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RELATIONSHIPS BETWEEN SCHOOL CLIMATE, SCHOOL ACHIEVEMENT, AND STUDENTS' VIOLENT BEHAVIOUR

The quality of the school climate is often cited as an important factor for adapting to school life, which can largely influence students' behaviour at school. This paper aims to examine the relationship between the school climate and violent behaviour and the differences in the mentioned variables concerning school achievement, gender, and a class of students in the function of a better approach to the prevention of violent behaviour. The research was conducted on a random sample of 823 high school students. The study used questionnaires for assessing violent behaviour (PRONA, Čolović, Kodžopeljić, Nikolašević 2014) and a questionnaire for evaluating the quality of the school climate (Vessels 1998). Students reported a lower level of violent behaviour. A statistically significant negative correlation between violent behaviour and the quality of the school climate was established. No statistically significant differences were found in the perception of the quality of the school climate concerning school achievement and gender.Still, there were in the assessment of violent behaviour concerning school achievement and differences concerning students' gender. Statistically significant differences were found in the propensity for violent behaviour and the perception of the school climate concerning the class attended by the students. The above results indicate the importance of the quality of the school climate in the prevention of violent behaviour, but also the need to consider numerous additional factors to explain the occurrence of peer violence in school.

Keywords: school climate; violent behavior; school achievement; gender; students

INTRODUCTION

It has long been known that the quality of the school climate is particularly important for the life and functioning of the school, i.e. the way subjects accept their roles, their mutual relationship, and how they feel at school. Widespread questions are: how does the school experience affect the attitudes, motivation, and behaviour of students and teachers (Domović 2003)? The experience created at school is extremely important for the student's life and affects the general attitude towards education and the orientation in life and behaviour. Every day, a large part of their time is spent at school; they acquire diverse knowledge, develop competencies, and learn about themselves and their relationships with others. The school climate is realised through various ways shaped and experienced by those who participate in school life. As mentioned, many phenomena are related to the school climate: peer violence, dropping out of school, student success, delinquency, behavioural disorders, prosocial behaviour, and other phenomena (Domović 2003). It is known that the school climate depends on the perceptions of all those who participate in school life, and it affects individual perceptions, interests, desires, and behaviour. Therefore, if viewed in this way, it could give a more complete picture of school life and also show the level of quality of the school's work. Over recent years, research in various areas (e.g. risk behaviour prevention, health promotion, social-emotional learning) has identified climate-based school improvement guidelines to promote safe, caring, collaborative, and active schools. Therefore, in this paper, attention was paid to researching the connection between the school climate and students' violent behaviour, as well as their differences concerning school achievement, gender, and class.

SCHOOL CLIMATE

Today, the school climate is increasingly associated with the positive development of children and young people, the effective prevention of risky and violent behaviour, the promotion of health, learning, and the success of students. The fact is that there is no universal and generally accepted definition of school climate, and researchers and theorists use different terms, such as atmosphere, feelings, environment, or mood in school (Cohen, McCabe, Mickhelli, Pickeral 2009). Only some of the definitions of school climate will be listed here. School & Pickeral 2009 climate refers to the relatively permanent quality of the school environment that affects the behaviour of its members and is based on the common perception of school behaviour that is in-

fluenced by the formal organisation, characteristics of participants, and school management (Domović 2004). Jurić (1993) describes the school climate as a specific stamp of school life that is shaped and experienced by the people who participate in it, principals, teachers, students, and other employees and is realised in different ways, depending on how the participants realize their roles based on independent understanding in connection with the legalities and rules of the institution. The construct "attitude" towards school was one of the first to be defined by Lewy (1986, according to Arajuo Candeias et al. 2010), and it refers to students' behaviour, feelings, and opinions related to school and experiences at school. The school climate reflects the school life experiences of students, school staff, and parents. An important question arises:What kind of school climate is it possible to meet the needs of students and society? To understand the school climate, it is important to investigate how students perceive relationships between students and relationships between students and teachers, as well as sensitivity to violence.

Helmut Fend (1977) describes three important dimensions of school climate that are interrelated:

- contents or patterns of expectations: provide opportunities for the adoption of positive norms and values in school while at the same time they can be marked by strict rules and various pressures;
- interactions: forms of behaviour between participants and their mutual influence, in particular control, the possibility of co-determination, and forms of argumentation;
- social relations: this dimension refers to the intensity and quality of social relations and ties in the school (emotional quality, ways of resolving conflicts between all persons who make up the school climate).

Also, the student-teacher bond is emphasised here through trust, understanding, and willingness to help, and the student-student bond through solidarity, integration, and group cohesion. Kantorova (2009) divides the more complex division of school climate characteristics into attitude and motivation towards school, competencies and the quality of teachers, school rules and discipline, class cohesion, and the physical conditions of the school (architectural, aesthetic, and hygienic conditions).

