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Perceptions of school climate by students and teachers in secondary schools in Croatia

Abstract: School climate represents a relatively permanent quality of the school environment, which is based on a common perception of behaviour in school and is affected by its formal and informal organization, participants' personalities, and the school management. The study involved 451 students and 102 teachers from secondary schools in the city of Zagreb. The study was performed using a questionnaire containing a school climate scale (Niobe Way 2007) and questions about the sociodemographic data of the participants. The aim of the study was to determine the differences between students' and teachers' perceptions of the school climate, and the gender of the participants was considered. The results showed that the teachers assessed all four dimensions of school climate more positively than the students. It was also found that gender is not a relevant factor in the teachers' assessments of different aspects of the school climate but contributes to more positive assessments by female students compared to their male counterparts.

Keywords: school climate, secondary schools, teachers, students, gender

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Introduction

The importance of school climate was recognized more than 100 years ago (Perry 1908, p. 181), but it was not until the middle of the previous century that the concept started to be studied systematically (Cohen et al. 2009, p. 181). School climate is referred to in practice using many similar terms: atmosphere, feelings, tone, ambiance, or milieu (Homana et al. 2006, p. 2; Tagiuri in Cohen et al. 2009, p. 182). Baranović (et al. 2006, p. 487) point out that even though school climate can differ according to class and school levels, school-level climate is considered to be the general term that comprises perceptions of the school working environment. Therefore, the school climate is consequently defined as "a relatively permanent quality of the school environment and it affects the behaviour in that environment. It is based on a common perception of the behaviour in school, and it is affected by formal and informal organization, participants' personalities and school management" (Baranović et al. 2006, p. 486). It should also be pointed out that the concept of quality school – school without coercion (Glasser 2005) indicates the need to create a positive school climate, in which students experience safety, support, fondness, friendship, honesty, and maintains that in such an environment, they achieve optimal cognitive results.

The concept of school climate allows for two approaches: On the one hand, it is possible to approach the school environment as a subjective phenomenon, while, on the other, it can be approached as an objective component of school life (Cohen et al. 2009, p. 182). For instance, Cohen et al. (2009, p. 182) state that school climate refers to the quality and characteristics of school life. To be more specific, it pertains to the experiences of everyday school life, and the foundation of the concept itself is represented by norms, goals, values, and interpersonal relationships (Cohen et al. 2009, p. 182; Freiberg 1999, p. 100). A sustainable and positive school climate supports the development and education of young people towards a productive and satisfactory life that contributes to the betterment of a democratic society (Cohen et al. 2009, p. 182; Freiberg 1999, p. 98).

School climate exceeds individual experiences; it represents a totality of phenomena that surpasses the experience of an individual (Cohen et al. 2009, p. 182).

School experience, as a totality of phenomena, gains its significance through the intentional consideration of participants who have previously undergone their own experiences but have also taken part in interpersonal experiences with students, school staff, and members of participants's families (Cohen et al. 2009, p. 182; Freiberg 1999, p. 2). School climate is distinctly shaped by safety, relationships, teaching, learning, and the (external) environment (Cohen et al. 2009, p. 182; Freiberg 1999, p. 156). Although there is no universally agreed upon set of core domains of school climate, Thapa et al. (2013, p. 360) identified five domains in their review of 200 references: safety (rules and norms, physical safety, and social-emotional safety), relationships (respect for diversity, school connectedness/engagement, social support, leadership, students' race/ethnicity, and students perceptions of school climate), teaching and learning (social, emotional, ethical, and civic learning; service learning; support for academic learning; support for professional relationships; and teachers' and students' perceptions of school climate), institutional environment (physical surroundings, resources, and supplies), and the school improvement process (the implementation of evidence-based programmes).

Besides the differences in its conceptualization and dimensions, there are multiple ways to evaluate school climate: observations, interviews, focus groups, questionnaires, and so on. Evaluations can be conducted on students, teachers, managers, employees, family, or multiple agents, covering numerous dimensions in diagnosing the climate. This evaluation from multiple perspectives provides insight into what is going well and what can be improved in the school, thus contributing to planning interventions based on the identified needs and potentialities (Moro et al. 2019, p. 6). Several tools and assessments have been created to measure school climate, but few adequately reflect its multidimensional nature. Most measures have focused on specific domains of school climate, such as student engagement, using self-report surveys completed by students and/or staff. Student engagement often includes measures of social relationships/connectedness that are based on the assessment of the existence of meaningful roles for students at school, level of public recognition of students' achievements and constructive behaviour, feelings of closeness between staff and students, level of engagement of learners, students' sense that their input is valued, students' perceptions of academic accomplishment, recognition of success, and sense of value and commitment to academics (Catalano et al. 2004, p. 255; Whitlock 2006, p. 17; Zullig and Kooperman 2010, p. 141). Other approaches have focused on order, safety, and discipline, identifying incidents of violence, perceived safety, respect for peers and authority, knowledge and fairness of disciplinary policies, and gang activity (Zullig and Kooperman 2010, p. 141). The domain of the physical environment, including the quality and maintenance of school facilities, classrooms, buildings, grounds, ambient noise, school temperatures, and classroom arrangement, have been measured through the observational assessments and self-report surveys of students and staff (Zullig and Kooperman 2010, p. 141).

Numerous studies have shown that a positive school climate is related to lower student non-attendance rates (Battin-Pearson et al. 2000, p. 579; DeJung and Duckworth 1986, p. 68; Purkey and Smith 1983, p. 40; Reid 1982, p. 113; Rumberger 1987,

p. 109; Sommer 1985, p. 419) and represents a good predictor of the incidence and types of punitive measures (Cohen et al. 2009, p. 185; Wu et al. 1982, p. 263). A positive school climate has been associated with fewer behavioural and emotional problems for students, an increase in their achievement levels, and a reduction of their maladaptive behaviour (McEvoy and Welker 2000, p. 135). Moreover, research suggests that a positive school climate is associated with increased job satisfaction for school personnel (Aldridge and Fraser 2016, p. 302). A positive school climate can provide an enriching environment for the personal growth and academic success of both students and teachers (Marshall 2004, p. 2). A safe, caring, participatory, inclusive, and responsible school climate also causes a greater fondness for the school and offers an optimal foundation for social, emotional, and academic learning (Blum et al. 2002, p. 16; Johnson and Stevens 2006, p. 119; Osterman 2000, p. 359). Furthermore, DeWitt and Slade (2014, p. 2) state that school climate is based on patterns of students', parents', and school personnel's experiences of school life and reflects norms, values, and interpersonal relationships; teaching and learning practices; and the organizational structure.

