

Play fight and real fight: the need for physical contact

Abstract

Play Fight and Real Fight are behaviours commons in the school playground especially between boys. For many teachers these behaviours have no differences and they have the same type of action, that is, they go to the children and stop what they are doing without asking what is happening. It is very frequent to listen the children talk about play when we where thinking that there was a real fight. In order to understand Play Fight behaviour and see the differences with Real Fight we observe with video record 83 primary school children during their times of recess with focus on contact behaviours (play or Real Fight).

Following the works of Aldis (1975) and Hall (1972) we observe the interactions between the children according to the dimensions: action plans, body parts, contact distance and occupied space. During Play Fight the children go to the floor more often and they make use of the whole body. In Real Fight the children avoid getting down to the floor and they used mostly hands and/or feet. These differences are visible but the supervisors need some training.

Introduction

Starting point

- “Today I had to write 10 times the same sentence ...”
- “You made something wrong, what was the sentence?”
- “I do not beat my friends in the classroom” But I was not beating!”
- “No? What happened?”
- “No! We have finished the work and we go show the teacher, then we start playing and we were giving slaps but it was only playing”
- “Of course, you teacher think that you where beating and fighting.”
- “But no one said anything to her, **because we were playing.**”

The children have problems in accepting that the adults make mistakes and they are punished because they are playing in a different way where physical contact is similar to a fight. The children do not understand that adults do not know how to distinguish play fight from real fight.

This pre-text was the pretext for the research that we present here. During this time the contacts with the children were very close, the talk were very trustable and open, we try to assess the children’s motivations in real fight and play fight because *we need to understand the children before intervention* (Pellegrini, 1996). We tried to identify visible differences between real fight and play fight. We wanted to give the teachers and others some instruments

that allow them to know better the children, also ways to better identify and interact with the children in risk of aggression and exclusion, and ways to identify and distinguish play fight from real fight in order to make better intervention.

Children's play

Through play the child assesses the world, the life. Play is their work. Play is the child's way of being healthy. Play to learn, learning through play. The adults forget their own childhood and become careful observers of their own children. They try to understand their children's behaviour but the children are not asked about their games and attitudes, and the adults decide about what is happening. The adult's decisions and attitudes about play and aggression are based in their perception about the situations, they should ask the participants before trust in observations (Pellegrini, 2004, p. 450).

Bishop & Curtis (2001, p. 2) mentioned the occidental perception of the adult about children's play: "*do not know how to play*", "*traditional games are disappearing*" and "*some adults do not see children playing they only focus their attention on fighting*". That is not a new perception about children's play, grown ups always think that their children are not like them at the same age. Play Fight between fake enemies is treated like aggression and the players are punished, most of the time without understanding why.

The scientific community interested in these issues know the work of Peter Smith (or under his direction) about *real fight* and *play fighting*, there are also researchers like Pellegrini (1995) or Blatchford (1998) interested in recess and its function in child development. There is also a grown body of research about aggressive behaviour and *bullying* like Olweus (1993), Whitney & Smith (1993) and Pereira (1997).

Physical aggression is very visible, and happens mostly in the playground where there are no adults, that is why we choose the school playground to collect information about physical aggression between primary school children. The playground is the place where the children have liberty to decide, choose, decide, impose, submit or adapt we think that this space is a test tube where the child mixes knowledge from school, home and community with feelings and perceptions, and learn about gender, social and cultural differences, and life in society.

In the present work we ask the participant children what is happening in physical contact situations (play or real). When is not possible to say what is happening is better to ask the participants and listening to their version of the facts. Now we know that there are games with interesting names like "*melted butter*", "*princess and sharks*", or "*dinosaurs*" with rules defined by the children to every game in every day. We also find that real fights always have explanations.

Why do they play?

The ancient Greek thought about play and wonder about its necessity in child development and latter Comenius and Rousseau allied play and learning. Darwin's Theory of Evolution is a match point in the study of human development, after him the importance of play is no longer accessory or secondary.

