Students' Violence Against Teachers in Relation to School Climate

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Purpose:

The aim of this paper was to analyse the connection between experiencing violent behaviour of students directed at teachers and school climate.

Design/Methods/Approach:

The school climate is expressed through four dimensions: nature of the teacher-student relationship; nature of the relationship among students; extent to which students have decision-making autonomy; clarity, consistency and fairness in school rules. The research was based on four hypotheses, which negate the relationship between violent behaviour of students directed at teachers and various dimensions of school climate. It was conducted on a sample of 451 students in their final years of secondary schools in Zagreb.

Findings:

The results indicate that there is a statistically significant difference in the perception of three out of four dimensions of school climate between the students who have experience with violent behaviour of students directed at teachers and those students who do not have such experience. The results show that the students who have experience with violent behaviour of students directed at teachers assess students' autonomy more negatively.

Research Limitations/Implications:

Future research should include a larger sample of respondents, both secondary school students and teachers.

Practical Implications:

This research has significant practical implications for safety in schools since it indicates the need to design quality school climate in secondary schools in Zagreb.

Originality/Value:

The results of this research could be used to present the importance of school climate in schools in order to prevent violent behaviour of students directed at teachers.

UDC: 343.62+373.5

Keywords: school climate, violent behaviour of students directed at teachers, secondary school

Nasilje učencev nad učitelji v povezavi s šolsko klimo

Namen prispevka:

Namen prispevka je analizirati povezavo med doživljanjem nasilnega vedenja učencev nad učitelji in šolsko klimo.

Metode:

Šolska klima se izraža skozi štiri dimenzije: odnos učitelj-učenec, odnosi med učenci, obseg avtonomije odločanja učencev in jasnost, doslednost ter poštenost šolskih pravil. Raziskava je temeljila na štirih hipotezah, ki negirajo povezavo med nasilnim vedenjem učencev nad učitelji in različnimi dimenzijami šolske klime. Raziskava je bila izvedena na vzorcu 451 učencev zaključnih letnikov srednjih šol v Zagrebu.

Ugotovitve:

Rezultati analize kažejo, da obstajajo statistično pomembne razlike v dojemanju treh od štirih dimenzij šolske klime med učenci, ki imajo izkušnje z nasilnim vedenjem učencev nad učitelji, in učenci, ki takšnih izkušenj nimajo. Rezultati kažejo tudi, da učenci, ki imajo izkušnje z nasilnim vedenjem učencev nad učitelji, bolj negativno ocenjujejo avtonomijo učencev.

Omejitve/uporabnost raziskave:

Prihodnje raziskave bi morale vključevati večji vzorec anketirancev, tako srednješolcev kot tudi učiteljev.

Praktična uporabnost:

Raziskava ima lahko praktično vrednost za zagotavljanje varnosti v šolah, saj kaže na potrebo po oblikovanju kakovostne šolske klime v srednjih šolah v Zagrebu.

Izvirnost/pomembnost prispevka:

Rezultate raziskave bi lahko uporabili za predstavitev pomena šolske klime, z namenom preprečevanja nasilnega vedenja učencev nad učitelji.

UDK: 343.62+373.5

Ključne besede: šolska klima, učenci, nasilno vedenje, nasilje nad učitelji, srednja šola

1 INTRODUCTION

Similar to any manifestation of violence, school violence represents a serious social problem. School violence includes any form of violence that interrupts educational and teaching processes and, at the same time, involves aggression (Espelage et al., 2013).

An extensive body of research on school violence (for instance Bilić, Buljan-Flander, & Hrpka, 2012; Espelage et al., 2013; Olweus, 1998; Rigby, 2002) has so far been focused on victimisation of students by students, i.e. on violence among students in schools. Through the change in the paradigm that peer

violence, including violence among students in schools, is not a characteristic of the process of growing up of children and students, the focus of research was directed at children. Given that children spend a larger part of their childhood in educational institutions, i.e. schools, the research was focused on violence among students in schools.

This paper provides research on the experience of violent behaviour of students directed at teachers in relation to school climate on a sample of students from several secondary schools in Zagreb.

1.1 Victimisation of Teachers

Terry (in Garrett, 2014, p. 21) defines violent behaviour directed at teachers as "a situation from which a victim cannot escape". It is a situation of abuse of the unequal distribution of power with characteristic persistent and repetitive aggression (Terry in Garrett, 2014). Terry (in Garrett, 2014, p. 21) stresses that teachers finds themselves in "a powerful social limitation that excludes the opportunity to escape as a means for terminating the offensive interaction."