School climate represents a pervasive matter, and the creation of a positive school climate should be a yearly objective hat every student and staff member strives to achieve on a daily basis (DeWitt and Slade 2014, p. 5). School communities have a choice: They can autonomously decide whether to be proactive and create the kind of environment they will teach in to stimulate learning, or they can be passive and reactionary with regard to certain events (DeWitt and Slade 2014, p. 5).

Despite substantial interest in research and programming aimed at improving students' and teachers' perceptions of school climate, there has been limited research examining the congruence between their perceptions. Social cognitive theory suggests that although students and their teachers share a common objective experience, their differing roles within the school likely lead to their discrepant perceptions of the environment (Bandura 2001). Regarding the comparisons of students' and teachers' school climate assessments, teachers have more positive perceptions of all aspects of school climate that are covered by the research conducted by Kantorová (2009, p. 187). Studies on the gender differences between students in regard to their perceptions of school climate indicate that in a sample of American students, boys are more negative in their assessments of school climate than girls (Jia et al. 2009, p. 1523; Koth et al. 2008, p. 100; La Salle et al. 2016, p. 62; Mitchell et al. 2010, p. 275), while a study on a Chinese sample shows no gender differences (Jia et al. 2009, p. 1523). Regarding the gender differences between teachers in terms of their perceptions of school climate, Gunbayi (2007, p. 74) found that male teachers assess school climate more positively than their female colleagues, although no statistically significant differences were found.

In this study, we commence with the concept that school climate comprises four separate components—(1) nature of relationships between students and teachers; (2) nature of relationships among students; (3) extent to which student autonomy is allowed in decision-making; and (4) extent to which the school provides clear, consistent, and fair rules (Way et al. 2007, p. 195)—because it operationalizes previously stated views of school climate as a conglomerate of features of everyday

school life, whose bases are norms, goals, values, and interpersonal relationships. Because the four components coincide with the developmental need of adolescents, they are exceptionally important for high-school students (Way et al. 2007, p. 195). We also take into consideration the fact that these features can be perceived by students and teachers in different ways. Therefore, before examining the connection between school climate and different occurrences and behaviours in school, it is essential to realize the extent to which school climate represents the shared experiences of students and teachers.

Aim of the study

The aim of this study is to examine students' and teachers' perceptions of the secondary-school climate in Croatia's capital, the city of Zagreb. The following exploratory questions were set:

- Are there differences between students' and teachers' perceptions of school climate in Zagreb, and if there are, what and how extensive are they?
- What sorts of differences, if any, are there in the perceptions of school climate by students at secondary schools in Zagreb, based on their gender, and how extensive are these differences?
- What sorts of differences, if any, are there in the perceptions of school climate by teachers at secondary schools in Zagreb, based on their gender, and how extensive are these differences?

Based on these exploratory questions, the following hypotheses were set:

- Hypothesis 1: Students' assessments of school climate at secondary schools in Zagreb will be more negative than teachers'.
- Hypothesis 2: Male students' assessments of school climate at secondary schools in Zagreb will be more negative than female students'.
- Hypothesis 3: Female teachers' assessments of school climate at secondary schools in Zagreb will be more negative than male teachers'.

Method

Research method

A survey was conducted on students and teachers at high schools in Zagreb (Croatia) to examine their perceptions of school climate, and quantitative analysis was carried out on the data that were gathered. The results were obtained via two forms of the same questionnaire—one intended for students and the other for teachers.

Sample

The study was performed on a non-random (convenient) sample of 451 final-year students at secondary schools during the first term of the 2017–2018 school year. The study involved 88 students from Gymnasium II, 86 from Gymnasium III, 56 from Jelkovec High School, 99 from the Electrical Engineering Crafts School, and 122 from the Industrial Engineering School. Of the students who stated their genders, 252 (59%) were male and 175 (41%) female. Permission to conduct the study was granted by the City Office for Education of the City of Zagreb. In addition, consent was granted by the headteachers of the aforementioned schools. The teacher sample comprised 102 participants teaching final-year classes at the schools participating in the study. More specifically, the sample comprised 30 teachers from Gymnasium II, 12 from Gymnasium III, 9 from Jelkovec High School, 33 from the Electrical Engineering Crafts School, and 18 from the Industrial Engineering School. Four teachers did not state their genders, and of the remainder, 32 (32.7%) were male and 66 (67.3%) female.

Data-gathering methods and instruments

The data were received via the anonymous and voluntary surveys of students in concordance with the rules of the Code of Ethical Research on Children. The participants were all randomly selected final-year students who were present in class upon the arrival of the survey conductors. The survey was conducted by two sociology students from the University of Zagreb who were specially qualified for the task. They had previously received long-distance training and acquired the requisite certification to conduct studies on human participants, which was issued by the National Institutes of Health Office of Extramural Research in the United States of America. The remaining data were obtained via anonymous and voluntary surveys of teachers of final-year classes. A member of the professional service at each school conducted the teacher surveys at teacher council meetings.

The data were taken from a questionnaire containing 17 scales, among which was a relevant set of school climate indicators, as well as the sociodemographic characteristics of the participants. The school climate scale was examined using 23 items grouped into four subscales pertaining to four dimensions of school climate: (1) nature of the relationships between teachers and students, (2) nature of the relationships among students, (3) student autonomy in regard to decision-making, and (4) the provision of clear, consistent, and fair school rules. The scale that was utilized was based on the model of the school climate scale developed by Niobe Way. Written consent to use the scale was granted by the author in May 2017.

The subscale "nature of relationships between teachers and students" comprised three items pertaining to the students' perceptions of the support they received from the teachers at school. An example of an item is "At this school, teachers care about their students." The reliability of the scale was $\alpha = 0.675$ for the

sample of students and $\alpha = 0.714$ for the sample of teachers. The subscale "nature of relationships among students" used seven items to measure the perceptions of the relationships among peers. An example of an item is "At this school, students show mutual respect." The reliability was $\alpha = 0.817$ for the students' sample and $\alpha = 0.788$ for the teachers' sample. The subscale "extent of student autonomy in decision-making" used three items to measure the students' level of autonomy in decision-making at the school. An example of an item is "At this school, students have the opportunity to participate in establishing rules." The reliability was $\alpha = 0.823$ for the students' sample and $\alpha = 0.775$ for the teachers' sample. The subscale "Extent of provision of clear, consistent, and fair rules by the school" used 10 items to measure perceptions of the listed characteristics of the school rules. An example of an item is "The rules of this school are fair." The reliability was $\alpha = 0.866$ for the students' sample and $\alpha = 0.888$ for the teachers' sample. The reliability of the entire school climate scale was measured using the Cronbach alpha coefficient, which was $\alpha = 0.897$ for the students' sample and $\alpha = 0.912$ for the teachers'. For all items pertaining to school climate, the answers were supplied based on a six-point Likert scale (ranging from 1 – strongly agree to 6 – strongly disagree). Additionally, regarding the sociodemographic characteristics, the data were collected on the students' genders and the schools they attended, which were also where the teachers worked.