In the nineties (of the 20th century) the Evolutionary Psychology of Human Development is a new answer to the complex psychological functions through natural selection. That perspective seeks to include *all developing aspects that were studied traditionally in separated disciplines* (Slee & Shute, 2003). That perspective give some answers to fundamental questions about play and its functions in child and human development. Play as one of the aspects selected through evolution to make way to adulthood and play fight is the practical example of training of skills needed in adulthood competition for territory, food and mating.

Physical Activity Play, is probably the less studied type of play, but Smith & Pellegrini (1998) have a new look in the issue and mention its importance in child development. The study about physical activity play is fundamental to understand Play Fighting taking into account that this behaviour is visible in several countries in children from 4/5 years of age.

Play Fighting is frequently considered as aggression and the children are punished, other times the adults do not pay any attention to what the children are doing. Aldis (1975) "Play Fighting", is a fundamental document based in animals and humans observations. Play fighting behaviour as characteristics similar to those observable in other species like carnivore mammals and great primates (Aldis, 1975; Boulton, 1994; Humphreys, 1987; Pellegrini, 1995; Smith, 1978). Play fight is observed in different countries all over the world what may indicate that it is part of humans' genetics. Evolution may explain the children participation in this games, they are important to practice the necessary skills to adulthood (mating and territorial fights), and boys seem to get in these games with more pleasure (Aldis, 1975; Fry, 1983; Smith, 1984; Pellegrini, 1995; Bjorklund & Pellegrini, 2000, 2004).

The playgrounds are the places for friendship, play and also Play Fight and Real Fight. The behaviour in the playground is related to sociometric status justifying the use of nomination techniques with observation techniques to assess the relations between the children during recess. This is a learning and pleasure space that may imply some fears and dangerous relations.

There are several analyse perspective of aggressive behaviour taking into account that is very difficult to have a unique perspective of the problem in all its complexity. In development biology and sociology we find meeting points: aggressive behaviour, like Maccoby (2003) mentioned in relation to gender differences in play, seems to be the result of adaptations revealed in function of the environment. The evolutionist perspective of Human Development (Bjorklund & Pellegrini, 2002, 2004) integrates genetic and environment aspects in the explanation of conflict and aggression.

Why research about play Fight and Real Fight?

Teachers, educators and families need to know more about the consequences and the meanings, in order to understand the phenomenon before criticise or punish. The studies about recess focusing on children's behaviour (games and relations between the children) show that is trough play that children learn about hierarchy, differences, and find their place or space (Pellegrini, 1995; Blatchford et al., 1990; Blatchford, 1998). Play is affected by the interaction of personal and physical variables (Pellegrini & Perlmutter, 1985), this shows the weight of the playground physical characteristics and of supervision model over children's behaviour in that space. In other way, the studies about aggressive behaviours and/or bullying in school show that the playground is the place where more incidents happen (Olweus, 1993; Whitney & Smith, 1993; Pereira, 1997). This studies accused the lack of interest of the school staff, they neglect the quality of the space and the materials and supervision. Some studies have proved that the levels of victimisation and aggression are reduced when playground is changed with the introduction of materials and interested supervisors (Pereira, 1997; Marques, 2000).

Teachers' intervention usually happens only when the children ask for help, and most of the children no not see the teachers in the playground, they do not know if the teachers take some action when incidents happen (Marques, 2000). Most of the victims do not tell the teachers when they are victimised in the playground (Pereira, 1997; Marques, 2000), because they are afraid of retaliation.

In a study about teachers perceptions in relation to types of aggression (Marques, 2000), the most nominated type of aggression was *beating* (55%). But in a study with 112

children in one primary school, showed that the main form of aggression was *calling names* (Marques, 2000), like was found also by Whitney & Smith (1993) and Pereira (1997).