In the definition by De Wet (2010, p. 190), stressed is the intention of violent behaviour and the characteristic of repetition "with the aim of inflicting damage to a victim at a physical, emotional, social and/or professional level." Teachers cannot avoid such situations because they are obliged to remain at the workplace and at the same time are legally unprotected at their workplace.

Garrett (2014) adds to the definition factors invisible to an observer that are in opposition to the perceived superior authority of a teacher. Garrett (2014) emphasises that both serious as well as isolated negative incidents are considered violent behaviour.

Academic and behavioural outcomes of students are directly influenced by professional functioning of teachers (McMahon et al., 2014; Reddy, Fabiano, & Jimerson, 2013; Reddy et al., 2014). Challenging working conditions that include school violence, negative school climate and problems with discipline are directly related to the satisfaction of teachers (Cohen, Pickeral, & McCloskey, 2009; Ingersoll, 2001; Kersaint, Lewis, Potter, & Meisels, 2007; McMahon et al., 2014).

In schools, teachers are mostly exposed to traditional forms of violence, for example to physical, verbal or social forms of violence (Lokmić, Opić, & Bilić, 2013). They are, at the same time, unprotected victims of school violence due to the lack of education and lack of upbringing in families, unacceptance of authority by children, significant influence of peers and media, through which children, as a result of lack of control, obtain information inappropriate for their age that is later reproduced through their behaviour (Lokmić et al., 2013).

The variables regarding school, such as school climate and discipline standards, are strong predictors of the victimisation of teachers (Gottfredson & Gottfredson, 1985; Gottfredson, Gottfredson, Payne, & Gottfredson, 2005; McMahon et al., 2014). Identifying the nature and extent of violence directed at teachers can help in understanding school climate and in developing effective interventions (McMahon et al., 2014).

The context of every-day school situations is frequently considered the third reason for violent behaviour, particularly due to the stress that students face in such situations (Lokmić et al., 2013). Stress related to school can be caused by teachers, classmates and, frequently, parents (Lokmić et al., 2013). Children, i.e. students are used to being important to their parents and expect, therefore, the same treatment at school (Lokmić et al., 2013). Problems occur when such expectations are not met and when they cannot accept it and start seeking manners to stand out and draw attention, which, depending on the temperament of individual students can also be violent (Lokmić et al., 2013).

Teachers can also induce violence by their acts. To put it more precisely, students can feel hurt and less valuable if they are constantly exposed to teachers' criticism, which can lead to students' violent behaviour (Lokmić et al., 2013). Teachers that set clear rules and explain them clearly and in detail face the problem of violence less frequently compared to teachers who are more lenient and who never clearly define what is tolerated and what is not (Lokmić et al., 2013; Seiberer-Nagler, 2016).

Students in school usually form peer groups in which an individual, a leader, stands out and determines, to a large extent, the behaviour of the entire group (Lokmić et al., 2013; Staff & Kreager, 2008). A leader who behaves violently towards teachers will gather a peer group with similar characteristics and they will mutually encourage themselves in provoking teachers, disrupting classes and ignoring teacher's authority (Lokmić et al., 2013; Staff & Kreager, 2008). Individuals belonging to such groups might not be violent; however, to be accepted by their peers is important to them and, in order to avoid being mocked, they will try to fit in by behaving violently towards teachers (Lokmić et al., 2013; Wang & Dishion, 2012).

1.2 School Climate

Cohen, McCabe, Michelli, and Pickeral (2009) claim that school climate affects the quality and nature of school life. Everyday experiences of school life, as well as norms, goals and values along with interpersonal relations represent the basis of the concept of school climate that is publicly determined by four areas: safety, relations, teaching and learning, as well as (external) surroundings (Cohen, McCabe et al., 2009; Freiberg, 1999; Homanna, Barber, Torney-Purta, 2006; Perry, 1908).

School climate significantly affects individual experiences (Comer in Cohen, McCabe et al., 2009). Two aspects of school climate – attachment to school and positive feedback from teachers - have been proven to affect students' self-esteem (Hoge, Smit, & Hanson, 1990). Research on school climate contributes to revealing relations between the school climate and students' self-understanding (Cairns; Heal; Reynolds, Jones, St. Leger, & Murgatroyd; Rutter, Maughan, Mortimore, & Ouston all in Cohen, McCabe et al., 2009). A range of studies has shown that a positive school climate is related to lower students' absence rates (Cohen, McCabe et al., 2009; DeJung & Duckworth, 1986; Purkey & Smith, 1983; Reid, 1983; Rumberger, 1987; Sommer, 1985), moreover, it is a successful predictor of the rate

of disciplinary measures (Cohen, McCabe et al., 2009; Wu, Pink, Crain, & Moles, 1982). Recent research indicates that an effective risk prevention is related to a safe, caring, participatory and responsible school climate (Berkowitz & Bier, 2005; Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2002; Greenberg et al., 2003).

