# Family and community violence of schoolchildren from the city of São Gonçalo, Rio de Janeiro, Brazil

Violência familiar e comunitária em escolares do município de São Gonçalo, Rio de Janeiro, Brasil

# **Abstract**

This descriptive study aimed to investigate the association between violence in the family, school and community experienced by school children/adolescents of the city of São Gonçalo (RJ), Brazil. Questionnaires were administered to the mothers/guardians to assess violence in the family and school and to children to check their perceptions of community violence. Multiple correspondence analysis and cluster analysis, two exploratory descriptive techniques, were employed. Data from 280 schoolchildren were analyzed. A total of 43.9% of mothers reported that their children had been physically abused in their homes. With regard to children's/adolescents' perception of community violence, 93.2% said they had experienced or witnessed these events in their communities. For both sexes there was the formation of a cluster of categories with the presence of violence among siblings, presence of severe physical assault and verbal assault committed by parents. Among girls, the presence of violence in the school formed a cluster with the highest category of violence in the community. In conclusion, it should be emphasized that public policies aimed at dealing with violence should expand their scope to the various forms of violence affecting children.

**Keywords:** Child. Adolescent. Violence. Domestic violence. Scales. Cluster analysis.

# Liana Wernersbach Pinto<sup>1</sup> Simone Gonçalves de Assis<sup>11</sup>

<sup>1</sup>Jorge Careli Latin-American Center for Studies on Violence and Health, National School of Public Health, Oswaldo Cruz Foundation. Rio de Janeiro, RJ, Brazil.

FAPERJ (State of Rio de Janeiro Research Support Foundation): Process E-26/110.393/2007. **Corresponding author:** Liana Wernersbach Pinto. Centro Latino-Americano de Estudos de Violência e Saúde Jorge Careli, Escola Nacional de Saúde Pública, Fundação Oswaldo Cruz. Avenida Brasil 4.036/700, Manguinhos, 21040-361 Rio de Janeiro, RJ, Brazil. E-mail: lianawp@fiocruz.br

#### Resumo

O presente estudo descritivo teve como objetivo investigar a associação entre as situações de violência na família, na escola e na comunidade vividas e presenciadas por crianças e adolescentes do município de São Gonçalo (RJ). Foram aplicados questionários às mães/responsáveis para aferir a violência na família e na escola, e às crianças para verificar sua percepção sobre a violência comunitária. Empregaram-se a análise de correspondência múltipla e a análise de aglomerados, duas técnicas exploratórias descritivas. Foram analisados dados de 280 escolares. Verificou-se que 43,9% das mães informaram que seus filhos sofrem violência física severa em suas casas. Quanto à percepção das crianças/adolescentes sobre a violência comunitária, 93,2% afirmaram já ter vivido ou presenciado esses eventos em suas comunidades. Para ambos os sexos verificou-se a formação de um aglomerado com as categorias presença de violência entre irmãos, presença de violência física severa e de agressão verbal dos pais contra a criança/adolescente. Para as meninas, a presença de violência na escola formou um aglomerado com a categoria mais elevada de violência na comunidade. Conclui-se salientando que as políticas públicas de enfrentamento à violência devem ampliar seu foco de atuação para as variadas formas de violência que afligem as crianças/ adolescentes.

**Palavras-chave:** Criança. Adolescente. Violência. Violência doméstica. Escalas. Análise por conglomerados.

# Introduction

The World Health Organization (WHO) estimates that 40 million children/adolescents younger than 15 years suffer abuse and negligence worldwide every year1. A recent study on homicides committed in the world indicates that, in 2008, rates ranged between 1 and 2 children of both sexes per 100,000 inhabitants in the 0-to-14-year age group; while, in the 15-to-29 year age group, these rates were highly unequal between sexes: 21.2 per 100,000 inhabitants among men and 3-4/100,000 inhabitants among women<sup>2</sup>. Data from the Centers for Disease Control and Prevention (CDC) in the United States show that, in 2009, homicides were the fourth most frequent cause of death among American children/adolescents aged between 10 and 14 years3.

These data indicate that violence involves the lives of children and adolescents unequally. Community violence should be emphasized, which is a common form of violation of children's rights, characterized by the fact that it is practiced among individuals without family bonds, whether acquainted or not. This type of violence is practiced in acts of violence, such as physical and sexual violence, and it can be performed in public or private institutions, such as schools and health services, in communities and housing complexes<sup>4</sup>.

Studies have warned about children's and adolescents' high level of exposure to community violence, as victims and witnesses of episodes such as shootings, physical and verbal assault, and observing dead or wounded people on the streets. The high prevalences of these episodes among children and adolescents become even more alarming when associated with a series of negative consequences for their development<sup>5,6</sup>. A study pointed out that between 30% and 70% of children of several cities and countries are exposed to threatening and dangerous events in the places where they live7. Another study, conducted with a representative sample of adolescent students of the city of São Gonçalo, RJ, Southeastern Brazil, in 2005, indicated that half of them had already witnessed someone being seriously wounded; one out of every three had already faced a dangerous and unsafe situation in their neighborhood and 12.7% had their homes broken into or robbed<sup>8</sup>.