It is possible to say that children and teachers have different ways of looking to what is happening in the playground; usually the play fight and real fight are treated both as aggression and the children are punished. Adults vision is limited by culture, they do not understand body in movement, and the relations that the children make trough play fighting games. In play fight games there is: opposition, body to body fight, endless pursuit, rolling on the floor and start all over again. Adults vision do not allow them to see any differences between play fight and real fight and some real fights go on until some one get real hurt. Also for some children is difficult to know real fight from play fight, they always give aggressive answers to playful interactions; other children get tired of playing and may start a real fight; some children make use of play fight situations to retaliate from passed situations.

Research aims

We wanted to understand the different ways of looking at play fighting and how to distinguish from aggression and violence, and also how to identify the characteristics of aggressors, victims and others, in order to create prevention and intervention models with efficacy. With this study and with the participating children help we look to:

1. Identify the motives to play fight

Different children have different ways of participation in different games, some go away and others are very active and provocative always looking for action and fun. We try to assess what children's say and what they think about play fight in school and why they like to do it.

2. Identify the motives for Real Fights

Aggressive Fight or Real Fight happens when physical contact is voluntary and intentional, that is, when the children try to beat mutually. To some children, the identification of its place in school is function of power and submission relations (declared or hidden). The teachers complain about physical aggressions between the children, some situations are very serious, but they forget to analyse deeply the relations problem between aggressor and victim.

During recess the children have the opportunity to use their domain capacities over others because playgrounds are unsupervised, and during play is trough physical aggression that children manage to impose their way of thinking and "*kill divergent voices*".

3. Characterize and distinguish Play Fight from Real Fight

Play Fight considered as a form of physical activity play can be observed in different countries, probably these games are part of human being and maybe they are written in our genetic code. We want to know how to decide taking into account the movement and the relation between body's in action.

4. Characterize the participating children

To compare the groups for common and different characteristics in relation to Real Fights will help identifying risk and protection factors (similar to what was mentioned by Olweus,1993).

Method

Three hundred and four school children between 6 and 12 years (1st to 4th grade) from one primary school near Lisbon, filled in a peer-nomination questionnaire (Angulo & Neto, 2001). The questionnaire was adapted from previous instruments (Björkqvist & Österman, 1992, and Ortega & Ortega, 1999).

We selected for observation during one school year (October 2002 to June 2003) the 83 children that were more nominated in the different categories of the peer nomination questionnaire: physical aggressors (29 boys), victims of physical aggression (8 boys and 3 girls), physically aggressive and also victims of physical aggression (12 boys and one girl), conflict managers (8 boys and 4 girls), withdrawers (one boy and one girl), third party interveners (5 boys and 6 girls), and observers (3 boys and 2 girls).

All the 83 children were observed with video tape recording during three times of recess in continuum (not consecutive days). After the recess the children viewed the film of themselves that was made during the recent time of recess. All the participants in every play fight or real fight incident saw the videos together and explained what in their opinion was happening. The groups of children were interviewed together. They were asked to discuss, explain and justify their behaviours. They discussed the reasons for the fight, and in the end it was possible to have a clearer picture of what every incident was about. The interviews were recorded in order to make transcriptions for later content analyses.

Play Fight and Real Fight: results and discussion

We verified that the most practice activities present high physical vigour, which characterise *Physical Activity Play* according to Pellegrini & Smith (1998). Motor activity seems to be very important for the majority of the children, especially when they interact with others through that activity. We suppose that football, rough-and-tumble and catch games are more practiced because they promote the participation in large groups. Rough-and-tumble were observed in 16,2% of all the games and activities and this value is similar to those of Humphreys & Smith (1987) and Pellegrini (1995) that mentioned their incidence in 10% to 15% in recess activities of children from 7 to 11 years old.

Some times we do not register any incident with the selected children; we observed incidents in 107 of the observation periods.

1 The incidents

During data collect in the playground, we observed 246 Play Fight and Real Fight situations, and sometimes were difficult to understand if it was play or real aggression. Only the children knew the correct answers and with their help it was possible to identify with trust 127 Play Fight episodes, 100 Real Fight situations and 19 situations of play that become Real Fight.