Data analysis

For data processing, the descriptive analytical methods used included relative frequencies for each category and means of each variable. In addition, a non-parametric procedure (Mann-Whitney U test) was used to determine the differences between students' and teachers' assessments of school climate and, more specifically, the gender differences between students and teachers in regard to the assessments. The Mann-Whitney U test was used because the assumptions for the t-test were not met. More specifically, there was a discrepancy in the assumption regarding the normality of distributions and the homogeneity of the variances for the individual variables, and the sample of participants in the two groups were not the same approximate size. The analyses were performed using the SPSS (Statistical Package for the Social Sciences) software package.

Results

Descriptive analysis

We will begin the description of the comparative analysis results with the presentation of the descriptive analysis results.

		Strongly agree	Mostly agree	Agree	Disagree	Mostly disagree	Strongly disagree	Total	Mean (M)	Standard deviation (SD)
At this school, teachers are respected by students.	students	15.6%	33.1%	25.8%	13.3%	6.4%	5.8%	100%	2.79	1.35
	teachers	4.9%	51.0%	30.4%	8.8%	4.9%	-	100%	2.58	0.91
At this school, teachers care about their students.	students	11.4%	26.5%	33.4%	13.8%	6.2%	8.7%	100%	3.03	1.36
	teachers	28.4%	36.3%	33.3%	2.0%	-	-	100%	2.09	0.83
At this school, teachers contribute to students' high self-esteem.	students	7.8%	16.9%	32.5%	20.9%	9.6%	12.2%	100%	3.43	1.41
	teachers	17.8%	38.6%	35.6%	4.0%	4.0%	-	100%	2.38	0.96

Table 1: Nature of the relationships between teachers and students – Assessments by students and teachers

As seen in Table 1, 74.5% of the students and 86.3% of the teachers agree for the most part with the statement that students respect teachers. However, in the other two items within this dimension of school climate, which explains the nature of the relationships between students and teachers, there are some divergences in students' and teachers' assessments. Only 2% of the teachers disagree with the statement that the teachers at their schools care about the students, whereas there are in total more than a quarter (28.7%) of those among the students. If we examine the means of students' and teachers' answers to the question regarding teachers caring about students, we see that the students are closer to disagreeing with the statement (M = 3.03; SD = 1.36) than the teachers (M = 2.09, SD = 0.83). The distinction between the means in the teachers' and students' answers is also perceived for the statement that teachers contribute to students' high self-esteem. More specifically, in their assessments, the students nearly enter the area of disagreement with the statement (M = 3.43, SD = 1.41), whereas the teachers mostly agree (M = 2.38, SD = 0.96). However, the teachers are more self-critical than in the previous case, as 3.9% of them do not agree with the statement, and approximately the same number mostly disagree with the statement, which is stronger disagreement not shown for the previous statement. However, the following discrepancy is disturbing: Nearly half of the students (42.7%) and only 8% of the teachers opine that the teachers at their schools do not contribute to the students' high self-esteem. It is especially disturbing that as many as 12.2% of the students strongly disagree with the statement, while none of the teachers have such a poor assessment of the teachers' contributions to the students' high self-esteem.

		Strongly agree	Mostly agree	Agree	Disagree	Mostly disagree	Strongly disagree	Total	Mean (M)	Standard deviation (SD)
At this school, students show mutual respect.	students	10.7%	33.6%	30.0%	13.8%	5.6%	6.4%	100%	2.89	1.30
	teachers	1.0%	49.0%	38.2%	9.8%	2.0%	-	100%	2.63	0.76
At this school, students help each other.	students	15.5%	30.2%	33.0%	10.6%	5.8%	4.9%	100%	2.76	1.28
	teachers	2.9%	44.1%	46.1%	5.9%	-	1.0%	100%	2.59	0.74
The students at this school really make an effort to get the best possible grades.	students	16.2%	21.5%	25.5%	19.3%	8.6%	8.9%	100%	3.09	1.48
	teachers	12.7%	27.5%	21.6%	26.5%	8.8%	2.9%	100%	3.00	1.30
Students at this school invest a lot of energy in what they do.	students	14.0%	18.0%	22.7%	24.5%	11.6%	9.1%	100%	3.29	1.48
	teachers	1.0%	28.4%	28.4%	29.4%	8.8%	3.9%	100%	3.28	1.12
Students at this school are caring individuals.	students	7.3%	20.2%	33.0%	17.5%	10.2%	11.8%	100%	3.39	1.41
	teachers	-	35.0%	44.0%	16.0%	4.0%	1.0%	100%	2.29	0.87
Students at this school have difficulties getting along with each other.	students	5.1%	7.8%	16.5%	34.6%	25.0%	10.9%	100%	3.99	1.28
	teachers	-	7.9%	15.8%	39.6%	23.8%	12.9%	100%	4.18	1.10
At this school, students trust each other.	students	6.7%	23.8%	32.7%	18.7%	9.1%	8.9%	100%	3.27	1.34
	teachers	2.0%	29.3%	56.6%	7.1%	4.0%	1.0%	100%	2.85	0.83

Table 2: Nature of relationships among students – Assessments by students and teachers

As seen in Table 2, there is congruence between students' and teachers' assessments of the majority of the items describing the second school climate dimension in this study: the nature of the relationship among students. The congruence between the students (M = 2.89, SD = 1.30) and teachers (M = 2.63, SD = 0.76) regarding mutual respect among students is evident. The means of the assessment of students helping each other are also near equal for students (M = 2.76, SD = 1.28) and teachers (M = 2.59, SD = 0.74), while the assessments of students (M = 3.09, SD = 1.48) and teachers (M = 3.00, SD = 1.30) regarding the students' efforts to get the highest possible grades are nearly identical. In addition, regarding the amount of energy they invest in what they do, the assessments of the students (M = 3.29, SD = 1.48) and teachers (M = 3.28, SD = 1.12) also almost match. However, in regard to the question of whether the students are caring, the congruence between their assessments and those of the teachers vanishes. Even though the students (60.5%) and teachers (79%) mostly agree with the statement that the students at their schools are caring, the means reveal a significant difference in their assess-

ments; it is also noteworthy that there was higher agreement among the teachers (M = 2.29, SD = 0.87) than the students (M = 3.39, SD = 1.41). The incongruity in the assessments of the students (M = 3.27, SD = 1.34) and teachers (M = 2.85, SD = 0.83) is also noticeable regarding the statement that students at the school in question trust each other. It is interesting that the teachers perceive a significantly more favourable situation than the students. However, one should not be deceived by the relative frequencies, which indicate that the students (36.7%) and teachers (12.1%) who disagree with the idea that students and teachers trust each other represent a minority.