Prvičić (2001) states that the class atmosphere refers to processes in the immediate environment within the same class with common ideals and goals, standards and norms of behaviour, which forms a system of interconnected roles and positions. On the other hand, a more global school atmosphere refers to a broader range of relationships among

school employees, ways of making decisions and managing the institution, and pressure in the workplace, but also includes ways of supporting student interests, shaping school goals, the level of creativity, and other factors that make the visible difference between different schools (Bošnjak 1997). Furthermore, it is possible to observe the school climate through the four elements that shape this construct, obtained in the work of the author Thap et al. (2013), namely: (1) relationships, (2) safety, (3) teaching and learning, and (4) environment. Vessels (1998), for assessing the quality of the classroom-teaching atmosphere, considers student-student and student-teacher interactions, as well as sensitivity to violence in the classroom and school environment.

In addition to the school climate, the school culture, which characterises each school with unique customs and history and a moral code that affects relationships and behaviour within the school, is of particular importance (Peterson & Deal 2002). Unlike school culture, school climate refers to the school environment or the school learning environment, a set of norms and expectations, the psycho-social context in which teachers work and teach, the degree of teacher empowerment, the physical and emotional well-being of the school organisation, school commitment and teacher support. (Cohen et al. 2009). Barth (2002) defines school culture as a set of complex norms, attitudes, beliefs, behaviours, values, ceremonies, traditions, and myths that are deeply rooted in every aspect of the school and are manifested in the everyday life of the school and affect teachers' productivity, professional development, and school leadership. The construct is closely related to other elements, such as student perception and interest in learning, motivation, and academic achievement. It is also stated that culture is the collective property; it reflects a moreprofound phenomenon based on symbolic meanings, common ideas about fundamental values, beliefs, and fundamental ideologies and assumptions.

STUDENTS' VIOLENT BEHAVIOUR

School violence is influenced by all the changes in the political, social, and scientific educational structures in society. Accordingly, school violence is a reflection of the entire situation in a society (Gašić-Pavišić 2004). Jackman proposes a generic definition of violence as actions that inflict, threaten to impose, or cause injury; actions can be physical, written or verbal, psychological, material, or social (Ray 2018). Peer violence is defined by Olweus (1998) as repeated and permanent exposure of a student to negative behaviour from another student or a more significant number of them. Olweus states that a power imbalance (asymmetric power relationship) is an important

determinant of violence. Peer violence is defined as exposure to intentional negative, repeated action by one or more students, disproportionate real or perceived strength, due to which the child suffers physical and/or emotional harm and is powerless to resist (Olweus 1993, 1998). According to Perrin-Miller & Perrin (2007), the key elements of peer violence are intent to hurt, injure, or cause physical, social, or emotional harm, not provoked by the victim, power imbalance (power in the relationship between the victim and the perpetrator of violence), occurs at least once a week, i.e. there is a threat of further violence, when violence escalates, children of the victims experience fear, which allows the perpetrator to continue believing they will not be reported.. An important determinant of violence is the intention to cause harm, which distinguishes violence from ordinary children's mischievous actions, competitions, occasional "matches of strength", and involuntary injuries (Popadić 2009). By violence, we mean intentional and unjustified harm to another (Maksimović,&Mančić 2012). Violence is also defined as the deliberate use of physical force or power in the form of a threat or an act committed directed towards oneself, another person, or a group or community, which leads to injury, death, psychological injury, impaired development or deprivation" (Popadić,&Pult 2007). When it comes to violence, it is stated that it increases in both developed and underdeveloped environments (Gašić-Pavišić 2004). Violence between peers can be direct, such as teasing, hitting, or intimidation, and indirect, such as social exclusion, gossip, or manipulation (Garrett 2003). In the literature, there are mainly two basic forms of peer violence, physical and verbal, and newer conceptualisations include relational or emotional (sometimes called psychological) and sexual, economic, and cultural peer violence (Bilić, Buljan, &Hrpka 2012).

SCHOOL CLIMATE AND STUDENTS' VIOLENT BEHAVIOUR

The role of the school climate in the prevention of violent forms of behaviour stems from its influence as a socialisation context in the school, which potentially ensures the prerequisites for the adequate development of cognitive and social skills.It can reduce the tendency of students to use force to achieve social goals. Depending on the interests, values, motivation, and other characteristics of the individual, the school climate can be perceived as stimulating for individual development and contributing to constructive behaviour and the involvement of individuals in school activities, or on the contrary, as a disincentive context that contributes to passivity, resistance and aggressive behaviour (Bošnjak 1997).