Table 1 – Incidents observed in the playground

	Frequency	%
Play Fight	127	51,6
Play Fight become Real Fight	19	7,7
Real Fight	100	40,7

The numbers that we present about conflict may look very high when compared with those presented by Smith (1997), Pellegrini (1987) or Fry (1987), that mentioned just 10% of the physical contact situations as Real Fight. But we think that our sample is special taking into account that 50% of the children are nominated as aggressive by their peers (aggressor and aggressive victim).

Taking into account the groups in study we verified that their participation in Play Fights and/or Real Fights is different. We emphasize the high values of the children in group aggressor and aggressive victim in relation to all the situations that imply physical contact. Pepler et al. (1998) also observed greater participation of aggressive children in higher levels of physical aggression than the other children.

Table 2 – Incidents per Group: frequency and percentage

	Play Fight		Play become Real Fight		Real Fight	
	Freq.	%	Freq.	%	Freq.	%
Aggressor	35	27,6	10	52,6	51	51
Victim	10	7,9	1	5,3	7	7
Aggressive Victim	27	21,3	6	31,5	32	32
Conflict Management	12	9,4	0	0,0	6	6
Withdrawal	5	3,9	0	0,0	0	0
Victim Support	22	17,3	1	5,3	2	2
Observer	16	12,6	1	5,3	2	2

We can confirm the children perceptions, those that are nominated as aggressors and aggressive victims get involved in higher percentage of Real Fight and Play Fight situations.

In relation to the gender of the participants in the incidents, we verified that boys and girls have different attitudes in relation to their participation. Our sample is unbalanced to the boys' side, maybe because they are perceived by others as more physical actives, and our study confirms it. The participation of boys and girls in Play Fights and Real Fights is statistically different ($\chi^2=15,285$, $p> .0005$). In this study we only observe girls participation in 20 Play Fight situations (6,53% of Play Fights observed), one Real Fight and only one Play Fight situation that changed to Real Fight. Other researchers have mentioned gender differences in the practice of high movement and physical contact games. Maccoby (2003) refers to gender segregation because the children want to play with peers that have behaviour compatible with their own.

Golombok & Hines (2004) associate gender separation with physical activity and aggression that are frequent in boys more dominators, this put more sedentary and cooperative girls away. Also Fry (1992), verified the differences between girls and boys that get into Play Fight or Real Fight in two Zapotec communities, the boys showed a more active behaviour and involve in a higher percentage of episodes. Golombok & Hines (2004) and Maccoby (2003), point the differences between boys and girls that deal with conflicts differently, boys treat the situations by force and girls by dialogue.

We think that is possible to use the evolutionist perspective to explain gender differences, taking into account that the genetic part of behaviour that distinguish boys and girls is reinforced by stimulation. Boys have a pre-disposition to greater motor activity and reactivity to the stimulations, showing their capacities in the outside playgrounds in Play

Fights and other with high physical activity. The girls search more sedentary activities and usually go away from boys games.

Table 3 - Percentage of Play Fight and Real Fight Incidents per Activity

Activity	Play fight	Real fight
Catch	24 %	4 %
Balance	2 %	2 %
Talking	4 %	6 %
Football	17 %	64 %
Rough-and-tumble	45 %	7 %
Walking	4 %	10 %
Other	4 %	7 %

During football games we observe more Real Fights; this is similar to Kelly's (1994) research that presents football as the activity that provokes more complains and conflicts between primary school children. Football appeared to be a problem because most of the real fight incidents happened during that activity, but it is also a *cultural activity* in Portugal, and especially during the preparation of the Euro 2004 football championships. In order to prevent aggression during football games, is required more attention from supervisors and coordination of efforts between school management, staff, and children.

2 The motives

The children observed their behaviours and talk about the incidents, then they explain the reasons for it. In table 66 we present the most nominated reasons for Play Fight and Real Fight and also why Play become Real Fight.