		Strongly agree	Mostly agree	Agree	Disagree	Mostly disagree	Strongly disagree	Total	Mean (M)	Standard deviation (SD)
At this school, students have the opportunity to suggest the activities in class.	students	8.2%	12.5%	31.4%	20.3%	14.3%	13.4%	100%	3.60	1.44
	teachers	4.0%	25.7%	42.6%	21.8%	5.9%	-	100%	3.00	0.94
At this school, students have the opportunity to participate in establishing rules.	students	2.2%	4.9%	15.9%	30.9%	15.9%	30.2%	100%	4.44	1.32
	teachers	2.0%	25.7%	41.6%	18.8%	10.9%	1.0%	100%	3.14	1.02
Students at this school are given the opportunity to participate in making decisions.	students	2.7%	13.6%	22.4%	23.3%	16.6%	21.5%	100%	4.02	1.43
	teachers	1.0%	25.7%	49.5%	14.9%	7.9%	1.0%	100%	3.06	0.93

Table 3: Extent of student autonomy regarding decision-making – Assessments by students and teachers

In Table 3, which provides data on students' autonomy, more significant differences in the assessments of teachers and students are immediately evident. Half of the students (52.1%) and nearly three quarters of the teachers (72.3%) agree with the statement that students at the school have the opportunity to suggest activities in class. When the students were asked to assess the level to which they can participate in establishing rules, the data analysis revealed that they mostly disagree with the statement (77%), while more than two thirds (69.3%) of the surveyed teachers agree that the students have the opportunity to take part in establishing the rules. In the students' assessment, they have not been given the opportunity to participate in decision-making (M = 4.02, SD = 1.43); however, in the teachers' assessment, the students have been given the opportunity to take part in making decisions (M = 3.06, SD = 0.93).

		Strongly agree	Mostly agree	Agree	Disagree	Mostly disagree	Strongly disagree	Total	Mean (M)	Standard deviation (SD)
The rules of this school are fair.	students	12.5%	29.5%	30.2%	14.3%	5.0%	8.6%	100%	2.96	1.38
	teachers	25.5%	25.5%	43.6%	1.1%	2.1%	2.1%	100%	2.35	1.08
Sanctions for breaking the school rules at this school are equal no matter who you are.	students	19.9%	17.9%	29.3%	12.3%	6.9%	13.6%	100%	3.09	1.61
	teachers	18.6%	23.5%	40.2%	10.8%	2.9%	3.9%	100%	2.68	1.21
Everybody knows what the rules of this school are.	students	13.9%	18.1%	33.3%	18.3%	8.1%	8.3%	100%	3.13	1.41
	teachers	17.0%	38.0%	40.0%	2.0%	3.0%	-	100%	2.36	0.89
Teachers at this school explain to their students what is expected of them.	students	15.6%	30.7%	36.3%	9.6%	3.6%	4.2%	100%	2.67	1.20
	teachers	19.6%	39.2%	40.2%	1.0%	-	-	100%	2.23	0.77
At this school, the procedures related to the application of rules are clear.	students	11.3%	25.5%	42.6%	12.6%	3.4%	4.7%	100%	2.86	1.72
	teachers	20.6%	36.3%	34.3%	5.9%	2.0%	1.0%	100%	2.35	1.00
Everybody clearly understands which behaviour will be rewarded at this school.	students	20.0%	20.9%	31.7%	15.4%	5.4%	6.6%	100%	2.85	1.40
	teachers	19.6%	33.3%	40.2%	4.9%	1.0%	1.0%	100%	2.37	0.95
At this school, people are rewarded equally for equal achievements.	students	11.6%	18.6%	24.3%	21.6%	9.5%	14.3%	100%	3.42	1.54
	teachers	8.9%	28.7%	39.6%	13.9%	4.0%	5.0%	100%	2.90	1.18
At this school, one knows what is done and when.	students	8.2%	19.0%	39.1%	19.5%	6.2%	8.0%	100%	3.20	1.28
	teachers	8.1%	37.4%	43.4%	6.1%	5.1%	-	100%	2.63	0.91
At this school, students and teachers are informed on how to earn rewards.	students	10.2%	22.8%	35.9%	15.3%	8.4%	7.4%	100%	3.11	1.34
	teachers	5.1%	29.6%	48.0%	10.2%	6.1%	1.0%	100%	2.86	0.96
Procedures related to the application of rules are frequently ignored at this school.	students	7.2%	14.9%	25.0%	30.2%	13.7%	9.0%	100%	3.55	1.34
	teachers	2.0%	10.2%	13.3%	36.7%	22.4%	15.3%	100%	4.13	1.25

Table 4: Extent of provision of clear, consistent, and fair rules by the school – Assessments by students and teachers

Regarding the results presented in Table 4, there is a clear difference in the teachers' and students' assessments of whether everyone in school knows what the school rules are. The mean of the assessment of this variable for surveyed students is adjacent to disagreement (M = 3.13, SD = 1.41), while the mean for the surveyed teachers for the assessment of the same variable indicates strong agreement (M = 2.36, SD = 0.89). Furthermore, there is a difference between the students and the teachers regarding their assessments of whether people are rewarded equally for equal achievements: The assessments of the students are adjacent to disagreement (M = 3.42, SD = 1.54), while the assessments of the teachers indicate agreement (M = 2.90, SD = 1.18). Although neither the students nor the teachers agree with the statement that the procedures related to the application of rules are frequently ignored in schools, the teachers more firmly disagree (M = 4.13, SD = 1.25), while the disagreement of the surveyed students is significantly weaker and almost adjacent to agreement (M = 3.55, SD = 1.34).

Testing the differences between students and teachers regarding school climate assessment

In the following section, we look in more detail at the previously indicated differences between students and teachers in regard to perceived school climate, focusing on statistical significance. The Mann-Whitney U test was used to determine whether statistically significant differences exist between teachers' and students' assessments of different aspects of school climate. For the same reason this method was used to answer the last exploratory question to determine whether statistically significant differences exist between male (N = 252) and female students (N = 175)—that is, male (N = 32) and female teachers (N = 58).