There is an opinion that the perception of positive school and classroom teaching is considered a protective factor in the development of behavioural problems. The school environment is one of a series of arguments mentioned when emphasising the need for a more explicit role of schools in preventing behaviour disorders (Bouillet, &Bijedić 2007). Depending on the interests, values, motivation, and other characteristics of the individual, the school climate can be perceived as stimulating for individual development and contributing to constructive behaviour and the inclusion of individuals in school life, or on the contrary, as a disincentive context that contributes to passivity or resistance and even aggressive behaviour (Puzić, Baranović, & Doolan 2011). The literature highlights two important reasons why a positive school experience is treated as a possible factor in the prevention of socially unacceptable and individually harmful behaviour of students: (1) theories and research associate poor attachment to school with deviant behaviours such as, for example, delinquency, use of psychoactive agents, underage pregnancy and dropping out of school and (2) research confirms that the school environment and school experience are an important factor in promoting or weakening students' attachment to school (Bouillet, Bijedić 2007). This is also the case with the research conducted by Couger and Miller (1966; according to Mejovšek, &Stančić 1982) showed that delinquents have specific school-related difficulties. Explaining the importance of a positive school climate as a prerequisite for development, Miljević and Riđički et al. (1999) emphasise that it is difficult to find out what the climate is like in a school. But regardless, its effect is powerful. An open school would increasingly have to be the bearer of organising learning and various social and cultural actions and programs in collaboration with an increasing number of factors in its environment.

The results of numerous studies confirm the impact of various elements of the school climate on the appearance of violent forms of behaviour among students. In an overview of the empirically established effects of this relationship, Holtappels and Meier (2000) point out that the pressure to adapt and negative social relations at school influence deviant behaviour at school, that the lack of interest of teachers and non-participation of students in school life influence the occurrence of violent behaviour, and that boredom and school aversion can be associated with school violence and vandalism. Based on the results of their research, Holtappels and Meier (2000) further state that schools with less physical and verbal violence are characterised primarily by proactive engagement of teachers, i.e. positive social relations and group cohesion of students.

Recent research has shown that a positive school climate is associated with reduced levels of violence and aggression, as well as sexual harassment, and greater tolerance for others and differences, regardless of race, religion, or sexual orientation (Goldstein, Young, &Boyd 2008; Attar-Schwartz 2009). However, this relationship has not been fully elucidated, and future research should critically examine the complex set of individual, group, and organisational factors that shape predicted violent behaviour in schools to prevent it.

The meta-analysis of research that studied the connection between school climate and violent behaviour included 36 studies. Together, they had 113,778 respondents, with an average age of 13.53 years, and data collected for the period 1982-2008 in different countries across North America, Europe, and Asia. A moderate correlation was found between students' perceptions of school climate and violent behaviour.

Cohen, McCabe, Mickhelli, and Pickeral (2009) cite the results of research by numerous authors who conclude that a positive school climate is associated with a lower number of student absences, that a positive school climate is a critical dimension associated with the prevention of health and addiction problems, and with learning and teaching.

In a review of recent international research on the impact of the school environment on the occurrence of school violence, Lindstrom Johnson (2009) points out that each of the 25 observed studies indicates that the school environment influences the occurrence of school violence. No connection was established in research between objective characteristics of schools (size of school, level of education) and violent behaviour (Steffgen, Recchia, Viechtbauer 2013).

VIOLENT BEHAVIOUR AND SCHOOL CLIMATE CONCERNING SCHOOL ACHIEVEMENT

School achievement can generally be defined as "the degree to which students have permanently adopted the knowledge, skills, and habits prescribed by the curriculum, developed psycho-physical abilities, and formed moral cognition, will, and action (Bedeniković Lež 2009). In research, students' school success is most often expressed by school grades. In research, the general average of grades, or the final grade from certain subjects at the end of the semester or the end of the academic year (most often those necessary for enrollment at a higher level of education) is taken as a measure of school achievement. Some authors in their research use the general average of grades in the semester, and not at the end of the completed class, considering it a

more objective assessment of content adoption (Pekić 2011). Weinert (2000) in addition to the knowledge that students should acquire in school, also mentions other aspects of achievement: students should additionally develop the ability to learn and their social competencies, and they are also expected to develop positive values and to perfect some other important competences that they can use outside the school context. Some authors, such as Farrington (1997), believe that school success is also significant for predicting peer violence, whereby lower school success is associated with more violent behaviour and victimisation. It has been shown that school stress and failure at school can encourage feelings of incompetence and helplessness, and thus some forms of self-destructive behaviour (Mikas 2012). According to Graovac and Prica (2014), dissatisfaction with the results can cause conflicts with parents, teachers, and educators, leading to internalised problems. Williams, Ayers, and Arthur (1997) list several groups of risk factors, among which are school-related risk factors (school failure, disciplinary problems, lack of attachment to school). It is important to emphasise that risk factors are cumulative and occur in groups; one pulls the others behind. Also, the greater the number of factors present, the greater the risk of developing behavioural disorders (Budić 2016). The connection of aggressiveness with poorer school performance and governance is emphasised, which is manifested by the failure to achieve positive relationships with the school, and more frequent absences from classes compared to students who are not violent or aggressive (Pongrac 2003). Numerous studies have also been conducted on the topic of the influence of various aspects of the school environment on student achievement, and the results indicate the existence of a connection between the quality of the school environment and student success (Koludrović, Kalebić Jakupčević 2017).