One of fundamentally important dimensions of school climate are relations that include how "related" people within a school feel about each other (Blum, McNeely, & Rinehart, 2002; Cohen, McCabe et al., 2009; Osterman, 2000). It is a fact that school attachment, i.e. the extent to which students feel attached to at least one caring and responsible adult in a school, is becoming a research area of significant interest (Cohen, McCabe et al., 2009). School attachment and interconnection within the school are a strong predictor of school success for adolescents, as concluded by Blum et al. (2002), as well as, by Shochet, Dadds, Ham, and Montague (2006). In addition, Karcher (2002a, 2002b) concludes that the same predictor can be applied to the prevention of violence and as a protective factor for risky sexual relations, violence and drug abuse (Catalano, Haggerty, Oesterie, Fleming, & Hawkins, 2004; Kirby, 2001).

School climate has a tendency to promote or to complicate purposeful behaviour of students and it strongly affects students' motivation for learning (Cohen, McCabe et al., 2009). School climate is based on the samples of personal experiences of parents, students and school staff, and it reflects norms, values, interpersonal relations, teaching and methodological procedures, as well as organisational structures, while the creation of school climate is an annual goal that is being achieved on a daily basis (DeWitt & Slade, 2014).

Creating a positive school climate is an annual goal that is achieved on a daily basis, and it is the entire process that includes trust at the level of the institution, positive shifts in thinking and the feeling of autonomy among students, employees and teachers (DeWitt & Slade, 2014).

Way, Reedy, and Rhodes (2007) stress the importance of school climate for secondary school students through four dimensions: (1) the nature of relations between students and teachers; (2) the nature of relations among students; (3) the extent to which students have decision-making autonomy; and (4) the extent to which a school provides clear, consistent and fair rules. These four concepts have been used as the basis for the research presented in this paper.

Researchers have noticed that lack of harmony between a person and the environment, as well as the extent to which students perceive that their schools do not support their need for attachment, autonomy and consistency can represent a risk for the psychological and behavioural health of students (Way et al., 2007).

Given that school climate is based on samples of personal experience of school life of children and school staff, and given that it reflects norms, values and interpersonal relations, teaching and methodological procedures, as well as organisational structure (DeWitt & Slade, 2014), this paper provides a review of differences in the perception of four dimensions of school climate (Way et al., 2007) by the students who have experience with violent behaviour of students directed at teachers and those students who do not have that experience.

2 METHODOLOGY

2.1 Research Aim

The main aim of the paper is to analyse the frequency of violent behaviour of students directed at teachers in the City of Zagreb and to determine whether there is a connection between school climate consisting of four dimension and the occurrence of violence of students directed at teachers.

Given that researched are the occurrence of violent behaviour of students directed at teachers, as well as the relation of such violence to the basic aspects of school climate based on whether students witnessed or heard of cases of such behaviour in their schools, the following research questions are asked:

- 1. Is there a difference in the perception of the teacher-student relationship between the students who have experience with violent behaviour of students directed at teachers and those who do not have that experience?
- 2. Is there a difference in the perception of the relationship among students between the students who have experience with violent behaviour of students directed at teachers and those who do not have that experience?
- 3. Is there a difference in the perception of the decision-making autonomy allowed to students between the students who have experience with violent behaviour of students directed at teachers and those who do not have that experience?
- 4. Is there a difference in the perception of clear, consistent and fair school rules between the students who have experience with violent behaviour of students directed at teachers and those who do not have that experience?

2.2 Hypotheses

Taking into account the previously defined research aim and the specific research questions, the following hypotheses have been formulated:

H1: There is no statistically significant difference in the perception of the claims that measure the nature of the teacher-student relationship between the students who have experience with violent behaviour of students directed at teachers and those who do not have that experience.

H2: There is no statistically significant difference in the perception of the claims that measure the nature of the relationship among students between the students who have experience with violent behaviour of students directed at teachers and those who do not have that experience.

H3: There is no statistically significant difference in the perception of the claims that measure the decision-making autonomy allowed to students between the students who have experience with violent behaviour of students directed at teachers and those who do not have that experience.

H4: There is no statistically significant difference in the perception of the claims that measure the clarity, consistency and fairness of school rules between the students who have experience with violent behaviour of students directed at teachers and those who do not have that experience.