Community violence is more present in more impoverished areas, where there is a lack of protective resources from public institutions such as health, education, housing and safety<sup>9</sup>. Children and all family members are exposed to high-risk situations and deprived of their right to come and go at any time of the day or night, due to robberies, thefts, murders or drug trafficking. Apart from the visible effects of living in high-risk areas, the fear caused by lack of control and safety stands out in society, becoming as restrictive as the actual events that have occurred.

Children exposed to community violence often have a restricted access to school. They suffer due to the threat, exposure and witnessing of situations that make them emotionally vulnerable. Additionally, they learn that violent situations are part of life, becoming commonplace and being possibly repeated in their current and future relationships. In this context of exclusion where children are the target of violent acts, their health becomes physically and emotionally impaired<sup>10</sup>.

Community violence also affects children in the school environment11,12. Studies conducted in Brazil have shown that the roots of violence in schools are found in the violence occurring in the neighborhood, family and structural conditions such as poverty and deprivation<sup>13-16</sup>. A study that included a sample survey conducted in households of the city of Rio de Janeiro (914 adolescents) revealed that nearly half of adolescents reported episodes of violence in their schools17. Data from a study conducted in ten schools of large cities in the United States show that the victimization of adolescents in schools is frequent: 30% of males and 16% of females reported having been victims of thefts in their school or surrounding areas and 2/3 had already witnessed verbal or physical assaults in the

school environment18.

In a study conducted with 46,979 students in 13 Brazilian state capitals, Abramovay found that approximately half of them reported violence at school as a factor that prevents them from concentrating on their studies. Two other consequences were mentioned: feelings of nervousness and outrage and the loss of interest in going to school<sup>19</sup>.

Family violence is another relevant form of aggression against children that occurs in hierarchical and inter-generational relationships found in the family4. It affects more children than adolescents, due to their greater physical and emotional vulnerability. This form of violence consists in aggressive ways through which family members relate to each other, using violence to resolve conflicts and as a strategy to educate. Moreover, it includes lack of basic care for children4. For generations, the praxis exercised in family and school education has been based on the use and often abuse of negative emotional behavior and physical force since childhood. A study conducted by the United Nations Children's Fund (UNICEF) shows that this form of violence is present in all cultures, classes, levels of education, income strata and ethnic groups and it is frequently approved by society and legalized and authorized by the government20.

Problems resulting from the exposure of children to family violence are not limited to their physical health, including their psychological development, social relations and academic performance as well<sup>21-25</sup>. The impact goes beyond behavioral and emotional problems, affecting the way in which children view themselves and the world, their ideas about the meaning of life, their expectations for the future and their moral development. Furthermore, the impact extends beyond the period when children suffered or witnessed violence, with consequences that will often only appear during adolescence or adulthood<sup>26</sup>.

An analysis of Brazilian studies performed by Reichenheim et al.<sup>27</sup> shows that the number of cases of psychological and physical violence against children and adolescents

is remarkably high in this country. Although lower than the prevalence rates of certain countries such as India (36%), Egypt (26%) and the Philippines (37%), this prevalence is significantly higher than those of other countries situated in the same continent, such as Chile (4%) and the USA (4.9%)<sup>4, 28,29</sup>.

A survey conducted by the Brazilian Ministry of Health in emergency sentinel health services of 38 cities of this country (24 states and the Federal District) in 2007 showed that, of all 5,756 occurrences resulting from violence that took place in these services, 5% occurred among children aged up to nine years and 20.2%, among adolescents aged from ten to 19 years. With regard to reports of domestic, sexual and other forms of violence that comprise the Ministry of Health Surveillance System (data referring to 27 cities situated in 20 Brazilian states), of all 9.038 cases of violence recorded in 2007. 21.4% occurred among children and 26.2% among adolescents. These data indicate the relevance of violence occurring in these age groups that are found in Brazilian health services30.

It should be emphasized that the exposure of children to a certain form of violence does not usually occur alone; studies have shown high rates of joint occurrence with community and family violence<sup>31,32</sup>. Concomitant occurrence of more than one form of violence can seriously harm children<sup>33,34</sup>. Bearing this in mind, the present study aimed to investigate the association between violent situations experienced by male and female children and adolescents in their family, school and community. In general, in the studies on violence, the separate investigation of each form of violence is frequent. Thus, this study sought to explore the interrelations among the forms of violence that can affect child growth and development.

#### Methods

#### Study design, population and sample

The results shown in this article originated from the third stage of a longitudinal

study performed in 2008 with 434 children/ adolescents. This study began in 2005, including 500 children aged between six and 13 years and enrolled in the 1st grade of primary school. School and class records and the mean number of students per class for 2005, provided by the City of São Gonçalo Department of Education, were used in the design of the sampling plan. There was a random selection of schools and students participating in the study and simple cluster sampling with three stages of selection (schools, 1st grade classes and students) was employed. The sample size considered the highest number of sample students possible, using a proportion of 50%, confidence level of 98.02% and relative error of 5%.

The cross-sectional data analyzed in this study refer to 280 children/adolescents who had complete information about all variables studied.