Naturally the main reason to Play Fight was *play* (table 4), or they just wanted to have fun. Some times the children give other explanation to this behaviour like for example *mocking* or *calling names* but in the end the will to *play* was mentioned again. The results are similar to those from Smith & Boulton (1990), Humphreys & Smith (1987), Pellegrini et al. (2002, 2004) and Fry (2005), which mentioned *play* like the main reason to Play Fight.

The children also mentioned the motives for Real Fights: *physical offence* was the most nominated (30 incidents), followed by *provoking* (23 incidents) and *object possession* (16 incidents). Some real Fights happened because the children tried to *help* their *friends* (13 incidents), or because of arguing about the *rules of the game* (8). These motives are very similar to those that Blatchford (1998) identified as principals: the children reacted to physical or verbal aggressions help their friends or do not agreed with others about football incidents. In our observation, physical offence has provoked 30% of the incidents and verbal only 2%, and the second more nominated cause was provocation with 23%. Some times Play Fight become Real Fight (19 incidents) – in 4 situations the motive is play, someone did not understand the situation as play and it changed to Real Fight.

Table 4 – Incidents Motives

	Play Fight		Play become Real Fight		Real Fight	
	Freq.	%	Freq.	%	Freq.	%
Help Friend	1	0,8	3	15,8	13	13
Play	119	93,7	4	21,1	0	0
Mocking	2	1,6	1	5,3	5	5
Physical offence	0	0	3	15,8	30	30
Verbal Offence	1	0,8	2	10,5	2	2
Object Possession	1	0,8	0	0	16	16
Provoking	2	1,6	4	21,1	23	23
Game rules	0	0	0	0	8	8
Other	1	0,8	2	10,5	3	3

For Real Fight the children mentioned reasons that are different between groups (table 5): for the groups aggressor and aggressive victim the main reason was physical offence with 27,4% and 37,5%, followed by provoking with 21,6% and 34,4% of the incidents; in groups Conflict Management and Victim Support the causes were physical offence and fights about object possession, with 37,5%; the group Victim presented as main reason for Real Fight participation the help of a friend with 42,8%; the other children only participate in two Real Fights, one because of physical offence and the other because of game rules.

Table 5 – Motives to Real Fight: frequency and percentage per group

	Aggressor		Victim		Aggressive Victim		Conflict management and Victim Support		Withdrawal and Observer	
	freq	%	freq	%	freq	%	freq	%	freq	%
Help Friend	8	15,7	3	42,8	1	3,1	1	12,5	-	-
Play	-	-	-	-	-	-	-	-	-	-
Mocking	1	2	1	14,3	2	6,2	1	12,5	-	-
Physical offence	14	27,4	-	-	12	37,5	3	37,5	1	50
Verbal Offence	2	3,9	-	-	-	-	-	-	-	-

Object	7	13,7	1	14, 3	5	15,6	3	37,5	-	-
Possession	11	21,6	1	14, 3	11	34,4	-	-	-	-
Provoking	6	11,8	-	-	1	3,1	-	-	1	50
Game rules	2	3,9	1	14, 3	-	-	-	-	-	-
Other										

Boys and girls have some ideas about getting into play fights. We may say that boys love play fights more than girls. Boys said that they have fun and it is good to strength training, they see these games as very useful. Boys said that girls do not play because then they cry and Girls say that play fight is for boys because they like to get hurt:

What the boys said:

- T: *We run a lot*
- M1: *It is to sued*
- D: *It is for gymnastics*
- B: *To be men*
- M2: *To be strong*
- F: *We are men and we are strong*
- T: *To be valiant*
- M1: *To be tall*
- M2: *To strength training*

What the girls said:

- L: *Girls are quieter.*
- Ca: *Girls are more graceful and we get hurt*
- Cl: *Boys do ply fight and girls don't.*
- C: *Boys get hurt a lot*
- S: *Men are stronger and may hurt the girls*
- AS: *I don't play because I don't want to get hurt.*
- S1: *Boys have muscles*

