Individual, family, and school climate factors as predictors of school violence

Livia Nano¹, Sultana Aliaj², * and Renisa Beqiri³

¹,²,³ Department of Psychology and Pedagogy, University of Tirana, Albania

Abstract.

School is the highest knowledge institution. For this reason, it is considered a sacred space in terms of culture, peace, equality, and knowledge (Henry, 2000). Recently some unfamiliar or unreported phenomena are being evidenced, making school and particularly school violence one of the main focuses of the studies (Ferrara, Franceschini, Villani, & Corsello, 2019).

The violence issue against children in schools is complicated, and it is clear that it goes beyond the school environment. The primary aim of this paper is to explore the interaction of individual and family demographics, and school climate-related variables with reported physical, psychological, sexual violence, and weapon victimization reported by primary school children. The study is based on a representative sample of students from Tirana, Albania (n=1500). The main hypothesis of this research is that individual and contextual factors can successfully predict types of violence.

The regression analysis examined the relation of different forms of victimization and individual-related variables (gender, age, school success), family-related demographics (parental education, perception of social-economic status, number of children in family, marital status), and school climate variables (safety, relations with teachers, rules and regulations against violence, student participation in setting rules, school norms on violence). The results of this study show the most of these factors have significant predictive power and the individual and contextual factors should be considered when analyzing violence at school.

Key words: contextual factors; individual factors; prevention, psychological well-being; students

1. Introduction

School violence is a global phenomenon present in all continents showing some similarity in terms of trends and at the same time explained specifically by contextual factors where it occurs (Benbenishty & Astor, 2006). Studies from LMIC (low and middle-income countries) indicate the presence of school violence in various degrees and forms, the same studies are concentrated mainly on social, academic, and mental health consequences of school violence.
(Fleming, & Jacobsen, 2009). Studies in LMIC rarely focus on analyzing various setting-related factors that might be associated with school violence. Addressing ecological or contextual related variables associated with school violence might be more feasible and affordable areas of intervention in LMIC’s.

Several studies have explored school violence in Albania using various methodologies and measurements and no specific theoretical perspective.

Physical violence - The Child Abuse Albania Survey, 2006, with 1,500 children, indicates that every second child at home and every third one at school, declares that the violence against is justified. In another study, participants considered that physical violence is more harmful than psychological violence (Tamo & Karaj, 2006) the same study identifies forms of violence that children report experiencing often at home/school are ear pulling (18.5 percent/38.9 percent), pinching (15.9 percent/23.5 percent) and being smacked on the head (15.2 percent/26.3 percent). According to Save the Children (2007) forms of physical violence are reported for hair pulling, hitting to face or neck, hair or ear spasms, fist or swipe in various parts of the body and face, bites, kicks, strokes. Health Behavior of School-Age Children reported that about 35% of children have been injured at least once during the last year, in a way that needed medical intervention. Of these, 11% needed serious medical interventions, including hospitalization (Currie, Zanotti, Morgan, Currie, De Looze, Roberts C et al, 2012). According to Haarr (2013), the prevalence of physical abuse was 59% for high school students. From a study of 2013 by the Ministry of Education and Sports "Violence against children at schools in Albania", the findings show that 12% of students experienced hand-armed or different objects; 8% of students have experienced ear pulling and bite. The latest study about bullying, in April 2017, reported that physical violence has a prevalence of 33% (Dragoti & Ismaili 2017)

Psychological violence - is manifested through insults, screams, low-grade assessments, child placement after school, isolation, and obliging or forcing to stand in uncomfortable or humiliating positions. Types of verbal offenses reported by children varied between the children who live in a city, the village, and those belonging to minority groups. (Save the Children, 2007). BECAN study in Albania reports that 69% of 3,328 interviewed schoolchildren have experienced various forms of psychological violence. Other forms of psychological neglect were reported as following: neglect 26% (Hazizaj, Çoku, Cenko & Haxhiymeri, 2013), 41% experienced being shouted at, 22% being threatened and 16% being offended (Haarr, 2013). Dragoti and Ismaili (2017) report that 45% of the students reported experiencing psychological bullying.