#### Data collection

In 2008, interviews were conducted with the mothers and children. The following data originated from the instrument answered by mothers/legal guardians:

- Sex and age;
- Violence committed by the father and/ or mother against the child: the Conflict Tactics Scale (CTS), developed by Straus<sup>35</sup> and validated in Brazil by Hasselmann & Reichenheim<sup>36</sup>, was used in this study. It corresponds to actions that a family member performs when in conflict with another. Two conflict tactics were assessed: verbal assault against a child (cursing or insulting, becoming sullen, crying, doing things to irritate, destroying, hitting or kicking objects) and severe physical assault against a child (kicking, biting or punching, attempting to hit with objects, beating, threatening or using knives/firearms). One positive item in each of the sub--scales is considered to be a case.
- Violence among siblings: assessed by two items: 1) to assess humiliation among siblings, and 2) to assess fights

- that may cause physical harm. One positive item is considered as presence of physical and/or psychological violence among siblings.
- Violence experienced by a child at school in the previous year: assessed through a scale used by the United Nations in studies on self-reported offenses. There are eight dichotomous questions about being humiliated, threatened, and severely assaulted so that medical care is required; having objects purposefully damaged; having lived with individuals who had cutting weapons or firearms; and having been a victim of robbery or theft<sup>37</sup>. One positive item characterizes children as victims.

Information about self-reported ethnicity was used from the questionnaire applied to children and the "Things I Have Seen and Heard" scale<sup>38</sup> was analyzed. In this scale, children themselves assess their experiences with violence at home, at school, in the community and in other locations where they have been to throughout life, including events such as seeing someone being arrested, beaten, stabbed or shot; seeing robberies and break-ins; hearing shots; seeing drug dealing and gangs/criminals where they live. A total of 12 questions about community violence, as proposed by Malik<sup>7</sup>, were used to construct the score employed in this article. The final score of community violence was obtained from the sum of frequencies and categorized as follows: (1) 0 events occurred: (2) 1-10 events occurred: and  $(3) \ge 11$  events occurred. The community violence scale showed a Crohnbach alpha = 0.775 (95%CI: 0.730-0.830).

Additionally, the homicide rates per district where children of the city of São Gonçalo lived were used in the analysis, aiming to show in a concrete way one of the most evident forms of violence to which children are exposed. Police reports (PR) were evaluated from micro-data provided by the *Instituto de Segurança Pública* (ISP – Public Safety Institute) of the city of Rio de Janeiro for the period from July 2007 to

June 2008. The population of São Gonçalo per district was obtained from the city's Department of Finance for 1996, using estimates of population per district from 2008, as the *Instituto Brasileiro de Geografia e Estatística* (IBGE – Brazilian Institute of Geography and Statistics) does not have census data per district of a city in the 2000 Census. Homicide rates were calculated and categorized as follows: (1) < 30/100,000 inhabitants; (2) 30-50/100,000 inhabitants; and (3) more than 50/100,000 inhabitants.

# Data analysis

Data were analyzed with the SPSS software, version 15.0. The first moment of data analysis included the construction of the distribution of frequencies of the variables studied and the calculation of summary measures. Next, multiple correspondence analysis (MCA) was used for both sexes, aiming to verify the associations among the several forms of violence studied (in the family, in the community, at school). The MCA is a technique of exploratory analysis of multivariate data that enables the visualization of the most important relationships of a large set of variables without a defined structure a priori. The results of this analysis are shown through graphs where all categories of variables involved are shown together, thus allowing the relationships among them to be more easily visualized. Each category is represented by a point in the graph. The distance between points enables the visualization of the existing relationships. The measure of inertia is used to define the proportion explained by each axis/dimension (the greater the inertia, the better the representation of points in space). The multiple correspondence analysis was performed with the ca package of the R 2.10.1 software (www.r-project.org). As the MCA is a descriptive analysis with a subjective interpretation, a cluster analysis was subsequently performed using the stats package of the R 2.10.1 software (www.r--project.org). This technique was used with the purpose of confirming clusters found by the correspondence analysis. The cluster analysis included the cluster method known as average, with the results shown in graphs known as dendrograms. The techniques employed are descriptive and non-inferential. The chi-square test was used with the purpose of comparing proportions, considering a p-value < 0.05.

The present study was approved by the Research Ethics Committee of the National School of Public Health/FIOCRUZ (Official opinion 24/07) and school principals and parents/legal guardians signed an informed consent form.

# **Results**

The sample studied was comprised of data from 280 children/adolescents, of which 142 (50.7%) were boys and 138 (49.3%) were girls. With regard to ethnicity, 48.2% were mixed, 24.3% were black and 27.5% were white. Age varied between nine and 15 years (mean =11.1; SD = 0.9).

Table 1 shows the distributions of frequencies of variables associated with violence. A great number of mothers (80%) informed that verbal assaults were frequent in their routine with the child/adolescent; while 43.9% reported severe physical assault committed by one of the adults. The percentage of children/adolescents who reported having experienced or witnessed violence in the community was very high (93.2%). Additionally, the majority of districts of the city of São Gonçalo had high homicide rates (more than 50/100,000 inhabitants).