Table 6 – Boys and girls motives to participate in Play Fight and Real Fight (frequency and percentage)

	Play Fights		Real Fights			
	Girls (N=9)		Boys (N=48)			
	Freq.	%	Freq.	%	Freq.	%
Help Friend	0	0	1	0.9	13	13.1
Play	17	85	102	95.3	0	0
Mocking	1	5	1	0.9	5	5.1
Physical offence	0	0	0	0	29	29.3
Verbal Offence	0	0	1	0.9	2	2
Object Possession	1	5	0	0	16	16.2
Provoking	1	5	1	0.9	23	23.2
Game rules	0	0	0	0	8	8.1

Other	0	0	1	0.9	3	3
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3 Starting the incident

The children in our sample started most of the episodes. We think that this is due to the fact that more than 50% of the children in our sample are seen as aggressive by their peers. In 37% of the Play Fight situations the children did not know who started and they said that “*if we want to play we don’t have to say anything*”. In Real Fight situations the children only had difficulties to say who started in 6% of the episodes.

There are statistical differences in Real Fights between the groups Aggressor and Aggressive Victim ($\chi^2=5,3743$, $p< 0.025$): these two groups that we grouped as *aggressive group*, are different in relation to provocation or reaction. The children in group Aggressor started 51% (n=26) of the incidents and reacted in 45,1% (n=23), and the children in the group Aggressive Victim started 72% (n=23) and reacted only in 18,2% (n=6) of the Real Fight situations. The children of the group Aggressive Victim seem to be looking for confrontations, this may be related to being less liked in the class (sociometric questionnaire¹), and maybe this is their way of interacting with someone.

Like was mentioned by Perry et al. (1988), Olweus (1993, 1996, 1999), Garrity et al. (1997), Ladd et al. (2004), Ortega & Mora-Merchan (2000), Pepler & Craig (1995) and Smith (2004), the children from group Aggressive Victim showed provocative and irritating characteristics.

Table 7 – Real Fight Provocation or Reaction

Action	Aggressor	Victim	Aggressive Victim	Conflict Management	Withdrawal	Victim support	Observer
Provocation	26	3	23	1	-	1	-
Reaction	23	4	6	4	-	1	2
Unknown	2	-	3	1	-	-	-

Taking into account the groups *Aggressive* (Aggressor and aggressive Victim) and *Peaceful* (all the others) there are statistical differences between them ($\chi^2= 5,4131$, $p< 0,025$). The children in the first started 49% of the Real Fights and reacted in 29%, and the children in the second group started only 5% of the incidents and reacted in 11% of the Real Fight incidents.

4 Incidents characteristics

After understanding what happened during recess, the physical contact episodes were observed frame by frame in order to identify observable aspects that could help adults decide what was happening. These categories that we have identified are influenced by researchers like Aldis (1975), Hall (1971) and Smith (1984), and are the result of our one personal reading and interpretation of the relations between the children with their body’s as mediator during Play Fights and Real Fights:

- *Bodily positions*. The children were standing, or they fell down on the floor, or they altered between these two positions one or more times.
- *Body parts*. The children used hands, feet, torso, or the whole body.

¹ We applied a sociometric questionnaire to all the classes

- *Contact distance.* The children were close, or they were on a short distance (i.e. hand and feet can hit the other), or on a longer distance (e.g. run away from each other).
- *Occupied space.* If the children did not move from starting point, or if they moved around the area where the fight started (2-3 metres), or if they moved from one place to another without stopping the fight.

4.1 **Body positions** - In play fight, the children fell to the floor or go up and down in 49% of the events (in 20% they got up and down more than once); in real fight, the children avoided falling down, they stay up in 83% of the events, since falling down would decrease their possibilities to defend themselves.