2.3 Sample of Variables

The data were collected based on a questionnaire that contains 17 sets of questions, among which there is a relevant set of indicators of school climate measured with the help of 24 claims that are organised in four subscales: (1) nature of the teacher-student relationship, (2) nature of the relationship among students, (3) decision-making autonomy allowed to students, (4) available clear, consistent and fair school rules.

For all the questions that measure school climate offered are answers in the form of a Likert scale from 1 (I completely agree) to 6 (I completely disagree). The Cronbach's alpha coefficient of reliability for the entire set of school climate amounts to 0.885, whereas divided by subscale as follows: nature of the teacher-student relationship 0.675; nature of the relationship among students 0.760; decision-making autonomy allowed to students 0.823; available clear, consistent and fair school rules 0.859. The set of variables related to the school climate was authored by Professor Niobe Way from the University in New York and the author provided written permission for the use of the questionnaire in May 2017. When translating the questionnaire, cultural differences were taken into account and the questionnaire was adapted to the Croatian educational context.

The experience of violent behaviour of students directed at teachers was measured by a claim that examined whether students witnessed or heard of cases of violent behaviour of students directed at teachers. If students did not have the stated experience, they marked the statement with "X".

2.4 Sample of Respondents

The analysis included a sample of 451 students in their final years of secondary schools in Zagreb. 174 students from two grammar schools and 277 students from three secondary vocational four-year and three-year schools participated in the research. Vocational four-year and three-year schools where educating students in field of electro mechanics, industrial engineering and computer technology, which are schools that are mostly attended by male students. Access to students, i.e. the permission to conduct research was obtained from the Department of Education of the City of Zagreb. In addition, the consent was also obtained from school principals. The schools were selected by the Department of Education based on their previous positive experiences and cooperation. The sample of 451 students is a convenience, non-probabilistic sample formed by the arrival of persons conducting research to classes. To put in more clearly, included in the sample were all students who were attending classes when a person conducting research arrived.

2.5 Data Collection Methods

The data were collected by an anonymous and voluntarily survey of students in their final years of secondary schools in Zagreb in the first term of the school year 2017/2018 in accordance with the ethical rules of conducting scientific research. Surveyed were all students in randomly selected classes who were attending classes when a person conducting research arrived.

2.6 Data Processing Methods

The statistical package SPSS was used in processing data for the purpose of this paper. In order to answer the research questions, conducted was the non-parametric Mann-Whitney U test to determine differences between the group of students who have experience with violent behaviour of students directed at teachers and those who do not have that experience. Moreover, presented are percentage shares of students regarding their level of agreement with the measured claims of school climate.

3 RESULTS AND DISCUSSION

3.1 Descriptive Analysis

In the first part, presented are percentage shares of the students who have experience with violent behaviour of students directed at teachers and of those who do not have it regarding their level of agreement with the measured claims of school climate.

Table 1: Percentage share of the students*

	Experience with violence of students directed at teachers	I completely agree	I mostly agree	I agree	I disagree	I mostly disagree	I completely disagree
Students	Yes	11.3%	24.8%	22.0%	22.7%	9.9%	9.3%
respect teachers	No	17.8%	37.8%	26.9%	9.1%	5.2%	3.1%
Teachers	Yes	9.2%	17.0%	29.8%	21.3%	8.5%	14.2%
take care of students	No	12.3%	31.6%	36.1%	9.1%	4.6%	6.3%
Teachers contribute	Yes	9.2%	17.0%	29.8%	21.3%	8.5%	14.2%
to students' self-esteem	No	6.0%	20.4%	33.7%	22.5%	8.8%	8.8%

^{*}Percentage share of the students who have experience with violent behaviour of students directed at teachers and those who do not have it regarding the level of agreement with the claims that measure the teacher-student relationship

It is visible from the results presented in Table 1 that students are more prone to express agreement with the statements that measure the teacher-student relationship, i.e. that their answers are more frequently located on the left distribution side that indicates a certain level of agreement with the statements that students respect teachers, that teachers take care of students and that teachers contribute to students' self-esteem. The stated refers both to those students who have experience with violent behaviour of students directed at teachers and to those who do not have that experience.