Positive school experiences lead to better academic success, contribute to the development of a positive self-image, and create better interpersonal relationships (Bezinović, Ristić Dedić 2004). Also, studies of the classroom-teaching atmosphere have shown that a positive, supportive, and culturally aware school and classroom atmosphere contributes to the academic achievement of students (Bouillet, Bijedić 2007). Educational achievements in the form of grades and control of children strengthen their organisational abilities, and teamwork, improve interpersonal relationships, and reduce risky behaviours (Takšić 1998; Takšić, Mohorić, &Munjas 2006). Violent behaviour is caused by peer rejection or poor school performance, which can be prevented using emotional literacy methods. It has been proven that students with better school success are less likely to enter into conflict situations compared to students with lower success; they are less confrontational as an orientation

when solving conflicts (Zec 2005). Purkey and Smith (1983), based on an analysis of various research, conclude that the school climate significantly influences the student's chances of success in learning cognitive skills. That is why they believe that any change strategy that aims to improve the school must start with changing the school climate, i.e. changing schools requires changing people's behaviour and attitudes. Koth et al. (2008) found that satisfaction with the school climate from students' perspective is also related to specific classroom factors. Namely, students who attend a class with a higher proportion of children with behavioural problems give more negative assessments of the school environment, especially regarding order and discipline.

VIOLENT BEHAVIOUR AND SCHOOL CLIMATE CONCERNING GENDER AND CLASS

In the period of adolescence, students are in the education system. The specificity of the adolescent age is that interests suddenly expand, and they become curious and want to experiment with more content and activities.Therefore, school becomes boring, tiring, and difficult for them (Vizek Vidović et al. 2003). It is believed that the older the students, the more negative the perception of the school climate (Hamre, Pianta 2001). The research that examined students in primary and secondary schools showed that girls in primary and secondary schools are more satisfied with aspects of the quality of school life than boys, generally have a positive attitude towards school, and experience fewer negative feelings, and satisfaction with school decreases as they grow older. (Brajša-Žganec et al. 2009). According to research (Jeđud, & Lebedina-Manzoni, 2008) conducted in 36 countries of Europe and North America, questions related to the school environment were examined – school success, how much students like school, the relationship between students in the class, and school workload. The results in Croatia showed that female students like school more, feel less burdened at school, and have better academic performance but worse relationships with their peers. Younger students have better success in school, like school more, are less burdened by school, and have a better relationship with their peers at school.

Some findings show that older boys show more violent behaviour (Olweus 1998; Velki 2012) and that boys are more physically and verbally violent (Espelage, Bosworth, & Simon 2000). The mentioned authors point out that boys are more likely to be bullies than girls; it is noted that girls' violence is more difficult to detect: girls use less noticeable and more insidious means of abuse, such as slander, gossip, and

manipulate friendships in the class (e.g. stealing a girl's best friend). Recent research shows that when it comes to relational and indirect forms of violence, boys are equally violent, if not slightly more violent, than girls. Boys are more often victims of all forms of peer violence (Olweus 1998). Aggression increases with age (Buljan Flander et al. 2007). Teachers' evaluations showed that male subjects were more inattentive, restless, and prone to aggressiveness and antisocial behaviour than female subjects (Fergusson, Gibb, & Sheree 2008).

Almost all research shows that older boys show more violent behaviour (Olweus 1998; Veliki 2012). When it comes to relational and indirect forms of violence, boys are equally violent if not slightly more violent than girls (Olweus 2010). Boys are more often victims of all forms of peer violence (Olweus 1998, 2010). The amount of overall aggression increases with age (Buljan, Flander et al. 2007; Olweus 1998; Velki 2012b). When it comes to age, that is, class, it is emphasized that younger children are at greater risk, because they do not have developed social skills or self-protection skills. The results of the Dunedin study indicate that 19.6% of males and 17.4% of females show the emergence of antisocial behaviour in adolescence (Odgers et al. 2008). The prevalence of antisocial behaviour among young people is highest in the late teenage years, between 15 and 19 years.The onset of antisocial behaviour is most common between the ages of 8 and 14, and the peak of the cessation of delinquency is between 20 and 29 years (Farrington 2002). Students in the final grades of primary school show the most violent behaviour, while the victims are more often younger students. Some authors, such as Farrington (Farrington 1997), believe that school success is also significant for predicting peer violence, whereby lower school success is associated with more violent behaviour and victimisation.

