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SUBJECTIVE AND OBJECTIVE SCHOOL ACHIEVEMENT: ROLE OF DEMOGRAPHIC FACTORS, ATTITUDE TOWARD SCHOOL, AND COPING WITH SCHOOL FAILURE

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ABSTRACT

A school is an environment in which students can receive a comprehensive evaluation of their schoolwork. In addition to the teacher's evaluation of school achievement, which is usually expressed through school grades, its subjective aspect, i.e., the student's evaluation of achievement, is also important. Some students begin to lose interest in learning and schooling in general due to school failure, especially if they do not have a positive attitude toward school. This study aimed to investigate the predictive values of attitudes toward school, coping strategies with school failure, and demographic variables, such as gender, grade, and type of school, to explain objective and subjective school achievement. The research sample consisted of 267 second, third, and fourth-grade high school students (61% females). Data were collected using questionnaires. Hierarchical regression analysis was performed to analyze the data. The results showed that grade, attitude toward school, and all three coping strategies with school failure (problem-focused, emotion-focused, and ego-focused) were predictors of students' subjective school achievement, whereas gender, grade, attitude toward school, problem-focused, and ego-focused coping strategies were singled out as predictors of objective school achievement. Students' objective and subjective school achievement and their related pedagogical implications are discussed in the context of the obtained results.

Key words:

subjective school achievement, objective school achievement, attitude toward school, coping with school failure, high school students.

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■ INTRODUCTION

The determination and investigation of school achievement are frequently based on school grades, which serve as objective indicators of a student's achievement. Understanding school achievement in modern schools is more complex than that in traditional schools (Mikas, 2012). According to Bašić and Kranželić Tavra (2004), a wider definition of school achievement is necessary, considering both external and internal perspectives. An external perspective is related to students' academic success, which is determined by their school grades. On the other hand, the internal perspective refers to the subjective assessment of academic achievement, such as an individual's internal experience of performing school duties and tasks. When it comes to school achievement, it is important to differentiate between two aspects: the formal, which pertains to teachers' assessments, and the informal, which relates to the experiences of students, their parents, peers, and other relevant individuals (Jevtić, 2014).

The importance of considering and examining subjective school success alongside objective school success stems from several points. Students spend most of the day at school and evaluate themselves based on school-related information. It is important to consider whether the information received is positive or negative because it is related to school achievement and learning outcomes (Piuk & Macuka, 2019). Achievement in school represents an important aspect of students' self-image. For some students, school failure becomes a personal affliction (Wood, 2001, as cited in Kranželić Tavra & Bašić, 2005). If students perceive themselves to be unsuccessful in their schoolwork, this can affect their self-confidence and thus their learning motivation and outcomes (Raboteg-Šarić et al., 2009). Students with low school performance usually have lower self-esteem than those with high school performance (Rijavec et al., 1999). Furthermore, school failure can result in absenteeism and, sometimes, school dropout (Jeđud & Lebedina-Manzoni, 2008).

With regard to demographic characteristics, such as gender and grade, research points to gender differences regarding school achievement in favor of female students (Babarović et al., 2009; Jokić & Ristić Dedić, 2010; Šimić Šašić et al., 2011). Furthermore, Yoo, Cho, and Cha (2014) found that female students have higher subjective school achievement than male students. The results can be explained by gender differences in persistence and engagement in favor of female students (Kenney-Benson et al., 2006; Vecchione et al., 2014). With regard to grade, certain studies have shown that there are differences in objective and subjective school achievement in favor of students in lower grades (Lončarić, 2010; Nikčević-Milković & Tatalović Vorkapić, 2020). Such results could be seen in the context of pubertal changes during adolescence. According to Gillet, Vallerand, & Lafreniere (2012), there is a decline in intrinsic and extrinsic motivation for school achievement

around the age of thirteen, followed by stagnation, and an increase in motivation after the age of sixteen.

Secondary schools differ in their curricula and the demands placed on students. However, studies that consider differences in school achievement regarding the type of secondary school program are rare. According to some research results, high school students have better school achievement and school competence than vocational school students (Grozdek et al., 2007; Lebedina-Manzoni & Lotar, 2011; Šimić Šašić et al., 2011).

With renewed interest in school effectiveness, special emphasis has been placed on the school environment and its contribution to school achievement (Marks, 1998). According to Noddings (2003), when students are happy, they learn better. Most students with poor school performance do not want to study because they do not like school, even if they want to get good grades. These students erase schools from their own world of quality (Glasser, 1990). Students' poor performance is not so much a result of their incapability but rather it depends on their attitude toward school. Students' positive reactions to school can increase their commitment to learning (Epstein & McPartland, 1976). Namely, students' motivation correlates with their classroom experiences (Pintrich et al., 1994). When students perceive the classroom as a stimulating environment where they like to be, better success in learning is encouraged and the frequency of school absenteeism is reduced (Leonard et al., 2000). Previous studies on the relationship between students' attitudes toward school and school achievement are relatively underrepresented. According to Raboteg-Šarić, Šakić, and Brajša-Žganec (2009), less negative feelings toward school are a significant predictor of higher school achievement. Bubić and Goreta (2015), however, did not find a significant connection between school achievement and satisfaction with school.