Experience with I I I mostly I completely violence of I disacompletely mostly I agree students gree disagree disagree agree agree directed at teachers Yes 9.9% 26.1% 26.1% 16.2% 10.6% 11.3% Students help each other 32.9% No 17.5% 37.4% 6.3% 3.4% 2.4% Students 7.7% Yes 19.7% 20.4% 21.8% 12.0% 18.3% apply themselves to 26.9% 7.0% earn the best No 21.0% 22.4% 18.5% 4.2% grades Students put 9.9% Yes 8.5% 18.3% 31.0% 15.5% 16.9% a lot of effort into their 24.5% 10.1%5.2% No 16.8% 21.8% 21.3% work Students Yes 23.9% 28.9% 6.3% 13.4% 16.9% 10.6% hardly get No 3.9% 5.6% 13.0% 36.5% 29.1% 11.2% along Yes 6.4% 16.3% 24.8% 24.1% 9.2% 19.1% Students trust each other 27.7% 9.5% 7.0% 36.1% 16.1% 3.5%

Table 2: Percentage share of the students*

Similar to the claims that measure the teacher-student relationship, students are more prone to agree that students help each other and to disagree that students hardly get along, regardless of the experience with violence of students directed at teachers. However, for other claims, there are visible differences in the answer trends depending on the experience of violence. More than a half of students who have experience with violent behaviour of students directed at teachers are more prone to disagree that students apply themselves to earn the best grades, that students put a lot of effort into their work and that students trust each other.

^{*}Percentage share of the students who have experience with violent behaviour of students directed at teachers and those who do not have it regarding the level of agreement with the claims that measure the relationship among students

Table 3: Percentage share of the students*

	Experience with violence of students directed at teachers	I completely agree	I mostly agree	I agree	I disagree		I completely disagree
Students have the opportunity to propose ac- tivities in class	Yes	9.2%	12.1%	30.5%	18.4%	12.1%	17.7%
	No	7.0%	27.7%	36.1%	16.1%	9.5%	3.5%
Students have the opportunity to participate in determining the rules	Yes	3.5%	5.7%	19.9%	24.8%	12.1%	34.0%
racs	No	7.7%	13.3%	31.2%	21.1%	16.1%	10.5%
Students have the opportunity	Yes	2.9%	12.9%	20.0%	25.7%	14.3%	24.3%
to participate in decision-making	No	2.5%	14.4%	22.9%	21.1%	18.3%	20.8%

*Percentage share of the students who have experience with violent behaviour of students directed at teachers and those who do not have it regarding the level of agreement with the claims that measure the decision-making autonomy allowed to students

More than a half of students who have experience with violent behaviour of students directed at teachers and those who do not have that experience express a certain level of agreement with the statement that students have the opportunity to propose activities in class, whereas more than a half of both groups expresses a certain level of disagreement with the statement that students have the opportunity to participate in decision-making. As for the opportunity of students to participate in determining the rules, over 70% of the students who have experience with violent behaviour of students directed at teachers disagree with that statement, whereas that only applies to less than half of the students who do not have that experience.

Table 4: Percentage share of the students who have experience with violent behaviour of students directed at teachers and those who do not have it regarding the level of agreement with the claims that measure the clarity, consistency and fairness of school rules

Experience with Ι Ι violence of I mostly completely completely mostly I agree students disagree disagree disagree agree agree directed at teachers The rules are Yes 12.9% 25.0% 24.3% 16.4% 6.4% 15.0% fair No 12.1% 31.8% 34.6% 12.5% 3.9% 5.0% Yes 17.1% 19.3% 27.9% 10.0% 5.0% 20.7% Sanctions for disobeying the rules are equal for all 22.5% 17.9% 13.3% 7.4% No 29.8% 9.1% 11.3% 28.4% 36.2% 9.2% 7.1% 7.8% Teachers explain to students what is expected from them No 17.9% 31.6% 36.1% 9.8% 2.1% 2.5% Yes 10.1% 21.0% 39.9% 15.2% 5.8% 8.0% The procedures regarding the application of the rules are clear No 12.0% 27.1% 44.0% 11.3% 2.5% 3.2% The procedures Yes 13.8% 19.6% 30.4% 19.6% 8.0% 8,7% regarding the application of the rules are often ignored 3.5% No 13.0% 20.7% 36.1% 17.2% 9.5%

Table 4: Percentage share of the students*

*Percentage share of the students who have experience with violent behaviour of students directed at teachers and those who do not have it regarding the level of agreement with the claims that measure the clarity, consistency and fairness of school rules

Over 60% of the students from both groups express a certain level of agreement with all the claims that measure the clarity, consistency and fairness of school rules, with the exception of the claim stating that the procedures regarding the application of the rules are often ignored. To put it more precisely, less than half of the students who do not have experience with violence of students directed at teachers express a certain level of agreement with that statement.

It can be concluded that students mostly positively assess the teacher-student relationship and school rules, whereas they mostly do not recognise the autonomy allowed to students in their schools. Similarly, the results of the subscale on the relationship among students indicate the existence of certain problems in the relationship among students.