	Students/ teachers	N	Average rank	Sum of ranks	Mann-Whitney U test
Nature of relationships between teachers and students					
Students respect teachers.	students	450	279.48	125,766.50	
	teachers	102	263.35	26,861.50	
	total	552			21,608.500
Teachers care about their students.	students	449	296.13	132,963.00	
	teachers	102	187.38	19,113.00	
	total	551			13,860.000**
Teachers contribute to students' high self-esteem.	students	449	298.18	133,882.00	
	teachers	101	174.68	17,643.00	
	total	550			12,492.000**

Nature of relationships among students					
Students show mutual respect.	students	450	280.70	126,315.50	
	teachers	102	257.97	26,312.50	
	total	552			21,059.500
Students help each other.	students	451	278.75	125,715.50	
	teachers	102	269.27	27,465.50	
	total	553			22,212.500
The students make an effort to get the best possible grades.	students	451	277.96	125,360.50	
	teachers	102	272.75	27,820.50	
	total	553			22,567.500
Students invest a lot of energy.	students	449	276.06	123,953.00	
	teachers	102	275.72	28,123.00	
	total	551			22,870.000
Students are caring individuals.	students	440	279.73	123,080.50	
	teachers	100	229.90	22,989.50	
	total	540			17,939.500**
Students have difficulties getting along with each other.	students	448	272.01	121,862.50	
	teachers	101	288.24	29,112.50	
	total	549			21,286.500
Students trust each other.	students	449	282.79	126,971.50	
	teachers	99	236.91	23,454.50	
	total	548			18,504.500**
Extent of student autonomy in decision-making					
Students have the opportunity to suggest activities in class.	students	449	287.95	129,288.50	
	teachers	101	220.16	22,236.50	
	total	550			17,085.500**
Students have the opportunity to participate in establishing rules.	students	447	302.45	135,195.00	
	teachers	101	150.80	15,231.00	
	total	548			10,080.000**
Students are given the opportunity to participate in making decisions.	students	447	294.69	131,728.00	
	teachers	101	185.13	18,698.00	
	total	548			13,547.000**
Extent of provision of clear, consistent, and fair rules by the school					
The rules are fair.	students	441	279.11	123,086.00	
	teachers	94	215.89	20,294.00	
	total	535			15,829.000**

Sanctions for breaking the school rules are equal for everyone.	students	447	281.40	125,786.00	
	teachers	102	246.95	25,189.00	
	total	549			19,936.000*
Everybody knows what the rules of this school are.	students	447	290.52	129,864.00	
	teachers	100	200.14	20,014.00	
	total	547			14,964.000**
Teachers explain to their students what is expected of them.	students	449	285.75	128,301.00	
	teachers	102	233.09	23,775.00	
	total	551			18,522.000**
Procedures related to the application of rules are clear.	students	444	286.16	127,055.50	
	teachers	102	218.39	22,275.50	
	total	546			17,022.500**
Everybody clearly understands which behaviour will be rewarded.	students	441	281.54	124,160.50	
	teachers	102	230.74	23,535.50	
	total	543			18,282.500**
People are rewarded equally for equal achievements.	students	440	280.93	123,611.00	
	teachers	101	227.72	23,000.00	
	total	541			17,849.000**
At the school, one knows what is done and when.	students	437	281.98	123,223.50	
	teachers	99	209.02	20,692.50	
	total	536			15,742.500**
People are informed on how to earn rewards.	students	443	275.65	122,114.00	
	teachers	98	249.97	24,497.00	
	total	541			19,646.000
Procedures related to the application of rules are frequently ignored.	students	444	283.74	125,980.50	
	teachers	98	216.05	21,172.50	
	total	542			16,321.500**

Table 5: Testing the differences between teachers and students regarding the assessment of items that measure school climate
*NOTE: $p < 0.01$**; $p < 0.05$**

The Table 5 data indicate that the teachers have a more positive attitude than students towards each dimension of school climate: the relationships between teachers and students, relationships among students, extent of student autonomy allowed, and established school rules.

Regarding the relationships between teachers and students, the table illustrates that teachers believe to a greater extent than students that teachers care about their students and contribute to their higher self-esteem. When it comes to the re-

lationships among students, teachers believe to a greater extent than students that students are caring and that they exhibit mutual trust. In addition, teachers believe to a greater extent than students that the latter have the opportunity to propose activities in class and participate in rule- and decision-making. The teachers consider the rules to be fair and clear to a greater extent than the students. The teachers also opine to a greater extent than the students that the procedures related to the application of rules are clear, that the sanctions for breaking the rules and rewards for achievements are equal for all, that everyone is clear on which behaviours will be rewarded, and that everyone is informed on how to earn rewards. However, the students believe to a greater extent than the teachers that the procedures related to the application of rules are frequently ignored.

Testing the differences in school climate perception regarding gender

Taking into consideration the possibility of differences in perception regarding the genders of participants (Chen and Astor 2009, p. 569; Garrett 2012, p. 24; Gunbayi 2007, p. 74; Jia et al. 2009, p. 1523; Koth et al. 2008, p. 100; La Salle et al. 2016, p. 62; McMahon et al. 2014, p. 755; Mitchell et al. 2010, p. 275; Ozdemir 2012; Steffgen 2007, p. 88), in the following part of the analysis, we test the differences between the male and female participants' assessments of the items used to measure school climate.

	Male/ female	**N**	**Average rank**	**Sum of ranks**	**Mann-Whitney U test**
Nature of relationships between teachers and students					
Students respect teachers.	male	251	231.52	58,110.50	
	female	175	187.66	32,840.50	
	total	426			17,440.500**
Teachers care about their students.	male	251	221.98	55,717.00	
	female	174	200.05	34,808.00	
	total	425			19,583.000
Teachers contribute to students' high self-esteem.	male	251	210.72	52,890.00	
	female	175	217.49	38,061.00	
	total	426			21,264.000
Nature of relationships among students					
Students show mutual respect.	male	252	229.93	57,942.50	
	female	174	189.70	33,008.50	
	total	426			17,783.500**
Students help each other.	male	252	230.84	58,172.50	
	female	175	189.75	33,205.50	
	total	427			17,805.500**