Table 8- Body Positions during Play Fight and Real Fight

Body positions	Play fight	Real fight
Standing	51 %	83 %
Falling to the floor	29 %	17 %
Multiple positions	20 %	0 %

Differences in gender are statistically important in Play Fight ($\chi^2=15,232$, $p < 0,0005$). Girls only go the floor in two episodes and we never observe multiple plans. Boy go the floor in more than 50% of the episodes and in more than 24% we observe multiple changes of plans in the same episode. Probably the children avoid the floor because they are afraid of getting hurt. This is similar to Aldis findings (1975), he also mentioned that if girls fell down they have a more passive attitude than boys. In boys we find statistical differences between Play Fight and Real Fight plans ($\chi^2= 43,4457$, $p < .0005$). In Play Fight they do go to the floor in only in 43% of the episodes and in more 24% we observe multiple plans. In Real Fight they only go to the floor in 16% of the episodes and when this happen the fight stops.

4.2 **Body parts** – We found that the children used different body parts during play fight in comparison with real fight (Table 9). In Play Fight the children use their whole body , and the physical contact is more visible. In Real Fight the children use more their hands and feet, maybe this way they keep safe distance and have space to run away if necessary (see Hall, 1971). In Play Fight the whole body was used in almost 40% of the episodes, this maybe related to fight in the floor, when the children try to get the other to the floor and keep a superior position over him (see Aldis, 1975).

Table 9 - Body Parts Used in Play Fight and Real Fight

Body parts	Play fight	Real fight
Hands	28 %	44 %
Feet	10 %	16 %
Torso and hands	15 %	9 %
Hands and feet	7 %	16 %
Torso, hands and feet	40 %	15 %

Girls use mostly hands (35% of the episodes) or hands and torso (40% of the episodes) and boys use the whole body in around 45% of the episodes. Aldis (1975) mentioned that in

girls is very common the play slap with open hand and it is very rare to see them fighting in the floor, also their fight is more fragmentary.

In boys there are differences between Play Fight and Real Fight ($\chi^2= 24,983$, $p< .0005$). In Play Fight the whole body participates in around 45% of the episodes, but in Real Fight they used only the hands in almost 45% of the episodes.

4.3 **Contact distance** - In Play Fight the relations were closer; the children get body to body contact and go to floor. In Real Fight, in more than 50% of the episodes the children keep some (security) distance between them. The children seem to have some measure of risk and fight in a more secure distance avoiding getting hurt (see Hall, 1971). It was possible to observe that some children make simulated attacks until they get to hit the other and then they run away to avoid retaliation

Table 10 – Contact distance in Play Fight and Real Fight: frequency and percentage

	Play Fight		Play Fight becomes Real		Real Real Fight	
	Freq.	%	Freq.	%	Freq.	%
Close	28	22	2	10,5	7	7
Close and near	32	25,2	3	15,8	22	22
Near	38	29,9	7	36,8	52	52
Close, near and distant	21	16,5	6	31,6	4	4
Near and distant	8	6,3	1	5,3	15	15

During the Play Fight situations the children keep proximity. In Real Fight situations the children avoid getting to close to the other.

4.4 **Occupied space** -The space occupied was frequently reduced. The incidents started and ended in the same area in Play Fights (55%) and in Real Fights (68%). In 35% of the Play Fight and 21% of the Real Fight the children did not move from the same place. The differences maybe related to fight in the floor during Play Fight.

Table 11 – Occupied space during Play Fight and Real Fight: frequency and percentage

	Play Fight		Play Fight becomes Real		Real Real Fight	
	Freq.	%	Freq.	%	Freq.	%
Null	45	35,4	4	21,1	21	21
Small	69	54,3	8	42,1	68	68
Extended	13	10,2	7	36,8	11	11

In all the groups more than 50% of the Play Fight episodes happened in a small space. During Real Fight s the children in the *peaceful* group never use the extended space. There are

differences in Real Fight between the groups Aggressor and Aggressive Victim in the last group the children used the extended space in 28,1% when they run from the other children.