Sexual abuse - Pilika, Faviko & Shehi (2004) reported that 13% of students experienced sexual abuse during the past year, half of them reported being abused by other students, 22.5% by teachers, and 28% by persons entering the schoolyard and its premises.

1.1 Ecological-Contextual Model

Brofenbrenner’s model (1979) of ecological perspective offers an appropriate framework to explore how various individual, family, and school-related variables interact with reported
school violence. The model considers that an individual is embedded in several social contexts and enables to explore how different contexts impact the observed behavior.

According to the model, the individual develops within a context of “nested ecological structures” such that the immediate environment the child perceives is embedded within a larger environment such as the home or the classroom, which in turn is embedded within yet a larger environment such as the neighborhood or the school. The contexts within this hierarchy are interrelated. The child progressively accommodates the contexts within which he or she develops. The activities, roles, and interpersonal relations within contexts play important role in human development (Schonfeld, 2006).

In terms of research in the field of school violence, it is important to explore how various nested ecological structures impact reported school violence from students (Kassabri, Benbenishty, Astor & Zeira, 2004). The context of school has an important connection in the development and manifestation of aggression and violence (Steffgen, Georges, Sophie Recchia, and Wolfgang Viechtbauer, 2013).

Analyzing and understanding school violence and victimization from an ecological model, is important especially in Albania where recourses are scarce in terms of research, prevention, and intervention. Example understanding and addressing specific school climate variables associated with school violence might be more efficient and doable rather than focusing on individual or group interventions for violent schoolchildren

1.1.1. The variables related to school violence

**Age** - Longitudinal studies have found that victimization declines from primary to secondary school (Pellegrini & Long, 2002;). In general, other studies at a national level are consistent with findings that students with younger age report higher victimization compared to older students (Benbenishty, Zeira, & Astor, 2000; Pepler et al., 2006; Chen& Avi Astor, 2009; Owens, Daly,& Slee, 2005; Benbenishty& Astor, 2005). On the other hand, a previous study exploring bullying in Albanian schools has not shown a clear difference between age and grade levels (Dragoti, 2017).

**Gender** – Studies show that girls show higher usage and victimization of indirect aggression compared to boys who tend to use and victimized more with direct means of aggression (Lagerspetz, Björkqvist, & Peltonen, 1988; Card, Stucky, Sawalani, & Little, 2008; Rose, & Rudolph, 2006; Jenkins & Demaray, 2015). In terms of victimization through weapons, boys reported higher levels compared to girls (Tokunaga, 2010). In terms of sexual victimization, there is an expectancy that is primarily directed toward the girls (Fineran& Bennett, 1998). However, findings show that, in some cases, boys report higher levels of sexual victimization (Zeira, Astor, & Benbenishty, 2002; Lee et al., 1996; Attar-Schwartz, 2009). In this study, we predict that boys will report higher levels of physical victimization compared to girls who would report higher levels of psychological violence.

**School success** – School violence and usage environment handicap the school system to achieve the main aim of its existence which is learning and academic achievement. Students that reported higher levels of victimization reported lower school success (Sanders& Phye, 2004; Burdick-Will, 2013; Iyer, V., Kochenderfer-Ladd, Eisenberg, & Thompson, 2010;
Nakamoto & Schwartz, 2010). Feeling of safety in school and community and exposure to violence appeared to be predicting the school outcomes of students (Bowen & Bowen, 1999; Henrich et al., 2016). A study comparing the multi-victims compared had lower academic performance than non-victims. The same study concludes that exposure to school violence has a hindering effect on development and overwhelm coping and protective factors that can lead to lower academic performance. In terms of specific types of victimization in a longitudinal study found that psychological violence in form of peer exclusion and chronic peer abuse were associated with lower classroom participation and school achievement (Buhs, Ladd, & Herald, 2006). In terms of sexual victimization, it was reported that it impacts negatively to a greater degree compared to bullying student involvement and school outcomes (Gruber & Fineran, 2016).