The students make an effort to get the best possible grades.	male	252	240.94	60,717.50	
	female	175	175.20	30,660.50	
	total	427			15,260.500**
Students invest a lot of energy.	male	252	242.50	61,110.50	
	female	174	171.50	29,840.50	
	total	426			14,615.500**
Students are caring individuals.	male	248	236.79	58,724.00	
	female	172	172.59	29,686.00	
	total	420			14,808.000**
Students have difficulties getting along with each other.	male	251	201.19	50,498.00	
	female	174	230.04	40,027.00	
	total	423			18,872.000*
Students trust each other.	male	251	223.83	56,180.50	
	female	174	197.38	34,344.50	
	total	425			19,119.500*
Extent of student autonomy in decision-making					
Students have the opportunity to suggest activities in class.	male	251	212.95	53,449.50	
	female	175	214.29	37,501.50	
	total	426			21,823.500
Students have the opportunity to participate in establishing rules.	male	250	207.73	51,933.00	
	female	173	218.17	37,743.00	
	total	423			20,558.000
Students are given the opportunity to participate in making decisions.	male	249	214.39	53,384.00	
	female	174	208.57	36,292.00	
	total	423			21,067.000
Extent of provision of clear, consistent, and fair rules by the school					
The rules are fair.	male	248	217.20	53,865.00	
	female	171	199.56	34,125.00	
	total	419			19,419.000
Sanctions for breaking the school rules are equal for everyone.	male	251	211.36	53,052.00	
	female	173	214.15	37,048.00	
	total	424			21,426.000
Everybody knows what the rules of this school are.	male	251	224.54	56,360.50	
	female	172	193.69	33,315.50	
	total	423			18,437.500**
Teachers explain to their students what is expected of them.	male	250	216.48	54,120.50	
	female	175	208.03	36,404.50	
	total	425			21,004.500

Procedures related to the application of rules are clear.	male	246	220.17	54,161.00	
	female	175	198.11	34,670.00	
	total	421			19,270.000
Everybody clearly understands which behaviour will be rewarded.	male	246	211.26	51,970.00	
	female	172	206.98	35,601.00	
	total	418			20,723.000
People are rewarded equally for equal achievements.	male	244	208.21	50,803.00	
	female	174	211.31	36,768.00	
	total	418			20,913.000
At the school, one knows what is done and when.	male	244	217.03	52,954.50	
	female	173	197.68	34,198.50	
	total	417			19,147.500
People are informed on how to earn rewards.	male	246	220.96	54,356.00	
	female	173	194.42	33,634.00	
	total	419			18,583.000*
Procedures related to the application of rules are frequently ignored.	male	247	231.14	57,091.50	
	female	174	182.41	31,739.50	
	total	421			16,514.500**

Table 6: Testing the differences between male and female students' perceptions of items measuring school climate
*NOTE: $p < 0.01$**; $p < 0.05$**

Regarding the relationships between teachers and students, the female students believe to a greater extent than the male students that students respect teachers. The male and female students exhibit a significant statistical difference in their assessments of each item measuring the relationships among students. The female students believe to a greater extent that the students respect, help, and trust each other; that they are caring; that they strive to obtain the best grades; and that they invest a great deal of energy in what they do. In comparison with the female students' more positive assessments of the relationships among students, the male students believe that students have difficulties getting along. However, there are no gender differences in the assessment of the extent of students' decision-making autonomy. Regarding the assessment of school rules, the female students consider to a greater extent than the male students that everybody knows the school rules and is informed on how to earn rewards, while the male students consider to a greater extent than the female students that the procedures related to the application of rules are frequently ignored. Compared to the male students, the female students also have a more positive image regarding the relationships between teachers and students, the relationships among students, and established school rules.

	Male/ female	N	Average rank	Sum of ranks	Mann-Whitney U test
Nature of relationships between teachers and students					
Students respect teachers.	male	32	44.41	1,421.00	
	female	58	46.10	2,674.00	
	total	90			893.000
Teachers care about their students.	male	32	45.66	1,461.00	
	female	58	45.41	2,634.00	
	total	90			923.000
Teachers contribute to students' high self-esteem.	male	32	45.80	1,465.50	
	female	57	44.55	2,539.50	
	total	89			886.500
Nature of relationships among students					
Students show mutual respect.	male	32	44.81	1,434.00	
	female	58	45.88	2,661.00	
	total	90			906.000
Students help each other.	male	32	41.56	1,330.00	
	female	58	47.67	2,765.00	
	total	90			802.000
The students make an effort to get the best possible grades.	male	32	52.63	1,684.00	
	female	58	41.57	2,411.00	
	total	90			700.000*
Students invest a lot of energy.	male	32	48.61	1,555.50	
	female	58	43.78	2,539.50	
	total	90			828.500
Students are caring individuals.	male	32	41.48	1,327.50	
	female	56	46.22	2,588.50	
	total	88			799.500
Students have difficulties getting along with each other.	male	32	50.33	1,610.50	
	female	57	42.01	2,394.50	
	total	89			741.500
Students trust each other.	male	31	41.55	1,288.00	
	female	56	45.36	2,540.00	
	total	87			729.000
Extent of student autonomy in decision-making					
Students have the opportunity to suggest activities in class.	male	32	42.11	1,347.50	
	female	57	46.62	2,657.50	
	total	89			819.500

Students have the opportunity to participate in establishing rules.	male	32	38.00	1,216.00	
	female	57	48.93	2,789.00	
	total	89			688.000*
Students are given the opportunity to participate in making decisions.	male	32	37.70	1,206.50	
	female	57	49.10	2,798.50	
	total	89			678.500*
Extent of provision of clear, consistent, and fair rules by the school					
The rules are fair.	male	31	42.23	1,309.00	
	female	52	41.87	2,177.00	
	total	83			799.000
Sanctions for breaking the school rules are equal for everyone.	male	32	37.38	1,196.00	
	female	58	49.98	2,899.00	
	total	90			668.000*
Everybody knows what the rules of this school are.	male	32	44.11	1,411.50	
	female	56	44.72	2,504.50	
	total	88			883.500
Teachers explain to their students what is expected of them.	male	32	51.14	1,636.50	
	female	58	42.39	2,458.50	
	total	90			747.500
Procedures related to the application of rules are clear.	male	32	47.28	1,513.00	
	female	58	44.52	2,582.00	
	total	90			871.000
Everybody clearly understands which behaviour will be rewarded.	male	32	46.36	1,483.50	
	female	58	45.03	2,611.50	
	total	90			900.500
People are rewarded equally for equal achievements.	male	32	41.14	1,316.50	
	female	57	47.17	2,688.50	
	total	89			788.500
At the school, one knows what is done and when.	male	32	44.06	1,410.00	
	female	56	44.75	2,506.00	
	total	88			882.500
People are informed on how to earn rewards.	male	32	43.11	1,379.50	
	female	55	44.52	2,448.50	
	total	87			851.500
Procedures related to the application of rules are frequently ignored.	male	32	41.67	1,333.50	
	female	54	44.58	2,407.50	
	total	86			805.500

Table 7: Testing the differences between male and female teachers' assessments of items measuring school climate
*NOTE: $p < 0.01$**; $p < 0.05$**

Regarding the relationships between teachers and students, male and female teachers exhibit no statistically significant differences in their assessments. With regard to the relationships among students, the female teachers believe to a greater extent than the male teachers that the students strive to obtain the best grades. However, they exhibit no statistically significant differences in other items pertaining to the relationships among students. The male teachers believe to a greater extent than the female teachers that students have the opportunity to participate in rule- and decision-making. As in the assessment of the relationships among students, gender differences were found for a single item. To be more precise, the male teachers believe to a greater extent than the female teachers that the sanctions for breaking rules are equal for everyone. It is apparent that for the most part, gender is not a relevant factor in teachers' perceptions of different aspects of school climate.