Research by Koth et al. (2008) among elementary school students of a relatively large number of public schools found differences in the perception of the school climate concerning gender, in the form of a lower liking of the school environment by boys, who, compared to girls, evaluate the aspects of order and discipline less well (that is, they feel less confident) and have lower 16 motivation for academic achievement. In the study of students' perceptions of the school climate, an interesting finding is that as the level of education increases, students evaluate the school environment more negatively. This result is explained by the decline of motivation in older students as well as the more frequent appearance of behavioural problems (Yang et al. 2013). Koth et al. (2008) found that satisfaction with the school climate from students' perspective is also related to specific class factors. Namely, students who attend a class in which there is a higher proportion of children with behavioural problems give more

negative assessments of the school environment, especially for the aspects of order and discipline.

According to the above, students' perception of the school climate becomes more negative as their age increases, and at the same time, there is also a drop in performance in school achievement indicators (Koludrović, Kalebić Jakupčević 2017).

METHODOLOGY

Problem and goal

Given that in the last few years, research on the importance of the school climate for problematic student behaviour and, therefore, for violent behaviour has been intensified, the main problem in the paper was to examine the relationship between the school climate and violent behaviour among students. The goal was to examine the relationship between the school climate and violent behaviour and further determine the differences in the mentioned variables concerning school achievement, gender, and class in the function of better prevention of violent behaviour among students.

The following research questions were asked in this research:
1. Determine the level of violent behaviour among students;
2. Investigate the connection between the perception of the quality of school climate and the violent behaviour of students;
3. Examine the differences in the perception of the quality of school climate and violent behaviour concerning school achievement;
4. Determine gender differences in the violent behaviour of students;
5. Examine the differences in the perception of the quality of school climate and violent behaviour concerning the class.

Hypotheses
H1. Students show an above-average level of violent behaviour
H2. There is a statistically significant association between the perception of school climate and violent activities
H3. There are statistically significant differences in the perception of school climate and violent behaviour concerning school achievement
H4. There are statistically significant differences in violent behaviour concerning gender
H5. There are statistically significant differences in the perception of school climate and violent behaviour considering the class

Sample

The research is quantitative and conducted on a convenience sample, where the research population consisted of young people who attend secondary schools in the Tuzla Canton in Bosnia and Herzegovina. The research included N=823 respondents (403 male and 420 female, which in percentages represents the ratio 48.96% : 51.04%). The age of the students ranged from 16 to 19 years old, of which 292 students were 16 years old, 275 students were 17 years old, and 256 students were 18 and 19 years old.

Variables and instruments

The dependent variables included in this research are the perception of the school climate and violent behaviour, while the independent variables are gender, class, and school achievement.

The following questionnaires were used in this research:
1. Questionnaire on socio-demographic data of respondents.
2. Questionnaire for assessing violent behaviour (PRONA, Maksimović, Raković, Jovanović, &Čolović 2014).
3. Questionnaire for assessing the quality of the school climate (Vessels 1998).

In the work, as stated, a general questionnaire was used to collect data on socio-demographic characteristics. This questionnaire will provide information about the respondent that is necessary to successfully reach the results of the research (gender, age, class, school achievement). The questionnaire consists of multiple-choice questions, and respondents should circle the statement that applies to them.

The PRONA (Assessment of Violent Behaviour) questionnaire is intended for self-assessment of behaviours characteristic of violent interaction among primary and secondary school students. The questionnaire contains 20 items covering two scales between which there is high congruence in a sample of primary and secondary school students. One scale refers to the assessment of the suffering of violence (exposure to peer violence), and the other to the commission of violence (tendency to violent behaviour). The content of the items includes indicators of lighter and more severe forms of physical violence, as well as psychological and emotional violence. The reliability of the questionnaire in this research is (α =0.923).

The School Climate Quality Perception Scale (Vessels 1998) examines perceptions of the climate within educational institutions. This questionnaire examines three aspects of the school or academic climate: relationships between students, the student-teacher relationship, and the assessment of the importance of reporting violent behaviour in the classroom and school climate. The scale contains 18 statements, and the participant's task is to evaluate the degree of agreement with each statement on a scale from 1 to 4, where 1 indicates complete disagreement and 4 indicates complete agreement with the offered statement. The participants' task is to rate their agreement with each stated statement on a 5-point Likert scale. The reliability of the school climate perception questionnaire in this research is (α =0.886).

The average grade at the end of the school year was used to assess the student's school achievement.

Procedures, methods of data collection, and data processing

The research was conducted in the Tuzla Canton (BiH) secondary schools in 2021 on the population of secondary school students during regular classes. The first, second, third, and fourth-grade students were included. The average duration of filling out the questionnaire was 30 minutes. The students filled out the questionnaires during the department community class. In the beginning, the purpose of the research was explained, instructions were given, and it was indicated that the research was anonymous. During the examination, none of the respondents refused to participate in the study. Considering the nature of the work, a survey research method was used. The techniques used in the research are content analysis and assessment (self-assessment). The following statistical methods were used for data processing: descriptive statistical analysis, t-test for independent samples, Pearson's correlation coefficient, and analysis of variance (ANOVA). SPSS 20 software was used for data processing.