Table 1 also shows a similar picture for the variables studied according to sex (none of the variables was statistically significant).

With regard to the multiple correspondence using several forms of violence (family, school and community) against children, three dimensions were obtained and these could explain 73.2% of the variation for data on boys and 75.9% for those on girls. Graphs 1 and 2 show the results of the correspondence and cluster analyses for boys and girls, respectively.

Graph 1 shows a group being formed

in the central area, related to the boys who were victims of verbal assault and severe physical assault by their father and/or mother and physical and/or psychological violence by their siblings. Additionally, in the central area, there was another group characterized by the absence of severe physical assault, physical and/or psychological violence among siblings and at school; children who experienced fewer events (1-10) of community violence were also included in this group.

It should be emphasized that the group that reported the highest frequency of adverse events in the community ( $\geq$  11) is not close to any other categories of violence assessed. One must remember that this is the only variable of violence that shows children's perception; the remaining ones reflect the parents' or legal guardians' perspective, usually that of mothers.

Graph 2 (girls) shows the proximity between the presence of severe physical assault and verbal assault from parents and physical and/or psychological violence from siblings. The categories associated with the absence of verbal assault and severe physical assault from a mother and/or father seem to form a group.

Being a victim of violence at school and experiencing more events ( $\geq 11$ ) of community violence formed a cluster, unlike what was observed among boys.

Graph 3 sought to investigate the children's perspective of community violence (assessed with the "Things I Have Seen and Heard" scale) and homicide rates in the district where they live. The relationship among categories (Graphs 3a and b) was found: children who lived in areas with higher homicide rates had experienced 1-10 violent events where they lived; those who lived in areas with average homicide rates had experienced 11 or more violent events. Boys who had never experienced violent events in their community formed a separate group; lower homicide rates in the districts where girls in the same situation lived were also reported. The correspondence analysis among boys showed inertia of

**Table 1** - Family and community violence of children/adolescents studied, according to sex. Municipal School Network, city of São Gonçalo, RJ, Brazil, 2008.

**Tabela 1** - Violência familiar e comunitária das crianças/adolescentes estudados, segundo sexo. Rede Municipal de Ensino, São Gonçalo, 2008.

Characteristics	Males		Females		Total	
	N	%	N	%	N	%
Verbal assault by the mother and/or father (reported by mothers)						
Presence	117	82.4	107	77.5	224	80.0
Absence	25	17.6	31	22.5	56	20.0
Severe physical assault from the mother and/or father (reported by mothers)						
Presence	68	47.9	55	39.9	123	43.9
Absence	74	52.1	83	60.1	157	56.1
Violence among siblings (reported by mothers)						
Presence	74	52.1	74	53.6	148	52.9
Absence	68	47.9	64	46.4	132	47.1
Violence at school (reported by mothers)						
Presence	33	23.2	33	23.9	66	23.6
Absence	109	76.8	105	76.1	214	76.4
Violence in the community – "Things I Have Seen and Heard" scale (reported by children)						
Never	8	5.6	11	8.0	19	6.8
1 – 10	95	66.9	83	60.1	178	63.6
≥ 11	39	27.5	44	31.9	83	29.6
Homicide rate per district (100,000 inhabitants)						
< 30	33	23.2	29	21.0	62	22.1
30 – 50	21	14.8	25	18.1	46	16.4
≥ 50	88	62.0	84	60.9	172	61.4

99.6%. This fact occurred again among girls; however, inertia was slightly lower (77.8%).

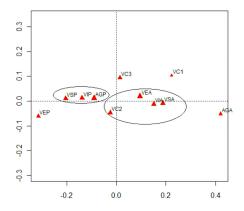
#### Discussion

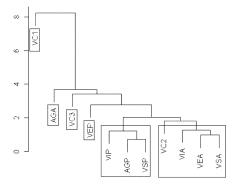
The first observation to be made is the high percentage of children who have experienced family violence, whether this is physical or psychological; community violence is also alarming. Schools are the only place where violence was less intense (although present in 23.6% of participants). The high homicide rates recorded by the Civil Police clearly reflect the social and criminal violence found in the city.

There were no significant differences between boys and girls with regard to experiencing the forms of violence investigated in this study. However, studies show that, during adolescence, the exposure of boys to community violence had a greater impact<sup>31,39</sup>.