Discussion

The aforementioned study results indicate an affirmative answer for the first exploratory question: It can be concluded that there are differences between secondary-school students and teachers in Zagreb regarding their school climate perceptions for all four observed dimensions in concordance with the theoretical concept that was chosen as our baseline: (1) the nature of the relationships between teachers and students; (2) the nature of the relationships among students; (3) students' decision-making autonomy, and (4) the provision of clear, consistent, and fair school rules (Way et al. 2007, p. 195). In concordance with Kantorová (2009, p. 187), the teachers have a more positive attitude than the students towards all aspects of school climate: relationships between teachers and students, relationships among students, extent of student autonomy, and established school rules.

The answer to the second exploratory question is partially affirmative, because the results show gender-based differences in the students' perceptions of school climate. Compared to the male students, the female ones have a more positive image of the relationships between teachers and students, the relationships among students, and the established school rules. Such results are in congruence with those of previous studies (Jia et al. 2009, p. 1523; Koth et al. 2008, p. 100; La Salle et al. 2016, p. 62; Mitchell et al. 2010, p. 275). It can be assumed that the differences are in large part a result of the processes of maturation and socialization of girls and boys: It is easier for girls to adjust to any environments in comparison to their male peers (McMahon et al. 2014, p. 762). However, these issues should be addressed in schools' everyday educational activities: Additional efforts need to be made to ensure that male students feel more comfortable in school, thereby rendering them more able to achieve better academic results.

The answer to the third exploratory question is negative, as the results show no differences between the male and female teachers' assessments of the majority of school climate aspects. Taking into consideration the primarily congruent assessments by the male and female teachers, it can be assumed that for the most part, the teachers have similar experiences of working in schools, which influence

their perceptions of school climate regardless of their gender. These findings are in concordance with the research conducted on a sample of Turkish teachers, among whom no statistically significant differences were found between male and female teachers regarding their perceptions of school climate (Gunbayi 2007, p. 74). In contrast, the existence of gender differences for students implies that there might be developmental factors at work.

The nature of the relationships between students and teachers is a key motivational factor in learning and teaching processes (Cohen and Michelli 2006, p. 185; DeWitt and Slade 2014, p. 21; Garrett 2012, p. 28). It is, therefore, important to perceive the congruence in the students' and teachers' assessments of one of three items used in this paper to describe this first dimension of school climate. Our participants agree that they respect teachers, which represents a solid foundation for quality cooperation between students and teachers. However, it should be approached with a certain level of caution, because such students' attitudes might reflect their efforts to present the student population in the best possible light. Consequently, the teachers' assessments might reflect a more accurate but also incomplete image of the actual situation regarding students' respect for teachers, as teachers spend only a limited number of school periods with their students weekly, during which the latter are able to show their respect. Teachers can also assess the respect that students show towards each other, whereas it is difficult for them to do the same for their female and male colleagues.

This study has shown that students and teachers disagree both in their assessments of teachers' care about students and in their perceptions of teachers' contribution to students' high self-esteem. It is disturbing that students fail to perceive the care and contribution of their teachers, regardless of the extent of objectivity of these perceptions and what they are dictated by. Even if they are subjective perceptions, they are important, because they affect the students' trust in teachers (Espelage et al. 2013, p. 84) and their motivation for learning (Cohen and Michelli 2006, p. 185; Espelage et al. 2013, p. 80; Garrett 2012, p. 24). The possibility should be allowed that the teachers are overexerted by the comprehensive curricula for their subjects and, thus, have insufficient time space to attend to their students as individuals. Conversely, we have to be aware that students often perceive the instructions and criticisms of teachers as negative; they are considered to be malevolent, especially during students' adolescence, when they experience a certain resistance towards authorities (Blum et al. 2002, p. 7; Espelage et al. 2013, p. 82; Lokmić et al. 2013, p. 3; Way et al. 2007, p. 195).

However, regardless of the objectivity of the state and how conditioned by objective circumstances it is, we cannot accept it as a necessity; it is, however, essential to seek to rectify these problems in the future. During their education, teachers learn how to treat students attentively and how to ensure that students extract the positives from criticism (via the so-called formative evaluation) (Anderson 2013, p. 4). However, it is necessary to provide the teachers with the opportunity to apply this knowledge and skills.

It is noteworthy that according to the results of this study, the students' and teachers' assessments are mostly congruent in regard to the nature of the

relationships among students. However, attention should be paid to the fact that the teachers consider the students as caring and that they trust each other to a greater extent than the students do. It is possible that the teachers base their assessments on their limited experiences with the students because they have few opportunities to perceive mutual student relationships, while the students spend more time together and have ample opportunity to see each other in numerous different situations and periods at school. It can, therefore, be assumed that the assessments of the teachers in this case are limited not only by the significantly shorter period spent with the students but also by the fact that the students probably act differently towards each other in the presence of teachers. Taking into consideration adolescents' increased need for belonging (Blum et al. 2002, p. 5; Espelage et al. 2013, p. 6; Lokmić et al. 2013, p. 4; Way et al. 2007, p. 2), it is necessary to explore in greater detail the fact that over one third of the students perceive an absence of mutual trust among students.

The current Croatian educational system does not foresee students having greater decision-making autonomy, and the teachers' assessments of the statement regarding students' opportunities to suggest activities in class are in concordance with this. While the teachers mostly express weak agreement with the statement that students have the opportunity to suggest activities in class, the students' assessments enter the area of disagreement with regard to this statement. Both teachers and students are aware of the limitations of the current educational system, even in regard to the students' lack of autonomy to propose activities in class. However, it is possible that when conducting their own classes, individual teachers make additional efforts to enable some opportunities to motivate and support students to propose activities for at least a couple of periods per year to the extent allowed by the subject curriculum. The students' disagreement with the statement is understandable, because if given such an option, the majority would choose to have no class—that is, they would suggest going out for a cup of coffee, resting, or playing board games. To be specific, students do not consider that the selection of a book for elective reading or a lesson according to their interests represents autonomy to propose content or class activities.