RESULTS

The first question in the research was related to examining the perception of the quality of the school climate and the level of violent behaviour among students. As shown in Table 1, the values of the Kolmogorov-Smirnov test for all scales used in this research are statistically significant ($p<0.01$), indicating that the distribution of the results deviates statistically significantly from the normal distribution. Using parameters of asymmetry and flattening, it was determined that all scales and sub-scales meet

Kline's (Kline 2005) criteria of normality of distribution. Since the coefficients of asymmetry and flattening for all scales in this research are within the range of +/- 1 and considering the insight into the shape of the distribution of each scale, the use of parametric procedures proved to be justified. The results are shown in Table 1.

Table 1 Descriptive statistical parameters for the perception of the quality of school climate and students' violent behaviour

The name of the scale	min.	max.	M	SEM	SD	*Sk*	*Ku*	KS	P
School climate	18	90	58.423	0.344	9.88359	-0.191	0.628	0.049	0,01
Violent behaviour	20	60	30.70	0.294	8.4626	0.894	0.198	0.136	0,01
Violence exposure	8	24	12.62	0.121	3.48166	0.789	0.125	0.141	0,01
The propensity for violent behaviour	12	36	18.17	0.188	5.41778	0.954	0.195	0.15	0,01

The arithmetic mean of the results obtained by the students' self-assessment on the school climate scale is M=58.42 (SD=9.88), which indicates positive assessments. The negative asymmetry (Sk=-.191) indicates that most of the results are in the area of higher scores and additionally confirms that students positively evaluate the quality of the school climate. When it comes to the violent behaviour of students, the arithmetic mean M=30.70 (SD=8.46) shows that, on average, adolescents achieve lower results than the average on the mentioned scale, whose results can range from 20 to 60. However, given that the data on asymmetry (Sk=0.894) indicate a positive asymmetry, this indicator supports that most results are to the left of the arithmetic mean, that is, in the zone of lower scores. A similar situation with exposure to violence (M=12.62; SD=3.48), (Sk=.789) and tendency to violent behaviour (M=18.17; SD=5.41), (Sk=.954). So here, too, students report below-average levels of exposure and propensity to violence.

The second research question was related to examining the connection between the perception of the school climate and violent behaviour (two additional dimensions that are measured by this questionnaire). The Pearson correlation coefficient was applied, as can be seen in Table 2.

Table 2 The connection between school climate and violent behaviour among students

Violent behaviour	Violent behaviour	Exposure to violent behaviour	Propensity to violent behaviour
School climate	-.094**	-.042	-.113**

A significant negative relationship was observed between the perception of the quality of the school climate and violent behaviour (r=-.0.94, p<0.01), which indicates that a more positive assessment and experience of the school climate results in a lower level of violent behaviour. The relationship between the perception of the school climate and the exposure to violent behaviour was not recognised (p>.005), while a positive perception of the school climate was associated with a lower degree of tendency to violence (r=-.1.13, p<.001).

When examining gender differences in the perception of the school climate and the severity of violence, a significant difference in violent behaviour was found, while no difference was found in the perception of the school climate, as shown in the following table.

Table 3 Gender differences in the perception of the school climate and the level of violent behaviour

	Gender	N	M	SD	SEM	t	P
Violent behaviour	Male	403	32.5037	9.01170	.44890		
	Female	420	28.7833	7.88178	.38459	6.294	.000
School climate	Male	403	58.4045	9.24313	.46043		
	Female	420	58.4439	10.62040	.51884	-.057	.955

The obtained values for gender differences in violent behaviour testify to the significance of these differences (t (821)=6.294; p=.00).They show that girls estimate that violent behaviour is less pronounced in them compared to boys. No significant difference was found in the perception of school climate concerning gender (t(821)=-0.57; p=.955).

The next question examined the perception of school climate and violent behaviour among students concerning school success. Although the initial results show that students with good and excellent results experience the school climate more positively, the results are not significant (F (4,818)=0.751, p>.005); students with better school results estimate that they are less violent (F (4,818)=6.935, p<.001). Given

that a small number of students with success is sufficient in the sample, we classified students with sufficient and insufficient grades into one category. Then we proceeded to calculate descriptive statistical parameters, as shown in Table 4.