Furthermore, among children of both sexes, there was a trend towards family violence affecting all its members: victimization due to verbal assault and severe physical assault committed by parents occurs concomitantly with physical and psychological violence existing among siblings. Other studies corroborate the finding that children suffering violence by their parents/legal guardians tend to witness more episodes of violence among parents and to experience more violence among siblings and the larger family<sup>40,41</sup>. A study conducted with adolescent students of São Gonçalo, RJ, showed that those who are somehow

(a) (b)





VSP = Presence of severe violence by the mother or father VSA = Absence of severe violence by the mother or father

AGP = Presence of verbal assault by the mother or father AGA = No verbal assault by the mother or father

VIP = Presence of violence among siblings

VIA = No violence among siblings

VSP = Presença de violência severa da mãe ou do pai;

VSA = Ausência de violência severa da mãe ou do pai; AGP = Presença de agressão verbal da mãe ou do pai;

AGA = Ausência de agressão verbal da mãe ou do pai;

VIP = Presença de violência entre irmãos;

VIA = Ausência de violência entre irmãos;

VEP = Presence of violence at school

VEA = No violence at school

VC1 = Things I Have Seen and Heard: Never

VC2 = Things I Have Seen and Heard: 1 - 10

VC3 = Things I Have Seen and Heard: ≥ 11

VEP = Presença de violência na escola;

VEA = Ausência de violência na escola

VC1 = Coisas que vi e ouvi: Nunca VC2 = Coisas que vi e ouvi: 1 - 10

VC2 = Coisas que vi e ouvi: 1 - 10 VC3 = Coisas que vi e ouvi:  $\geq 11$ 

**Figure 1** - Multiple correspondence analysis (a) and cluster analysis (b) applied to the data on family, community and school violence in a sample of 142 male students in the city of São Goncalo, RJ, Brazil, 2008.

**Gráfico 1** - Análise de correspondência múltipla (a) e análise de aglomerados (b) aplicadas aos dados de violência familiar, comunitária e escolar em uma amostra de 142 escolares do sexo masculino do município de São Gonçalo, Rio de Janeiro, 2008.

mistreated by their family witness two times more violence among siblings and parents, indicating the vicious circle of assaults in the universe of family relations<sup>42</sup>. It is important to consider family violence as a potential factor of social violence<sup>43</sup>.

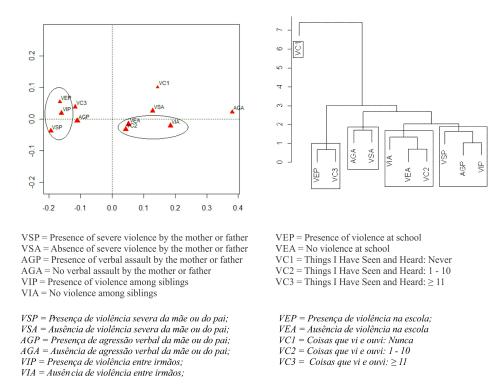
Community violence was found to be more complex. Boys and girls who have not experienced any form of community violence are less likely to experience violence in the family and at school. Boys who experienced fewer events of community violence (1-10) are characterized by the absence of family and school victimization. This situation is similar among girls, although, in their case, the absence of violence among siblings and at school is included to the lower level of community violence. What stands out is the fact that the higher level of exposure to community violence is not as close to all

forms of violence assessed in this study; this form of violence is only close to victimization occurring at school and among girls. Understanding all this variation requires the use of more complex statistical techniques than those found in the present study. In the literature, studies emphasize that children who suffer domestic violence are more frequently exposed to violence at school and in the community40,41. Studies with adolescent students of São Gonçalo, RJ, observed that those who are mistreated by their family are three times more exposed to episodes of violence at school and 3.8 times more exposed to assaults in the community42. This phenomenon is known as "re-victimization"44. There are many hypotheses for this situation, among which that violence is somehow learned and, consequently, could be reproduced in contexts where children

Rev Bras Epidemiol

2013; 16(2): 288-300

(a) (b)



**Figure 2** - Multiple correspondence analysis (a) and cluster analysis (b) applied to the data on family, community and school violence in a sample of 138 female students of the city of São Goncalo, RJ, Brazil, 2008.

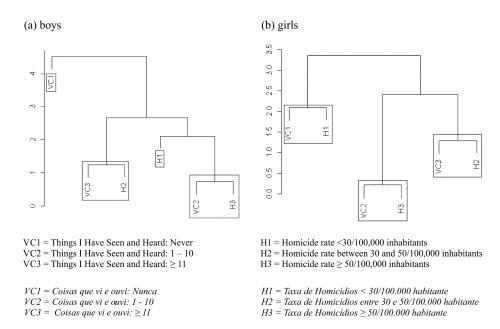
**Gráfico 2** - Análise de correspondência múltipla (a) e análise de aglomerados (b) aplicadas aos dados de violência familiar, comunitária e escolar em uma amostra de 138 escolares do sexo feminino do município de São Gonçalo, Rio de Janeiro, 2008.

and adolescents live<sup>45</sup>. This re-victimization process has a high potential of harming one's development, as the accumulation of adverse experiences increases the chances of a child or adolescent having emotional and behavioral problems<sup>46,47</sup>.

The discussion about the increase in the effects between family and community violence is controversial. While conducting a review of the family's role towards the exposure of children to community violence, Proctor<sup>48</sup> found that there is an association between community violence and family maltreatment/conflicts, as well as among family support, supervision and coercion. Conflicting families caught in the dynamics of violence would promote children's exposure to violence in the community, including their inadequate involvement with peers

and perpetrating acts of violence<sup>49,50</sup>. On the other hand, families who are more involved emotionally could have children who are less exposed to community violence<sup>51</sup>, although some experts defend the theory that family protection has a lower effect in communities with high levels of violence<sup>50</sup>.

