individuals with different skill levels. Thus, while observing their partners, children can exercise their skills and have the opportunity to learn new strategies that may be beneficial in unexpected situations or new environments^{3,23}.

Another confirmed hypothesis concerns the differences among boys and girls. Results lead us to reflections on sex segregation. The fact that girls engage in less segregated plays may be related to the low number of girls in each sample. Both samples were composed only by four girls, an aspect that may have required the presence of male partners in their play groups. However, evidence of strong segregation by gender found among boys is in accordance to data from Silva et al²². When observing the play of street children these authors also found a greater segregation by sex in boys than in girls. When interviewing schoolchildren, Cordazzo and Vieira¹³ also found that segregation by gender is stronger among boys and almost inexistent among girls. Likewise Souza and Rodrigues²¹ observed that free play in schoolchildren, most of the time, showed to be more segregated in boys than in girls.

Sex segregation demonstrated by boys can positively contribute in terms of the needs for identification to a group with similar individuals. By identifying and comparing to others, children find out their own skills and difficulties²². Comparisons to others also encourage children to exercise and improve their skills. They also learn new strategies to win games and to better perform in playing. In contrast, long term sex segregated plays can lead a child to experience situations typified by sex. This typification, according to Silva et al²², can generate greater rigidity of roles and confirm stereotypes related to appropriated behaviors for each sex. Playing with partners from the opposite sex helps children to learn and try different types of behaviors and social interactions²⁰.

Regarding the use of toys, the preference for motor toys in both countries shows the need schoolchildren have for physical activities. According to Papalia et al¹⁹ a child has a boost in body growth during school age, and motor skills are improved as long as he or she engages in intense physical activity. In addition, Pellegrini & Smith²⁹ state that

physical activities in playing open up to children the opportunity to improve strength and endurance, and provide conditions for reducing weight and thermoregulation of the body. Physical activity play was researched by Gosso et al¹⁷ in five different contexts, and the authors found this kind of play to be the most used by children overall. Due to children's motivation and need for playing, schools should provide conditions so that this aspect of child development is not neglected.

The low use of educational toys in the samples from both countries is another characteristic to be pointed out. Teaching objects, widely used in the school context, do not respond to the functions of toys. As argued by Brougère and Wajskop¹⁸ the goal of toys is playing, and playing has a goal in itself. Pedagogic objects have educational goals that although can be enjoyable for the child, are not considered by her/his as having a goal in itself. When a toy has a goal different from playing, such as the ones employed in school learning, it is no longer considered a toy, but a learning instrument.

Usually, teachers recognize the importance of play to child development and learning. However, when they want to provide children with pleasurable play moments, they often offer educational and stick to the rules toys only⁷. By providing only these types of objects teachers are not offering to children moments of fun, but other ways of acquiring school content. Educational toys could still be used in school, however, not exclusively. If a teacher wants to use toys to promote improvement in the child development and learning, he or she should not be limited by the use of educational toys.

Even when involved in free activities, playing for schoolchildren is very common, which exposes their strong motivation for this behavior. Similar data have been found by Cordazzo and Vieira¹³, who observed schoolchildren's activities outside the classroom, during class breaks. Educational proposals for kindergarten education usually recognize the importance of play in pre-school time. However, when a child is enrolled in elementary school, the need for playing is frequently neglected by teachers^{12,2}.

Child is a being in development; therefore, her/his activities and behaviors are also in change and maturation^{15,10}. Play changes along with the child, which means that as the child matures play should evolve accordingly. Thus, it requires greater social, cognitive, and motor skills. For this reason Queiroz et al¹⁵, as well as Bichara⁴, Friedmann⁸, Brougère⁶, Bomtempo² and Dohme²⁷, discuss the importance and need for playing in school.

One other type of play to be emphasized is rough and tumble play. In Brazil and Portugal boys played rough and tumble more than girls. This kind of play in groups of boys has been also observed by Bjorklund and Pellegrini⁵ and Smith²⁶. Souza and Rodrigues²¹, in their schoolchildren's free play observations, found rough and tumble play among boys and in mixed groups (boys and girls), while

the groups of girls did not present any episode of rough and tumble play. The same authors mention that boys were more restless than girls, whereas girls showed quieter behaviors and were more involved in conversations. Souza and Rodrigues²¹ and Smith²⁶ have argued that rough and tumble play, although sometimes confused with agonistic behaviors, can benefit children. The benefits are related not only to the sociability aspects involved in playing, but also to the acquisition of skills to deal with situations that put physical integrity at risk.