Table 4 Descriptive parameters and significance testing for perceptions of school climate and violent behaviour concerning school success

		N	M	SD	SEM	Min	Max	F	P
Violent behaviour	Insufficient Sufficient	107	33.68	9.150	.884	15.22	54.97		
	Good	218	30.94	8.798	.595	15.22	52.01		
	Very good	342	30.10	8.172	.441	15.22	54.97		
	Excellent	156	29.61	7.681	.615	15.22	54.97	6.032	.000
	Total	823	30.70	8.462	.294	15.22	54.97		
School climate	Insufficient Sufficient	107	58.39	10.11	.977	34.09	88.63	.701	.552
	Good	218	59.23	9.831	.667	28.22	85.76		
	Very good	342	58.02	9.789	.529	30.37	83.40		
	Excellent	156	58.19	10.02	.805	31.70	80.32		
	Total	822	58.42	9.883	.344	28.22	88.63		

Based on the tabular representation, it can be seen that significant differences were found in violent behaviour concerning school success (F (4,818)=6.032, p<.00), while no significant difference was found in the perception of the quality of the school climate (F (4,818)=.701, p<.552). The highest degree of violent behaviour according to self-assessment is present in insufficient and sufficient students, while the school climate is perceived most positively by good students.

The data for the mentioned variables are presented to determine the differences in the perception of the school climate and violent behaviour concerning the class. The results point to significant differences, as shown in Table 5.

Table 5 Differences in the perception of school climate and violent behaviour concerning the class

		N	M	SD	SEM	Min	Max		
								F	P
School climate	First	207	59.57	9.88	.687	33.00	86.00	5.250	.001
	Second	214	59.07	9.57	.654	33.00	90.00		
	Third	205	58.88	9.02	.630	35.00	87.00		
	Fourth	196	56.02	11.01	.787	18.00	78.00		
	Total	822	58.42	9.962	.347	18.00	90.00		
Violent behaviour	First	207	31.66	9.166	.637	20.00	60.00		
	Second	214	30.26	7.775	.531	20.00	56.00	2.759	.041
	Third	206	29.39	8.056	.561	20.00	60.00		
	Fourth	196	31.13	9.45	.675	20.00	60.00		
	Total	823	30.60	8.651	.301	20.00	60.00		

Younger students evaluate the school climate more positively ($F_{(4,818)}$ 5.250, $p<.001$), while respondents report that violent behaviour is more present in the first and fourth grades ($F_{(4, 818)}=2.759$, $p< 005$).

DISCUSSION AND CONCLUSION

In this paper, it was established that students positively perceive the quality of the school climate and that violent behaviour is not expressed above average. The results of previous research are not in agreement. Astor, Benbenishty, Zeira, & Vinokur (2002) state that students fear going to school because victimisation and violence against them are present all the time at school. Research has also shown that students feel less safe in large schools (Lleras 2008). Although there is no statistically significant difference in terms of violence and victimisation between smaller and larger schools, in larger schools students felt less safe, which may be the result of more often witnessing or hearing about an incident (Cornell, & Gregory 2008). It is pointed out that school violence is increasing in both developed and underdeveloped countries, in rural and urban areas (Gašić-Pavišić 2004), which is contrary to our results. However, it is stated that the frequency of all forms of violent behaviour decreases with increasing age in many studies with transferal designs (Kodžopeljić, Smederevac, & Čolović 2010). All the above points to the inconsistency of the results. Some results show that the perception of support from experts and mentors decreases during the year, as well as the perception of autonomy, clarity, and compliance with school rules. It is believed that the perception of the school climate is becoming more negative year by year (Way, Reddy, & Rhodes 2007). Bezinović (2000) found that ado-

lescents are generally not satisfied with their school. The justification for our results in this work could be that schools are dynamic, with many interactions among students, professors, and collaborators. Another explanation could lie in the desire for a positive evaluation of one's class, regardless of the actual situation at school. It is possible that the level of violent behaviour among students in this study was influenced by a more favourable perception of the school climate. Our results align with Pregrad's (2011) and Puzić, Baranović and Doolan's (2011) research.

In a large number of research studies, we have confirmed our results regarding the relationship between the perception of the quality of the school climate and the violent behaviour of students. Recent research has shown that a positive school climate is associated with reduced levels of violence and aggression (Attar-Schwartz 2009). Also, in the research on the connection between school climate, students' risky behaviours, and bullying, the connection between school climate and students' risky behaviours was established. This means that improving these elements of the school climate can have a protective effect and influence the prevention of risky behaviours (Klein, Cornell, & Konold 2012). Another study found an association between student perceptions of school climate and violent behaviour. Still, an association between objective school characteristics (school size, level of education) and violent behaviour was not established (Steffgen, Recchia, & Viechtbauer 2013). Everything indicates that without good interpersonal relations and a positive experience of the school, there is no safety nor adequate prevention of violent behaviour.