The fact that children who live in areas with more homicides report experiencing fewer violent events (1-10) and those living in areas with average homicide rates react by reporting more experiences of community violence  $(\geq 11)$  could indicate the movement of children throughout different districts of the city. Nonetheless, the mechanism of representation of violence used by children can partly explain this phenomenon. Living in districts with much violence can help it become trivial. Factors such as the closeness



**Figure 3** - Cluster analysis applied to the data on community violence (CVO) and homicide rates in a sample of schoolchildren from the city of São Gonçalo, RJ, Brazil, 2008. **Gráfico 3** - Análise de análise de aglomerados aplicada aos dados de violência comunitária (CVO) e Taxas de homicídios em uma amostra de escolares do município de São Gonçalo, Rio de Janeiro,

of children to a traumatic event, their life history, their subjective mechanisms, and the emotional and social relationships they have are essential to understand the way in which each of them views the violence they experience. A study conducted with children who were victims of a shooting in their school indicated that those who were on the schoolyard, directly exposed to the shooting, minimized the threat to life and the fact that they were in dangerous locations and also tended to omit physical injuries, although having symptoms of posttraumatic stress disorder (PTSD). Children who were inside the school and relatively protected from the shooting had a moderate level of PTSD, including frequent comments about their fear of the shooter invading the school. Children who were absent from school on this day did not have PTSD symptoms, although they were the ones who most frequently remembered that they were close at the exact moment of the shooting, increasing the importance of their participation in the event<sup>52</sup>.

2008.

It should be emphasized that the convergence between the homicide rates and the "Things I Have Seen and Heard" scale, especially with regard to its capacity to assess the absence and presence of community violence, indicates that this scale has the potential of assessing this form of violence in the age group studied. The children of São Gonçalo live in an environment where deadly violence is an everyday fact: the rates found in many districts are higher than those of neighboring cities: mean rates of 44.8 homicides/100,000 inhabitants in the city of Rio de Janeiro and 31.1 homicides/100,000 inhabitants in the city of São Paulo<sup>53</sup> were observed between 2004 and 2006. In 2007, the Southeastern region of Brazil had a homicide rate of 22.9/100,000 inhabitants<sup>27</sup>.

The results of the present study point to the complexity of studying mechanisms through which violence can influence child growth and development. What stands out is the need to investigate the interrelations among its distinct forms (community, school and family violence) and to distinguish

the ways in which children are involved in the violence they experience: as direct victims, when they are victimized by their parents or schoolmates; as indirect victims, such as the cases when they witness violence between their parents or in the community where they live; and as those who commit violence against others, such as their siblings or schoolmates.

One of the limitations of the present study was the impossibility of assessing the frequency of violence in the family or at school, characterized by the presence or absence of this phenomenon, due to the instruments and methodology used in this study. Another limitation was the impossibility of extrapolating the results found here to other groups and contexts. This study had an exploratory design and was focused on the representative sample of public network schools. As a result, it has been useful to analyze interrelations among different forms of violence in specific groups.

The varied forms of violence affecting children, although having the potential to harm their development, must be analyzed in a complex way. In other words, the set of adversities that appear throughout life and the way in which children and their family cope with the difficulties encountered should be analyzed <sup>54,55</sup>.

In conclusion, it should be emphasized that public policies aimed at dealing with violence must increase their scope to the various forms of violence affecting children and require a multi-faceted response<sup>20</sup>. In this sense, one must pay close attention to the structural violence caused by the socioeconomic difficulties that destabilize families, schools and other social means, making children and adolescents vulnerable, without adequate conditions for their growth and development<sup>56</sup>.

**Conflicts of interest:** Authors declared that there were no conflicts of interest.

#### References

- World Health Organization (1999). Report of the consultation on child abuse prevention, WHO, Geneva, 29-31 March 1999. Geneva: WHO.
- United Nations Office on Drugs and Crime UNODC. Global Study on Homicides. Tendency, Context, Data. Vienna: United Nations Office on Drugs and Crime; 2011.
- 3. Centers for Disease Control and Prevention. *Youth Violence: National Statistics*. Disponível em http://www.cdc.gov/Injury/wisqars/pdf/10LCD-Age-Grp-US-2009-a.pdf (Acessado em: 5 de junho 2012).
- 4. Brasil. Linha de Cuidado para a Atenção Integral à Saúde de Crianças, Adolescentes e suas Famílias em Situação de Violência. Orientações para gestores e profissionais de saúde. Rio de Janeiro: Ministério da Saúde/Claves; 2010. p.29.
- Henrich CC, Schwab-Stone M, Fanti K, Jones SM, Ruchkin V. The association of community violence exposure with middle-school achievement: A prospective study. J Appl Dev Psychol 2004; 25(3): 327-48.
- Penelope K, Trickett LD, Horn JL. Community Violence as It Affects Child Development: Issues of Definition. Clin Child Family Psychology Rev 2003; 6: 226-36.