In Play Fight boys and girls use essentially a small space around the starting point. In boys we found differences between Play Fight and Real Fight ($\chi^2= 6,9265$, $p< .05$). The Play Fight happened more in a null space what is related to fight in the floor. The use of the extended space in 11% of the situations is related in Play Fight with catch games and in Real Fight with the pursuit that ended some conflicts.

Conclusions

This Project main question was the identification of visible differences in children's behaviour during physical contact interactions in the playground. We want to know if something is play or real fight in order to decide about intervention. Main conclusions are summarized on the table 12.

Table 12 – General characterisation and visible differences between Play Fight and Real Fight (Marques, 2007)

	Play Fight	Real Fight
	The children from the groups Aggressor and Aggressive Victim participated in almost 50% of the observed Play Fights	As crianças dos grupos Aggressor e Vítima Agressiva participaram em 83% das Lutas a Sério observadas
Geral	The boys were the main participants, the girls only participated in 15,7% of the episodes observed	Os meninos foram os principais envolvidos nas Lutas a Sério (99%)
	The higher percentage of the Play Fights happened in the atrium during rough-and-tumble play	Verificaram-se em maior percentagem durante os jogos de futebol no campo de jogos
Action Plans	High percentage of plat fights take place in the floor and with changes in plans	Fight in the floor is very rare Multiple changes of plans were not observed
Body Parts	<i>Whole body</i> participates in the action	In 50% of the episodes the children use their hands and feet
Contact Distance	Most used distances were: <i>physical, near, physical and near</i> . Frequently the spaces between participants disappear.	Most fights developed keeping some space between participants (distance <i>near</i>).
Occupied Space	Most of the games develop in the same site (35%) or in a <i>reduced</i> space (54,3%).	Most of the real fights happened on a <i>reduced</i> space (68%).

Several studies about Play Fight used observational methodology but the participating children were not interviewed about the situations (Aldis, 1975; Fry, 1988; Pepler & Craig, 1995). In Smith et al. (2004b) study, the children were questioned individually, and it is not possible to discuss the situation with the participants at the same time. We agree with Pellegrini (1996) when he mentions the importance of asking the participating children what is happening, in order to understand their world, and that is why we decide to give the children a fundamental paper in our research: being part of the sample; forgetting our presence in their recess space; allowing the interviews; discussing with us and the other the different events: games, plays and real fights recorded on video.

Maccoby (2003) highlight the paper that evolution seems to have, given the children and what they need to get involved in several types of games according to the environmental conditions. The Evolutionist Theory (integrating influences from biology and sociology to the understanding of human development) seems to be a very interesting perspective to analyse and understand play and especially Play Fight. In that perspective Play Fight and Real Fight are adaptive behaviours that appear in function of the environment and can be related to the *species survival*. In *physical* bullying the same behaviour appears not because of species survival but it seems to be related with *individual survival*. The pro-active physical aggressor that uses force systematically over someone gets what he want and acquire status and domain over the other, it seems that there is no need of provocation (from individual or environment) but only what seems to be the need to harm someone.

We like to give some suggestions to people concerned with child development and child relations with peers, for those in the professional field that have to deal with risky situations (psychological and physical). Taking into account that the adults should avoid intervene in Play situations but have to take some action in Real Fight situations, we think that:

- It is necessary to know the children outside the classroom, using questionnaires, interviews and mainly children's observation during their leisure times;
- Should be identified the children in risk of getting into conflicts or exclusion situations through questionnaires and sociometry tests;
- It is important the have active supervision of the children and to improve the playground characteristics with the introduction of play materials. This way the children do different games, not just football which is the activity where most conflicts happen; simultaneously the adults can support the children with socialisation problems and those that get involved in conflicts more frequently;
- Teacher, educators and other adults' training should include knowledge about physical activity play and rough-and-tumble play as an area of interest, pointing its importance in child development especially boys, and also the characteristics of this type of games that allowed distinguishing them from real fight.

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