Examining the differences in the perception of the school climate and the severity of violence concerning school success, it was observed that insufficient and sufficient students have more pronounced violent behaviour, while students who achieve good success rate the school climate better. The more pronounced violent behaviour of students with poorer success rates was expected because it is possible that schools do not provide sufficient social support to students with poorer results, which can manifest as unacceptable behaviour. According to Marshall (2002), a positive, supportive, and culturally aware school and classroom climate contributes to students' academic achievement. A series of studies confirmed that school climate is directly related to academic achievement (Brand, Felner, Shim, Seitsinger, & Dumas 2003). Regarding the school climate in this paper, the better students did not show a better assessment of the quality of the school climate, which can be reflected in the bad experience, inactivity, and contents offered by the school. The above indicates that schools may still be more focused on academic success.

Significant differences were found in violent behaviour and perception of school climate concerning class. As most other studies have shown, older students evaluate the school climate more negatively than younger students. Brajša-Žganec et al. (2009) showed how older students are less satisfied with the school, experience more negative feelings, consider learning less challenging and fun, and rate their relationship with teachers less favourably. The older the students are, the more negative their perception of the school climate is (Hamre, & Pianta 2001). Possible reasons are concern about grades, negative experiences, less support, absenteeism, and poor activity in class. When it comes to violent behaviour, the perception of autonomy, clarity, and consistency of school rules decreases with age, so it is possible that for this reason, older students show more pronounced violent behaviour. Younger students also need time to adapt and adopt school rules.

Research that examined students in primary and secondary schools showed that girls in primary and secondary schools are more satisfied with aspects of the quality of school life than boys, generally have a positive attitude towards school, and experience fewer negative feelings (Brajša-Žganec et al. 2009). Our research differs in this respect because no significant differences were found concerning gender, and it is in line with the research of Way, Reddy, and Rhodes (2007), where no differences were found. Many factors could have influenced such results. First, adolescence is the age of emotional and social adjustment, building attitudes, stable interests, and one's view of the world. The period of the most intensive development of social skills is school age, namely adolescence. During this period, young people establish stronger friendships and first romantic relationships that influence the development of interpersonal skills and self-confidence. Differences were found in violent behaviour in favour of men, in which the researchers mostly agree, so there have been no changes in this matter. However, in recent times, it is said that girls use non-verbal methods of aggressive behaviour. In the research (Fergusson, Gibb, & Sheree 2008), teachers' assessments showed that male subjects were more inattentive, restless, and prone to aggressiveness and antisocial behaviour than female subjects, which the results in this paper also confirm. Bearing in mind the above, it is indisputable that numerous and complex phenomena contribute to the causes and manifestation of students' violent behaviour and that they are interconnected, in which they are in a continuous interactive relationship. It is increasingly pointed out that it is almost impossible for such behaviours to be determined by only one etiological factor. Therefore, the school climate can be one of the many factors that need to be investigated together with other protective factors to prevent violent behaviour. A systemic ap-

proach to preventing violent behaviour among students is needed to reduce risk factors. Big mistakes are made by taking on some programs based on preventing unacceptable behaviour without first checking the quality of those programs and their applicability in certain schools. The evaluation of applied programs based on the development of students' necessary skills while creating a positive climate in schools can provide a better approach to prevention.

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RELACIJE IZMEĐU ŠKOLSKE KLIME, ŠKOLSKOG POSTIGNUĆA I NASILNOG PONAŠANJA UČENIKA

Sažetak:

Kvalitet školske klime često se navodi kao važan faktor za prilagođavanje školskom životu koji u velikom dijelu može uticati na ponašanje učenika u školi. Cilj u ovom radu bio je ispitati relacije između školske klime i nasilnog ponašanja, te razlike u navedenim varijablamau odnosu na školsko postignuće, spol i razred učenika u funkciji kvalitetnijeg pristupa preveniranju nasilnog ponašanja. Istraživanje je provedeno na prigodnom uzorku od 823 srednjoškolca. U istraživanju su primijenjenji upitnici za procjenu nasilnog ponašanja (PRONA, Čolović, Kodžopeljić, Nikolašević 2014) i upitnik za procjenu kvaliteta školske klime (Vessels 1998). Učenici su izvjestili o nižem stepenu nasilnog ponašanja. Utvrđena je statistički značajna negativna povezanost nasilnog ponašanja sa kvalitetom školske klime. Nisu pronađene statistički značajne razlike u percepciji kvalitete školske klime s obzirom na školsko postignuće i spol ali jesu u procjeni nasilnog ponašanja s obzirom na školsko postignuće i razlike u odnosu na spol učenika. Utvrđene su statistički značajne razlike u sklonosti nasilnom ponašanju i percepciji školske klime s obzirom na razred koji pohađaju učenici. Navedeni rezultati ukazuju na važnost kvaliteta školske klime u preveniranju nasilnog ponašanja ali i potrebu sagledavanja dodatnih brojnih faktora kako bi objasnili pojavu vršnjačkog nasilja u školi.

Ključe riječi: školska klima; nasilno ponašanje; školsko postignuće; spol; učenici

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