- Malik NM. Exposure to domestic and community violence in a nonrisk sample: associations with child functioning. J Interpers Violence 2008; 23: 490-504.
- 8. Assis SG, Pesce RP, Avanci J. Resiliência: enfatizando a protecão na adolescência. Porto Alegre: Artmed; 2006.
- Assis SG, Avanci JQ, Pesce RP, Njaine K. Resilência na adolescência: refletindo com educadores sobre superação de dificuldades. Rio de Janeiro: FIOCRUZ; 2005.
- 10. Sociedade Brasileira de Pediatria/Fiocruz/Ministério da Justiça. Guia de atuação frente a maus-tratos na infância e na adolescência. Sociedade Brasileira de Pediatria/ Fundação Oswaldo Cruz/Ministério da Justiça; 2001, s/d. 40 p.
- Assis SG, Marriel NSM. Reflexões sobre violência e suas manifestações na escola In: Impactos da violência na escola. Um diálogo com professores. Rio de Janeiro: Editora Fiocruz; 2010. p. 41-64.
- 12. Alves R, Cubas VO, Ruotti C. *Violência na escola: uma guia para pais e professores*. São Paulo: Andhep: Imprensa Oficial do Estado de São Paulo; 2006.
- 13. Cardia N. A violência urbana e a escola. *Contemp Educ* 1997; 2(2): 26-99.

- Candau V. Escola e Violência. Rio de Janeiro: DP&A editora: 1999.
- 15. Guimarães AM. A dinâmica da violência escolar: conflito e ambiguidade. Campinas: Autores Associados; 1996.
- 16. Ristum M. O conceito de violência de professoras do ensino fundamental (tese de doutorado). Salvador: Faculdade de educação da Universidade Federal da Bahia; 2001.
- 17. Minayo MCS, Assis SG, Souza ER, Njaine K, Deslandes SF, Silva CMFP et al. *Fala Galera. Juventude, violência e cidadania no Rio de Janeiro*. Rio de Janeiro: Garamond; 1999. p. 238.
- 18 Elliott D, Hamburg B, Williams K. Violence in American schools. Cambridge: Cambridge University Press; 1998.
- Abramovay M. Violências nas escolas. Brasília: UNESCO Brasil, REDE PITÁGORAS, Coordenação DST/AIDS do Ministério da Saúde, Secretaria de Estado dos Direitos Humanos do Ministério da Justiça, CNPq, Instituto Ayrton Senna, UNAIDS, Banco Mundial, USAID, Fundação Ford, CONSED, UNDIME; 2002.
- 20. Fundo das Nações Unidas para a Infância UNICEF. Relatório do especialista independente para o Estudo das Nações Unidas sobre a Violência Contra Crianças. 2006. Disponível em http://www.unicef.org/brazil/pt/Estudo\_ PSP\_Portugues.pdf (Acessado em 09 de novembro de 2011).
- 21. Fleitlich BW, Goodman R. Social factors associated with child mental health problems in Brazil: cross sectional survey. *BMJ* 2001; 323: 599-600.
- 22. Abramovitch S, Maia MC, Cheniaux E. Transtornos de déficit de atenção e do uso do comportamento disruptivo: associação com abuso físico na infância. *Rev Psiq Clín* 2008; 35(4): 159-164.
- 23. Kennedy AC, Bybee D, Sullivan CM, Greeson M. The impact of family and community violence on children's depression trajectories: Examining the interactions of violence exposure, family social support, and gender. *J Family Psychol* 2010; 24(2): 197-207.
- 24. Horn JL, Trickett PK: Community violence and child development: A review of research. In: Trickett PK, Schellenbach CJ. Violence against children in the family and community. Washington, DC: American Psychology Association; 1998. pp. 103-38.
- 25. Holt S, Buckley H, Whelan S. The impact of exposure to domestic violence on children and young people: A review of the literature. *Child Abuse Negl* 2008; 32: 798-810.
- Margolin G, Gordis EB. The Effects of Family and Community Violence on Children. Ann Rev Psychol 2000; 51: 445-79.
- 27. Reichenheim ME, Souza ER, Moraes CL, Jorge MHPM, Silva CMFP, Minayo MCS. Violence and injuries in Brazil: the effect, progress made, and challenges ahead. *Lancet* (North American edition). 2011; 5: 69-82.