2. Methods

2.1 Research design

To study the phenomenon of violence in school and the impact of individual and contextual factors is the use of quantitative methods. Quantitative methodology is an objective and standardized measurement, through which questionnaires; surveys accumulate data to answer research questions and hypotheses.

This study has used a quantitative study to collect data to identify the problem. Considering that the monster is relatively large, at about 1500 students, it is found reasonable that for data collection the best method is the quantitative one because it holds a large amount of data in the shortest time possible. This method is considered appropriate for this study that has a large sample from a relatively large distributed population in a large rural and urban geographic area, as are generally distributed 9-year schools in the Tirana district.

2.2 Sampling Procedures

To select the sample of this study, two-step sampling methods were used. The first step is the selection of schools followed by the selection of classrooms within schools. We selected 13 schools randomly from a total of 50 public schools in 11 municipalities of the capital city of Tirana. We selected two schools only for one municipality that has a higher density of population compared to other municipalities. We selected randomly one class for each school grade from 6 to 9 in each school.

2.3 Sample

The sample used to accomplish the goals of the study are lower middle school students. The sample size is in the 6th, 7th, 8th and 9th grades. The sample number of samples was 1500 students, but the number used to do the analysis of the data and to produce results is 1,300 students. The following table shows statistics of the participants in the representative sample referring to the demographic variables analyzed in this study.

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girl</td>
<td>676</td>
<td>52</td>
</tr>
<tr>
<td>Boy</td>
<td>624</td>
<td>48</td>
</tr>
</tbody>
</table>
### Grade and Academic Achievement

<table>
<thead>
<tr>
<th>Grade</th>
<th>Six</th>
<th>Seven</th>
<th>Eight</th>
<th>Nine</th>
<th>Academic achievement</th>
<th>Poor</th>
<th>Enough</th>
<th>Good</th>
<th>Very good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>315</td>
<td>317</td>
<td>329</td>
<td>339</td>
<td>Poor</td>
<td>18</td>
<td>98</td>
<td>437</td>
<td>558</td>
<td>189</td>
</tr>
<tr>
<td></td>
<td>24.2</td>
<td>24.4</td>
<td>25.4</td>
<td>26.1</td>
<td>1.4</td>
<td></td>
<td>7.5</td>
<td>33.6</td>
<td>42.9</td>
<td>14.5</td>
</tr>
</tbody>
</table>

### Economic Status

<table>
<thead>
<tr>
<th>Economic Status</th>
<th>Under average</th>
<th>Average</th>
<th>Over average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>190</td>
<td>909</td>
<td>201</td>
</tr>
<tr>
<td></td>
<td>14.6</td>
<td>69.9</td>
<td>15.5</td>
</tr>
</tbody>
</table>

### Education Mother

<table>
<thead>
<tr>
<th>Education Mother</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>986</td>
<td>312</td>
</tr>
<tr>
<td></td>
<td>75.9</td>
<td>24</td>
</tr>
</tbody>
</table>

### Education Father

<table>
<thead>
<tr>
<th>Education Father</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>858</td>
<td>428</td>
</tr>
<tr>
<td></td>
<td>66</td>
<td>32.9</td>
</tr>
</tbody>
</table>

### Mother Employment

<table>
<thead>
<tr>
<th>Mother employment</th>
<th>Unemployed</th>
<th>Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>488</td>
<td>812</td>
</tr>
<tr>
<td></td>
<td>37.5</td>
<td>62.5</td>
</tr>
</tbody>
</table>

### Father Employment

<table>
<thead>
<tr>
<th>Father Employment</th>
<th>Unemployed</th>
<th>Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>407</td>
<td>880</td>
</tr>
<tr>
<td></td>
<td>31.6</td>
<td>68.4</td>
</tr>
</tbody>
</table>