3.2 Differences in Assessing the School Climate

In order to test the research hypotheses, conducted was a non-parametric Mann-Whitney U test to determine the differences between the students who have experience with violent behaviour of students directed at teachers and those who do not have that experience. The stated test was used because the preconditions for using the t-test to test differences between two independent groups were not met, i.e. because there is a deviation regarding the presumption of the normal distribution and homogeneity of variances for the used variables.

Table 5: Mann-Whitney U test difference*

Teacher-student relationship	Experience with violence of students directed at teachers	n	M	Central rank	Mann-Whitney U test
Students respect teachers	No	286	2.56	194.97	
	Yes	141	3.23	252.60	
	Total	427			14720.000**
Teachers take care of students	No	285	2.81	194.75	
	Yes	141	3.45	251.40	
	Total	426			14748.500**
Teachers contribute to students'	No	285	3.34	205.10	
self-esteem	Yes	141	3.65	230.48	
	Total	426			17698.000*

Note: p < .05*; *p* < .01**

The results presented in Table 5 indicate that students who do not have experience with violent behaviour of students directed at teachers consider, to a greater extent, that students respect teachers (U = 14720.000, p < .01), that teachers take care of students (U = 14748.500, p < .01), and that teachers contribute to students' self-esteem (U = 17698.000, p < .05).

The above results are in accordance with the research results obtained by the authors of the concept of school climate (Way at al., 2007), who claim that the decrease in trust in teachers, in this case in respect for teachers, will lead to an increase in violent and other problematic types of behaviour (O'Grady, Hinchion, & McNamara, 2011). In addition, average assessments of students who witnessed or heard of violent behaviour of students directed at teachers (M = 3.23) mostly indicate that students do not agree with the statement that students in their school respect teachers. This should be taken seriously because it indicates the existence of disrespect for teachers, whereby late and inappropriate reactions present a risk for worsening the teacher-student relationship.

Similarly, average assessments of students indicate that students are prone to disagree with the statement that teachers in their school take care of students (*M* = 3.45). Such results require a further analysis of school climate, i.e. it is necessary that students' and teachers' councils, in collaboration with school psychologists

^{*}Mann-Whitney U test difference in the perception of the teacher-student relationship between the students who have experience with violent behaviour of students directed at teachers and those who do not have that experience

and pedagogues, devise manners of how best to approach students at the school level, as well as at the level of each individual class, i.e. classroom (Košir & Tement, 2013). The founders of the concept of school climate Way et al. (2007) claim that the teacher-student relationship is related to a decrease in self-esteem, as well as to the occurrence of symptoms of depression and problematic behaviour in students.

The reason for concern is that students, both those who have experience with violence of students directed at teachers and those who do not have that experience, mostly do not agree with the statement about a possible contribution of teachers to students' self-esteem. The above stated has to be taken into account and the teacher-student relationship as part of school climate should be further examined as the research results suggest there is a need for teachers be devote themselves to their students more intensively.

This part of the research conducted in Croatia is in accordance with the results that Way et al. (2007), the founders of the concept of school climate, obtained after having tested the dimensions of school climate in the USA. To put it more precisely, a worse assessment of the teacher-student relationship by students leads to violent and other problematic forms of student behaviour (Lee, 2012; Way et al., 2007).

Experience with violence of students directed at Central Mann-Whitney Relationship among students teachers n M rank U test Students apply themselves to No 286 2.81 193.06 earn the best grades 142 3.65 257.69 Yes Total 428 14173.000** Students put a lot of effort into No 285 3.02 191.68 their work Yes 142 3.85 257.69 Total 427 13873.000** Students hardly get along No 285 4.40 229.75 Yes 141 3.68 182.39 Total 426 15746.500** Students trust each other No 285 3.04 195.10 Yes 141 3.71 250.68 Total 426 14849.500**

Table 6: Mann-Whitney U test difference*

Note: $p < .05^*$; $p < .01^{**}$

Students who do not have experience with violent behaviour of students directed at teachers consider, to a greater extent, that students apply themselves to earn the best grades (U = 14173,000, p < .01), that students put a lot of effort into their work (U = 13873.000, p < .01) and that students trust each other (U = 14849.500, p < .01), whereas they believe, to a smaller extent, that students hardly get along.