For students, disagreement with the statement about whether they have the opportunity to establish rules is clear because students frequently wish to change schools' established rules and regulations, including subject curricula. Students even complain about the rules imposed on teachers and schools (e.g. the number of subjects, subject content, number of elements graded within the subject etc.). Students do not consider an opportunity to establish rules that what the teachers are allowed and frequently offer as an opportunity, and this includes establishing rules at the classroom and subject levels (rules governing class conduct, examination methods, and possibly grading). Consequently, the teachers agree that they offer their students opportunities to establish rules in governing class, examination methods and possibly grading however, these are not recognized by students as opportunities, which is why they express their disagreement with the statement.

Decisions at the school level are made by the teaching staff, headteachers, and school board. These decisions are subject to government legislation and frequently

involve financial components. In addition, the Croatian educational system foresees the establishment of parent and student councils for such student activities. A student council, therefore, has the right to only propose but not participate in making final decisions. Consequently, students express disagreement with the statement that they are given the opportunity to make decisions because they recognize the distinction between proposing and making decisions. In contrast teachers consider that they are given opportunities to propose decisions and, therefore, express their agreement with this statement. These results are in concordance with those obtained from a study on a sample of American students, suggesting that most of the students do not perceive their classrooms as promoting autonomy in the way that their teachers do (Fisher and Fraser 1983, p. 60; Hafen et al. 2012, p. 253). The developmental literature highlights the importance of students' autonomy. In particular, self-determination theory posits that autonomous environments promote increased engagement through cognitive involvement, increased effort, and decreased boredom (Ryan and Deci 2000). Moreover, achieving autonomy is one of the central markers of healthy adjustment in adolescents (Eccles et al. 1997, p. 279). One possible explanation for teachers' more positive attitude towards the school climate could be their greater control over their daily activities and the order in which they engage in their daily tasks, while students may hold less favourable views of the climate because they have less power in deciding the order in which tasks are accomplished (Mitchell et al. 2010, p. 277).

Upon observing the attitudes towards the school rules and the assessments of whether they are consistently applied or ignored and thereby having more insight into the activities of the school, it is evident that the teachers express firmer disagreement with the statement that the procedures pertaining to the application of rules are frequently ignored. Students, who have comparatively less experience with the procedures or are not completely familiar with their administrative side, express their disagreement based on what they see or experience. The more positive assessments of school rules coincide with the results of previous research (Fisher and Fraser 1983, p. 60; Kantorová 2009, p. 187; Raviv et al. 1990, p. 146) suggesting that teachers' authoritative role and desire to function optimally influence their perceptions. Moreover, teachers are possibly more aware than students of the implications of having their questionnaires reviewed by a research team and might respond in accordance with this awareness (Raviv et al. 1990, p. 153).

Although this study offers important insights into the differences between students' and teachers' perceptions of school climate, as well as those related to the genders of the participants, it has certain limitations. For the results to be generalized with greater certainty to the population of students and teachers across the Republic of Croatia, it would be advisable for future studies to include a larger number of schools in the sample. This could allow for the examination of the differences between schools based on the type of programme, number of students attending, urbanity of the location, size of the classes, and other indicators that can potentially influence the functioning of the school. The students' and teachers' responses might have been more honest if they had filled out the questionnaires online because of the greater sense of anonymity that this would have allowed.

The results of the study of the perceptions of school climate by students and teachers in secondary schools in the city of Zagreb, as well as the four analysed indicators of school climate, have practical implications for school climate improvement to optimize educational outcomes. The improvement of the relationships among students and between teachers and students contributes to the prevention of all forms of violence in the same way that the extent of student autonomy in making certain decisions and the existence of clear, consistent, and fair school rules contribute to the creation of a supportive and democratic environment in which students experience safety, support, and friendship (Glasser 2005). Organizing different workshops, programmes, and thematic assemblies in the context of extracurricular and out-of-school activities focusing on different student interests or the observation of important dates for students and their communities would contribute to improving the results for the studied indicators of school climate. In the same manner, the strengthening of pedagogic competences would make teachers aware of the importance of their role in the education of students.

Conclusion

The middle of the last century brought about a change in the systematic study of the concept of school climate (Cohen et al. 2009). The school climate transcends individual experiences and represents a totality of phenomena (Cohen et al. 2009) The school climate is also created on a daily basis (DeWitt and Slade 2014, p. 5).

Although numerous differences in the conceptualization of school climate exist, this study begins with the concept based on four dimensions: (1) the nature of relationships between students and teachers; (2) the nature of relationships among students; (3) the extent to which student autonomy is allowed in decision-making; and (4) the extent to which the school provides clear, consistent, and fair rules (Way et al. 2007, p. 195).

A non-random (convenient) sample of 451 final-year students at secondary schools was collected during the first term of the 2017–2018 school year. During the same period, 102 teachers of final-year classes at the schools participating in the study were also studied.

The results of this study, performed on the described sample of students and teachers in Zagreb, indicate that there are differences in the students' and teachers' perceptions of school climate. In concordance with previous studies the teachers assess the relationships between students and teachers, the relationships among students, the autonomy of students, and the school rules in a more positive manner than the students, thereby confirming the first hypothesis. Regarding the gender differences between students, the female participants have a more positive image of the relationships between teachers and students, the relationships among students, and the established rules, which is in concordance with previous studies and expectations. In addition, in most cases, male and female teachers do not differ in their assessments of school climate, which leads to the conclusion that gender does not play a significant role in teachers' perceptions of school climate.

The small study sample provides limited insight into the situation in Zagreb's schools; consequently, it is necessary to include a larger number of schools, students, and teachers in future research.

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KAKO UČITELJI IN DIJAKI SREDNJIH ŠOL NA HRVAŠKEM DOJEMAJO ŠOLSKO KLIMO

Povzetek: Šolska klima je razmeroma trajen dejavnik kakovosti šolskega okolja, temelji pa na skupnem dojemanju vedenja v šoli in nanjo vplivajo tako formalni kot neformalni organizacijski vidiki, osebnosti udeležencev ter način upravljanja šole. V raziskavo je bilo vključenih 451 dijakov in 102 učitelja srednjih šol v Zagrebu. Uporabili smo vprašalnik, ki je vseboval lestvico za ocenjevanje šolske klime (Niobe Way 2007) in nekaj vprašanj, s katerimi smo zbrali sociodemografske podatke respondentov. Namen raziskave je bil ugotoviti, ali obstajajo razlike med dojemanjem šolske klime pri učiteljih in dijakih, pri čemer so nas zanimale tudi razlike med spoloma. Rezultati so pokazali, da so učitelji vse štiri dimenzije šolske klime ocenjevali bolj pozitivno kot dijaki. Razlik med spoloma pri učiteljih nismo mogli dokazati, se je pa pokazalo, da dijakinje v primerjavi z dijaki bolj pozitivno ocenjujejo šolsko klimo.

Ključne besede: šolska klima, srednje šole, učitelji, dijaki, spol

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