### Family members

<table>
<thead>
<tr>
<th>Family members</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only parents and children</td>
<td>741</td>
<td>57%</td>
</tr>
<tr>
<td>Parents, children, grandmother and grandfather</td>
<td>466</td>
<td>35.8</td>
</tr>
<tr>
<td>Parents, children, uncles and aunts</td>
<td>70</td>
<td>5.4</td>
</tr>
</tbody>
</table>
2.4 Data collection

Quantitative methods were used to collect the data. There is used a self-reported instrument was applied from 6th to 9th grade

The current study is focused on 6th, 7th, 8th and 9th grade students in 13 military public schools in the Tirana district. In each school, was randomly selected a classroom for each grade, and each school for each Tirana administrative unit. First, it was realized the pilot phase, to see the validity and credibility of the questionnaire. Also, Parent/guardian consent was obtained for all participants. In most cases, the administration of the questionnaire lasted about one lesson (45 minutes).

2.5. Instruments

The California School Climate and Safety Survey (CSCSS) is a self-reported questionnaire designed to measure the overall school climate and personal safety experiences. CSCSS was developed by M.J. Furlong, R. Morrison, and S. Boles in 1991. The instrument analyzes individual and contextual factors, it is thought of as a proper choice to answer research questions and hypotheses. The original CSCSS consists of 102 items with questions that include demographics, climate cluster perceptions, security, social support, violence, and the hostile index. In 2013, a CSCSS-PM (Progress Monitor) was developed, a shorter version that can be used by schools more than once a year.

Articles at the school-based risk session are designed to measure students' perceptions about the frequency of dangerous activities occurring at school. According to Likert's five-point scale, starting from "not at all" to "much", students are asked to explain how often they observe dangerous activities in their school. The instrument consists of the following dimensions:

Safety at school: This subscale included four items. Examples: “I feel safe and protected in school” or “My school is a safe place”.
Relations with teachers: This subscale included 10 items about the relationship between teachers and students. Examples: “Teachers make a good job to protect students from problematic people”, “My teachers respect me”.
Rules and regulations against violence: This subscale included six items. Examples: “The rules are clear in my school.” or “My school has clear rules against sexual victimization”.
Student participation in setting rules: This subscale included two items. Examples: “In my school, the staff doesn’t consider the representatives of students” and “In my school, the students are part of decisions making and rules”.
School on norms on violence:
Norms for Aggression are based on measures suggested by Jackson (1966) and Sasaki (1979) for assessing normative support in settings for certain behaviors. Scores were recorded as follows: 1 = disapproval (of aggression or alternatives) 2 = neutral 3 = approval (of aggression or alternatives). This subscale measures the violent behavior that may occur in...
school. Ten items have been given and students are asked to report how the majority of students would feel in specific situations would be in their school towards this behavior. If they would approve, stand neutral, or not approve their behavior (Likert Scale). Examples: “How would the kids in our school feel if a kid hit someone who says something means” or “How would the kids in your school feel if a kid threatened someone who hit first” (Multisite Violence Prevention Project, 2004)

Individual factors – were measured by gender, age of students, and academic success. The academic success was measured by asking the student to report the great point average from last semester that ranged from 1 being very poor to 5 being excellent.

Family-related variables
Parental education: Students were asked to report on last received a degree for both of their parents the options were as following: did not complete primary school, completed primary school, did not graduated from high school, graduated from high school, did not graduate from university and graduated from university.
The number of children in the family: was measured by asking students whether they have a brother or/and sister with “Yes” or “No” and if the answer is “Yes”, they were asked to report the number of children in their family including themselves.
Perception of social-economic status: was measured by asking students about their perception of their social-economic, the options were as follows: “my family has less income than other families”, “my family has incomes as most of the other households”, “my family has slightly more incomes than other families”, “my family has more incomes than other households”.
Marital status of parents: Students were asked to report on the marital status of their biological parents as “Married”, “Divorced”, “Separated”, “Collaborate”, “Single parenting”.