Average assessments of students who witnessed or heard of cases of violent behaviour of students directed at teachers indicate that they mostly disagree with the statement that students in their school apply themselves to earn the best

^{*}Mann-Whitney U test difference in the perception of the relationship among students between the students who have experience with violent behaviour of students directed at teachers and those who do not have that experience

grades (M = 3.65). Having in mind the concept of school climate, it is visible that violence of students directed at teachers, regardless of whether it was witnessed or just heard of, is related to the perception of the relationship among students, i.e. to the perception their fellow students' effort.

Similarly, the students who witnessed or heard of violence of students directed at teachers mostly disagree with the statement that students in their school put a lot of effort into their work (M = 3.85). Taking into account the obtained results, it is likely that students, based on the information on violence of students directed at teachers that they witnessed or heard of, lose motivation to put additional effort. Furthermore, the presence of violence of students directed at teachers disrupts the school climate and working atmosphere, which can also lead to demotivating students to put effort and energy into their work.

Average assessments for both groups of students lie below the scale average, which indicates that both students who do not have experience with violence of students directed at teachers and those who have that experience are more prone to disagree that students hardly get along, whereby students with experience with violence of students directed at teachers agree more compared to those who do not have that experience. It can be concluded that the possibly disturbed school climate and friendly environment are related to cases of violent behaviour of students directed at teachers.

In accordance with the previous claims that measure the relationship among students, the students who have experience with violent behaviour of students directed at teachers are more prone to disagree with the statement that students trust each other, which indicates that they have a more negative view of the relationship among students. The described situation is the results of witnessing, i.e. possessing information on violent behaviour of students directed at teachers, whereby students lose confidence in their fellow students who are ready to be violent towards teachers, i.e. have already been violent towards teachers. The described situation probably causes concerns in other students.

Way et al. (2007), in the results of their research conducted in some 30 schools in the USA, state that the loss of trust in fellow students leads to corresponding occurrence of violent and other problematic forms of behaviour, as well as depression symptoms and loss of self-confidence. For that reason, it is necessary to empower relationships among students (Sungur, 2007; Way et al., 2007).

Experience with violence of students Mann-Whitney directed at Central Decision-making autonomy allowed to students teachers n M rank U test Students have the No 285 3.56 211.43 opportunity to suggest Yes 141 3.65 217.68 activities in the classroom Total 426 19503.500 Students have the opportunity No 284 4.48 215.11 to participate in determining Yes 140 4.38 208.76 the rules Total 424 19424.000 Students have the opportunity No 284 4.01 210.16 to participate in decision-ma-4.09 Yes 140 217.24 king Total 424 19216.000

Table 7: Mann-Whitney U test difference*

Note: $p < .05^*$; $p < .01^{**}$

As for the assessment of the extent to which autonomy is allowed to students, it is visible that students do not differ depending on the experience with violent behaviour of students directed at teachers. It can be concluded that students who have experience with violent behaviour of students directed at teachers and those who do not have that experience disagree, to the same extent, with the statement that students have the opportunity to propose activities in class and to participate in determining rules and making decisions in school. It should be stated that students from both groups disagree more than agree with the statement that students have the opportunity to propose activities in class and to participate in determining rules and making decisions in school.

The obtained results have to be viewed in the context of the Croatian educational system, i.e. in accordance with the legislation and regulations that do not include students as decision-makers or as participants in decision-making, which, to a certain extent, disturbs the positive school climate in the secondary schools in Zagreb (Zakon o odgoju i obrazovanju u osnovnoj i srednjoj školi, 2008).

While the Croatian education system does not offer students the opportunity for active participation in decision-making, the authors Way et al. (2007), in their American research, prove that students' autonomy in decision-making, that exists in the system, is related to violent and other problematic forms of behaviour, students' mental health and self-confidence.

^{*}Mann-Whitney *U* test difference in the perception of the autonomy allowed to students between the students who have experience with violent behaviour of students directed at teachers and those who do not have that experience

Table 8: Mann-Whitney *U* test difference*

Clarity, consistency and fairness of school rules	Experience with violence of students direct- ed at teachers	n	M	Central rank	Mann-Whitney U test
The rules are fair	No	280	2.79	200.41	
	Yes	140	3.24	230.68	
	Total	420			16775.500*
Sanctions for disobeying the	No	285	2.93	205.74	
rules are equal for all	Yes	140	3.29	227.79	
	Total	425			17879.500
Teachers explain to students	No	285	2.54	202.36	
what is expected from them	Yes	141	2.96	236.01	
	Total	426			18842.500
The procedures regarding the	No	284	2.75	201.55	
application of the rules are clear	Yes	138	3.09	231.97	
	Total	422			16770.500
The procedures regarding the	No	285	3.79	231.33	
application of the rules are often ignored	Yes	138	3.14	172.08	
0	Total	423			14156.500**

Note: $p < .05^*$; $p < .01^{**}$

The students who do not have experience with violence of students directed at teachers consider, to a greater extent, that school rules are fair (U = 16775.500, p < .05) and, to a lesser extent, that procedures regarding the application of the rules are often ignored (U = 14156.500, p < .01).