Stick to the rules play, one other category to discuss, refers to compliance to toys' rules. According to the play development law, formulated by Elkonin¹⁶, at the age of the observed children, between seven and eight years-old, make-believe becomes more latent and rules more explicit. When children stick to the rules, they show that their pleasure is in playing with the rules. The older the child, the more important is the set of rules governing an activity¹. This is because children live in a society driven by rules, and to follow them is required in order to live in a civilized manner. However, even if children are sticking to the rules, they can either create new rules or remove others. By doing so, children rebuild the universe around them.

Although stick to the rules play was similar in both samples, other types of play varied in relation to the context. For example, Brazilian children opted for games/rules play, building towers with the checkers' parts, and creating rules to put down the partners' towers. Portuguese children, in turn, preferred to engage in make-believe play. They built arms with the building blocks, with which they played catching. Meanwhile, other children remained behind imaginary castles to escape from the armed children. These differences in play are basically what mark the distinction between the two samples. From these differences the social-cultural peculiarities of each sample may be perceived. As stated by Pontes & Magalhães¹⁴, although children's play has a more general character, the differences are marked by culture. Differences have been found

also in other activities, considered as no playing activities. While Brazilian children were more engaged in talking, Portuguese children preferred onlooker activities. Besides, aggressive episodes among Portuguese children have been recorded, while there had been no similar records among Brazilian children.

CONCLUSIONS

This present study aimed to characterize schoolchildren's play and to compare differences and similarities at play among Brazilian and Portuguese children. Through the data analysis we can identify that schoolchildren have a strong motivation to engage in playing behaviors. This motivation to play should be used by schools, since playing provides conditions for experimenting with different types of social interactions, and helps in child development. Sex segregation was verified in the samples from both countries, suggesting that schools and teachers should be prepared to stimulate different sex peer interactions. These kinds of interactions are positive because children experience new roles, different strategies to conflict resolution, and other types of behaviors.

In Brazil and Portugal similarities were found in the types of social interactions and choices of toys and plays. These similarities give support to the premise of general characteristics of playing behavior. However, the differences found, especially during no playing activities, refer directly to the peculiarities of each country. Despite the universality of behavior, culture does influence, and children interact and change the environments in agreement to the context.

Although the hypotheses had been confirmed, we suggest that other observations be conducted to confirm the trends shown in this study. Observations of play in other environments, like parks and public places, can show other play characteristics and types of social interactions. Naturalistic observations may show other trends and behaviors that cannot be observed in a controlled set such as the one used in this study.

REFERENCES

1. Vygotsky LS. A formação social da mente: o desenvolvimento dos processos psicológicos superiores. 4ª ed. São Paulo: Martins Fontes; 1998.
2. Bomtempo E. Brinquedo e educação: na escola e no lar. *Psicologia Escolar e Educação*. 1999; 3(1): 61-69.
3. Benenson JF, Apostoleris NH, Parnass J. Age and sex differences in dyadic and group interaction. *Developmental Psychology*. 1997; 33(3): 538-543.
4. Bichara ID. Um estudo etológico da brincadeira de faz-de-conta em crianças de 3-7 Anos [Tese de doutorado]. São Paulo: Instituto de Psicologia da USP; 1994.
5. Bjorklund DF, Pellegrini AD. Child development and Evolutionary Psychology. *Child Development*. 2000; 71(6): 1687-1708.
6. Brougère G. A criança e a cultura lúdica. *Revista da Faculdade de Educação*. 1998; 24(2): 103-116.
7. Carvalho AM, Alves MMF, Gomes PLD. Brincadeira e educação: concepções e possibilidades. *Psicologia em Estudo*. 2005; 10(2): 217-226.