- Assis SG, Avanci JQ, Pesce RP, Ximenes LF. Situação de crianças e adolescentes brasileiros em relação à saúde mental e à violência. Ciên Saúde Colet 2009: 14: 349–61.
- 29. Moura AT, Moraes CL, Reichenheim ME. Detection of child abuse: missed opportunities in emergency rooms in Rio de Janeiro, Brazil. *Cad Saúde Pública* 2008; 24: 2926-36.
- 30. Brasil. *Viva: vigilância de violências e acidente. 2006 e 2007*. Brasília: Ministério da Saúde; 2009.
- Garbarino J, Dubrow N, Kostelny K, Pardo C. Children in danger. Coping with the consequences of community violence. San Francisco: Jossey-Bass Inc. Publishers; 1992
- 32. Lynch M, Cicchetti D. An ecological-transactional analysis of children and contexts: the longitudinal interplay among children maltreatment, community violence and children's symptomatology. *Develop Psychopathol* 1998; 10: 235-57.
- 33. Sameroff AJ. Models of development and developmental risk. In: Zeanah JR CH (Ed). *Handbook on infant mental health*. New York: Guilford Press; 1993. p. 3-13.
- 34. Rutter M. Stress, coping and development: some issues and some questions. In: Garmezy N, Rutter M. *Stress, coping and development in children*. New York: McGraw-Hill; 1988.
- 35. Straus MA. Measuring intrafamiliar conflict and violence: the conflict tactics (CT) scale. *J Marriage Family* 1979; 41: 75-88.
- 36. Hasselmann MH, Reichenheim ME. Adaptação transcultural da versão em português da Conflict Tactics Scales Form R (CTS-1), usada para aferir violência no casal: equivalência semântica e de mensuração. Cad Saúde Pública 2003; 19: 1083-93.
- 37. Kahn T, Bermergui C, Yamada E, Cardoso FC, Fernandes F, Zacchi JM, et al. O dia-a-dia nas escolas (violências autoassumidas). São Paulo: Instituto Latino-Americano das Nações Unidas para a Prevenção do Delito e Tratamento do Delinquente/Instituto Sou da Paz; 1999.
- 38. Richters JE, Martinez P. *The NIMH Community Violence Project: Children as victims of and witnesses to violence.* Unpublished manuscript; 1993.
- 39. Romito P, Grassi M. Does violence affect one gender more than the other? The mental health impact of violence among male and female university students. *Soc Sci Med* 2007; 65: 1222-34.
- 40. Finkelhor D, Ormrod RK, Turner HA. Re-victimization patterns in a national longitudinal sample of children and youth. *Child Abuse Negl* 2005; 31: 479-502.
- 41. Weisel DL. *Analyzing Repeat Victimization. Problem-Oriented Guides for Police.* Problem-Solving Tools Series. No. 4. U.S. Department of Justice. Office of Community Oriented Policing Services; 2005.

- 42. Assis SG, Avanci JQ. *Labirinto de espelhos. A formação da autoestima na infância e adolescência*. Rio de Janeiro: Editora FIOCRUZ; 2004. p.207.
- Brasil. Ministério da Saúde. Política Nacional de Redução de Morbimortalidade por Acidentes e Violências. Brasília: Ministério da Saúde: 2001.
- 44. Boxer P, Terranova AM. Effects of multiple maltreatment experiences among psychiatrically hospitalized youth. *Child Abuse Negl* 2008; 32(6): 637-47.
- 45. Daro D, Edleson JL, Pinderhughes H. Finding common ground in the study of child maltreatment, youth violence and adult domestic violence. *J Interpers Violence* 2004; 19: 282-98.
- Rutter M. Maternal deprivation, 1972-1978: new findings, new concepts, new approaches. *Child Dev* 1979; 50: 283-305.
- 47. Sameroff AJ. Developmental systems and psychopathology. *Dev Psychopathol* 2000; 12(3): 397-412.
- 48. Proctor LJ. Children growing up in a violent community: the role of the family. *Agression and Violent Behavior* 2006; 11: 558-76.
- Cicchetti D, Lynch M. Toward an ecological/ transactional model of community and child maltreatment: consequences for children development. *Psychiatry Interpers Biol Proc* 2003; 56: 96-118.
- Luthar SS, Cicchetti D, Becker B. The construct of resilience: a critical evaluation and guidelines for future work. *Child Dev* 2007; 71(3): 543-62.

- 51. Brody GH, Ge X, Conger R, Gibbons FX, Murry VM et al. The influence of neighborhood disadvantage, collective socialization and parenting on African American children affiliation with deviant peers. *Child Dev* 2001; 72: 1231-46.
- 52. Pynoos RS, Nader K. Children's memory and proximity to violence. *J Am Acad Child Adolesc Psychiatry* 1989; 28 (2): 236-41.
- 53. Boselli, G. *O homicídio nos municípios brasileiros: um retrato da geografia do crime e sua relação com os indicadores sociais. 2008*. Disponível em http://
  www. observatoriodeseguranca.org/seguranca/locais/
  homicídios (Acessado em 9 de novembro de 2011).
- 54. Garmezy, N. Reflections and commentary on risk, resilience and development. In: Haggerty RJ, Sherrod LR, Garmezy N, Rutter M. (orgs.). *Stress, Risk and Resilience in Children and Adolecents: processes, mechanisms and interventions*. Cambridge: Cambridge University Press; 1996. p. 1-19.
- 55. Luthar SS, Cushing G. Measurement issues in the empirical study of resilience: an overview. In: Glantz MD, Johnson JL (Orgs.). *Resilience and development: positive life adaptations*. New York: Plenum Press; 1999. p. 129-60.
- 56. Carinhanha JI. Violência vivenciada peãs adolescentes em situação de rua: bases para o cuidado de enfermagem pela cidadania (dissertação de mestrado). Rio de Janeiro: Faculdade de Enfermagem da UERJ; 2009.

Received: 22/11/11 Final version: 14/06/12 Approved: 10/07/12