Students who witnessed or heard of cases of violent behaviour of students directed at teachers mostly, on average, do not agree that rules in their school are fair (M = 3.24), which indicates that allowing violent events and inadequate reactions to them can cause suspicion in students regarding the fairness of school rules.

Students who have experience with violence of students directed at teachers agree to a greater extent with the statement on ignoring the procedures for the application of rules (M = 3.14). The above stated should encourage schools to additionally and more clearly explain the procedures of the application of rules to their students, whereby it is important to avoid situations in which, due to uncertainties, a large number of students will witness the violence of students directed at teachers. To put it more precisely, clarifying the procedures for the application of rules in schools as part of the positive school climate contributes to preventing or reducing violence (Gottfredson & Gottfredson, 1985).

^{*}Mann-Whitney U test difference in the perception of school rules between the students who have experience with violent behaviour of students directed at teachers and those who do not have that experience

4 CONCLUSION

The analysis and determination of the relation between school climate and the occurrence of violence of students directed at teachers has been conducted on a sample of 451 students in their final years of secondary schools in Zagreb.

In this paper, three hypotheses were refuted due to the existence of a statistically significant difference in the perception of claims that measure three dimensions of school climate (nature of the teacher-student relationship, nature of the relationship among students and clarity, consistency and fairness of school rules) between the students who have experience with violent behaviour of students directed at teachers and the students who do not have that experience.

The accepted hypothesis (no statistically significant difference in the perception of claims that measure clarity, consistency and fairness of school rules between the students who have experience with violent behaviour of students directed at teachers and the students who do not have that experience) is the consequence of the inflexibility of the Croatian education system that does not foresee active roles of students in determining the rules, which means that we cannot expect that the autonomy of students in decision-making and determining the rules will make a difference.

The results of the research indicate the difference in the perception of three out of four dimensions of school climate depending on whether or not students witnessed or heard of violent behaviour of students directed at teachers.

When asking question about when students last witnessed student violence against teachers, we wanted to find out the prevalence of such events. In doing so, we have decided to take into account the experiences of students who have heard of such events, considering that news of such events among peers is spreading extremely fast. This was done so as not to lose valuable information, which has rarely been collected in Croatia. The question of whether students have witnessed or heard about students' violent behaviour towards teachers is one of the last questions in the questionnaire before sociodemographic questions. In this way, answering this question did not affect answering other questions in the questionnaire.

The results presented in this paper can have practical implications because, based on the obtained data, it is possible to view the extent to which the experience with violent behaviour of students directed at teachers affects the perception of the concept of school climate. In addition to the information on the number of students who witnessed or heard of violent behaviour of students directed at teachers, the paper provides an assessment of school climate by students on a subsample of the students who witnessed or heard of violent behaviour of students directed at teachers. Based on the research results, schools have the opportunity to more effectively prevent violence of students directed at teachers and to strengthen the elements of school climate on the basis of insight into decomposed dimensions of the concept. Accordingly, with the help of pedagogical designing and strong implementation of the concepts of school climate, schools can raise the level of safety of teachers, as well as strengthen positive foundations of school climate, i.e. school atmosphere. Furthermore, the research results are, especially after changes have been implemented in schools in accordance with the research results, of great

significant for the safety of students because students will feel more comfortable in school, put more effort into their obligations, establish better relationships with each other and with their teachers, thus allowing little or no room for violent behaviour directed at teachers.

The authors of the concept of school climate (Way et al., 2007) presented in their research that all four dimensions of school climate, when positively perceived by students, contribute to the reduction of problematic behaviour and depression symptoms in students. All dimensions of school climate contribute to greater self-confidence in students (Berkowitz & Bier, 2005; Cohen, McCabe et al., 2009; Way et al., 2007).

As mentioned before, as part of primary preventive efforts of school, it is advisable that schools themselves design all-encompassing, integrated, multi-directional prevention models that will promote educational and social success through clearly communicated expected behaviours (Lane et al. in Espelage et al., 2013; Greenberg et al., 2003; McMahon et al., 2014).

Establishing a positive and supportive school climate, transparent and consistent school rules, participation of students and their parents in decision-making and encouraging students to participate in extra-curricular activities can greatly contribute to the prevention of school violence (Ozdemir, 2012), including violence of students directed at teachers.

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