8. Friedmann A. O direito de brincar: a brinquedoteca. 4ª ed. São Paulo: Abrinq; 1996.
9. Gosso Y. Peixe oxemoarai: brincadeiras infantis entre os índios Parakanã. [Tese de doutorado]. São Paulo: Instituto de Psicologia da USP; 2004.
10. Ruiz RO. El juego infantil y la construcción social del conocimiento. Sevilha: Ediciones Alfar; 1992.
11. Cordazzo STD, Martins GDF, Macarini SM, Vieira ML. Perspectivas no estudo do brincar: um levantamento bibliográfico. *Aletheia*, 2007; 26: 122-136.
12. Biscoli IÂ. Atividade lúdica uma análise da produção acadêmica brasileira no período de 1995 a 2001. [Dissertação]. Florianópolis: Centro de Ciências da Educação da UFSC; 2005.
13. Cordazzo STD, Vieira ML. Caracterização de brincadeiras de crianças em idade escolar. *Psicologia: Reflexão e Crítica*. 2008; 21 (3): 365-373.
14. Pontes FAR, Magalhães CMC. A Transmissão da cultura da brincadeira: algumas possibilidades de investigação. *Psicologia, Reflexão e Crítica*. 2003; 16(1): 117-124.
15. Queiroz NLN, Maciel DA, Branco AU. Brincadeira e desenvolvimento infantil: um olhar socio-cultural construtivista. *Paidéia*. 2006; 16(34): 169-179.
16. Elkonin DB. *Psicologia do jogo*. São Paulo: Martins Fontes; 1998.
17. Gosso Y, Salum e Morais M, Otta E. Pretend play of Brazilian children: a window into different cultural worlds. *Journal of Cross-Cultural Psychology*. 2007; 38(5): 539-558.
18. Brougère G, Wajskop G. *Brinquedo e cultura*. 2ª edição. São Paulo: Cortez; 1997.
19. Papalia D, Olds SW, Feldman RD. *Desenvolvimento humano*. Trad. Daniel Bueno. 8ª ed. Porto Alegre: Artes Médicas; 2006.
20. Martin CL, Fabes RA. The stability and consequences of young children's same-sex peer interactions. *Developmental Psychology*. 2001; 37(3): 431-446.
21. Souza F, Rodrigues MMP. A segregação sexual na interação de crianças de 8 e 9 anos. *Psicologia Reflexão e Crítica*. 2002; 15(3): 489-496.
22. Silva LIC, Pontes FAR, Silva SDB, Magalhães CMC, Bichara ID. Diferenças de Gêneros nos grupos de brincadeira na rua: a hipótese de aproximação unilateral. *Psicologia, Reflexão e Crítica*. 2006; 19(1): 114-121.
23. Pellegrini AD, Smith PK. The development of play during childhood: forms and possible functions. *Child psychology & Psychiatry review*. 1998; 3(2): 51-57.
24. Morais MLS, Otta E. Entre a serra e o mar. In: Carvalho AMA, Magalhães CMC, Pontes FAR, Bichara ID, organizadores. *Brincadeira e cultura: viajando pelo Brasil que brinca*. São Paulo: Casa do Psicólogo; 2003. p.127-57.
25. Wanderlind F, Martins GDF, Hansen J, Macarini SM, Vieira ML. Diferenças de gênero no brincar de crianças pré-escolares e escolares na brinquedoteca. *Paidéia*. 2006; 16(34): 263-273.
26. Smith PK. Play fighting and real fighting: perspectives on their relationships. In: Schimidtt A, Atzwanger K, Grammer K, Schäfer K, organizadores. *New Aspects of Human Ethology*. New York: Plenum Press; 1997. p. 47-64.
27. Dohme VA. Atividades lúdicas na educação: o caminho de tijolos amarelos do aprendizado. [Dissertação]. São Paulo: Universidade Presbiteriana Mackenzie; 2002.
28. Michelet A. Classificação de jogos e brinquedos: a classificação ICCP. In: Friedmann A, Aflalo C, Andrade CMRJ, Altaman RZ, organizadores. *O direito de brincar: a brinquedoteca*. 4ª ed. São Paulo: Edições Sociais, Abrinq; 1998.
29. Pellegrini AD, Smith PK. Physical activity play: the nature and function of a neglected aspect of play. *Child Development*. 1998; 69: 577-598.