3. Results

During the analyses of the data were developed four regression models that predict physical, psychological, weapons, and sexual victimization through individual-level, family-level, and school-level variables. Each model features three hierarchical steps, where all variables are entered with the enter method in each step. The first model contains the individual-level variables of gender, academic success, and age. In addition to these, the second model features family-level variables such as parent and SES status as well as mother’s and father’s education. In model 3, additional school-level variables are added to the overall model, including safety in school, relations of students with their teachers, school rules against violence, participation of students in the decision making process within schools, as well as norms on violence.

In the first model, with three individual-level variables, physical victimization is significantly predicted with an R² = .04 (F(3,1280) = 20.99, p < .001), psychological victimization (R² = .03, F(3,1280) = 13.14, p < .001), victimizations through weapons (R² = .01, F(3,1280) = 5.27, p < .01), and sexual victimization with an R² = .06 (F(3,1280) = 28.68, p < .001). Including family-level variables in the second step of the model improves upon the first model significantly, predicting physical victimization (R² = .07, F(7,1276) = 14.95, p < .001), psychological victimization (R² = .04, F(7,1276) = 7.97, p < .001), victimization through
weapons ($R^2 = .03$, $F(5,1276) = 6.74$, $p < .001$), and sexual victimization ($R^2 = .09$, $F(5,1276) = 19.75$, $p < .001$). While the second model changes $R^2$ coefficients for the four victimization types are improved by .01 through .03, adding school level variables to as predictors in the third the third model improves overall predictive power considerably. Taken together, all variables significantly predict physical victimization ($R^2 = .25$, $F(12,1271) = 36.78$, $p < .001$), psychological victimization with an $R^2 = .22$ ($F(12,1271) = 30.35$, $p < .001$), weapons victimization ($R^2 = .17$, $F(12,1271) = 21.96$, $p < .001$), as well as sexual victimization ($R^2 = .28$, $F(12,1271) = 41.09$, $p < .001$).

When looking at individual predictors, gender significantly predicts the frequency of physical and psychological victimization. Since girls are coded as “1” and boys as “2”, the results shows that boys are more likely to be victims of physical violence whereas women are more often victimized by psychological violence. The variable of academic success significantly predicts all victimization types. Specifically, students who enjoy better academic grades are less likely to fall victims of physical, psychological, sexual, or to victimization with weapons, with $\beta$ coefficients ranging from -.09 to -.17. Age significantly predicts physical and sexual victimization, where older students are more likely to be victimized more often as compared to their younger peers.

4. Discussion

The study explored the impact of individual and contextual factors on school violence. 1500 students were part of this intervention, that have used quantitative methods to collect the data. The results showed that both individual and contextual factors influence the occurrence of violence in school. In terms of individual factors, gender and age constitute a significant difference in the type of violence experienced or directed by others. Thus boys tend to use and be victims of physical violence, while girls of psychological and sexual violence. These types of models also adapt to the social norms that society promotes.

Concerning contextual factors, the level of parental education and socio-economic status are of great importance. In most cases, a high level of education is associated with more ability to manage oneself and maladaptive behaviors and to pass them on to children. Also, low socio-economic status is associated with a lack of access to services, such as high levels of stress, which in turn translate into increased aggressive behavior.

At last, an important result is related to academic success. Students who have higher academic success, tend to have lower levels of experiencing violence, as well as engage in prosocial behavior.

5. Conclusion

The intervention at schools is very important to decrease the levels of school violence. Improving school climate takes time and commitment from a variety of people in a variety of roles. Students learn best when they are in an environment, in which they feel safe, supported, challenged, and accepted. When schools focus on improving school climate, students are
more likely to engage in the curriculum, develop positive relationships, and demonstrate positive behaviors.

The results from the study show that in Albanian schools the violence is present, impacted by individual and contextual factors. The situation of violence should not be conceived as a separate problem but should be assessed in a broader context, taking into account many influencing factors.

Schools must engage in ongoing assessments of levels of violence, to design prevention policies and programs. This would help not only in the academic progress of the students but also in the healthy socio-emotional development and the creation of safe communities.

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