The importance of school achievement is always present during schooling. Students are exposed to stressors not only because of the requirement to learn new teaching content but also because of parents' and teachers' expectations (Lončarić, 2007). The results indicate that knowledge evaluation is a frequent or very frequent stressor for slightly more than 50% of students (De Anda et al., 2000). School success and school failure are subjective experiences that are understood differently by different students (Bilić, 2001). Not all students perceive a bad grade in the same way, and coping strategies with school failure can be divided into effective and ineffective strategies. Some students, for example, try to deny the existence of a negative grade or a grade lower than expected or forget that it has happened. Such students try not to think about it and act as if nothing has happened. In addition, they fantasize and imagine that a negative grade or a grade lower than expected has disappeared. This strategy of denial and avoidance may reduce tension in the short term; however, if a student avoids even thinking about a bad grade, it is less likely that he or she will try to improve it. Study results indicate that students with better academic performance

use problem-solving coping strategies with school failure more often, whereas emotion-focused coping strategies are used less often (Brdar & Rijavec, 1997; Brdar & Bakarčić, 2006). Such results can be explained by understanding that students who often get bad grades are more focused on reducing discomfort than on solving the problem itself. In another study, emotion-focused coping strategy was found to be a negative predictor of subjective but not objective school achievement (Nikčević-Milković & Tatalović Vorkapić, 2020).

Although older adolescents have a greater repertoire of available strategies for coping with school failure, they apply both effective and ineffective strategies more frequently (Williams & McGillicuddy-De Lisi, 2000). Compared with younger students, high school students more often hide bad grades from their parents, and they are less inclined to seek their help (Rijavec & Brdar, 1997). Due to school failure, some students begin to lose motivation and interest, not only in learning but also in school. Frequent failure is associated with a loss of confidence in one's abilities, which can lead to low self-confidence (Bilić, 2001). On the other hand, every experience of success increases the probability of new success, and the student starts to believe that he or she can succeed. In addition, early experience of success gives students a sense of self-worth and this makes it easier for them to overcome possible failures in the future (Brdar & Rijavec, 1998).

Starting with the lack of prediction research in which the distinction between objective and subjective school success was made and the ambiguity of some findings in previous research, this study examines the predictive values of attitudes toward school, coping strategies with school failure, and demographic variables such as gender, grade, and type of school to explain students' objective and subjective school achievement.

■ METHOD

Sample and Procedure

This study included 267 students, 163 (61%) of whom were female. The sample included 106 (40%) second-grade students, 90 (34%) third-grade students, and 71 (27%) fourth-grade students, with 113 (42%) attending high schools, 106 (40%) four-year vocational schools, and 48 (18%) three-year vocational schools. The research was conducted in May 2018 in six high schools in Zadar: two high schools, two four-year vocational schools, and two three-year vocational schools. The survey was conducted in schools based on the obtained informed consent of the respondents.

Table 1. Sample structure

Demographic variables	f	%
Gender		
Female	163	61
Male	104	39
Grade		
2nd grade	90	34
3rd grade	71	27
4th grade	113	42
Type of school		
High school	113	42
Four-year vocational school	106	40
Three-year vocational school	48	18

Instruments

In this study, a questionnaire was used. The first section is related to demographic data, including gender, grade, and type of high school.

Attitudes toward the School Scale consisted of six items. Since it was originally constructed in the English language, they represent a Croatian version of the School Satisfaction Scale from the Quality of School Life Questionnaire (Ainley & Bourke 1992, as cited in Leonard, 2002). Permission to translate the original instrument was obtained. For example, for the item: “My school is a place where I like to go each day”, students indicated their degree of agreement with the content of each statement on a five-point scale (1: I don’t agree at all; 2: I mostly disagree; 3: I neither agree nor disagree; 4: I mostly agree; 5: I completely agree), where a higher score indicates a more positive attitude towards the school.

The Coping with School Failure Scale refers to the different strategies that students use when they receive a negative grade or a grade worse than expected. The first scale, called Problem-Focused Coping, examines how often students think about ways to correct a bad grade or a grade that is worse than expected and how often they actively do so. It consists of two subscales: Active Problem-Solving (e.g., “I study more to get a better grade”) and Problem-Thinking (e.g., “I figure out ways to correct the grade”). Both subscales consist of four items, with a higher score indicating more effective coping with school failure. The second subscale, called Emotion-Focused Coping, examines how often students avoid thinking about a bad grade, fantasizing

and imagining that a negative grade or a grade lower than expected has disappeared, or do other things to forget a bad grade. It consists of three subscales: Avoidance (five items, e.g., “I avoid anything that reminds me of a bad grade”), Fantasizing (four items, e.g., “I wish that bad grade would just go away”), and Distraction (four items, e.g., “I do other things to forget the bad grade as soon as possible”), where a higher score indicates more frequent use of a less effective coping strategy with school failure. The last subscale, Ego-Focused Coping, examines how often a student accepts, ignores, or makes fun of a bad grade. It consists of the following subscales: Giving up and Reinterpreting (five items, e.g., “I accept a bad grade because there’s nothing else I can do”), Ignoring the Problem (four items, e.g., “I pretend that the bad grade doesn’t concern me”), and Making Fun of the Problem (four items, e.g., “I joke on account of a bad grade”). A higher score indicates more frequent use of a less effective strategy for coping with school failure. On the basis of the eponymous scale (Lončarić, 2014), a shorter version of the scale with an equal number of statements on each subscale was used. A five-point scale was used to answer the following statements (1: I never do it; 2: I mostly don’t do it; 3: I moderately do it; 4: I mostly do it; 5: I always do it).

The Subjective School Achievement Scale (five items) measures students’ subjective assessment of school achievement, i.e., the feeling of success and achievement in school work. Since it was originally constructed in the English language by Ainley & Bourke (1992, as cited in Leonard, 2002), it represents a Croatian version of the Achievement Scale from the Quality of School Life Questionnaire. The permission to translate the original instrument was obtained. Example of the item: “My school is a place where I have been successful as a student.” Students indicated their degree of agreement with the content of each statement on a five-point scale (1: I don’t agree at all; 2: I mostly disagree; 3: I neither agree nor disagree; 4: I mostly agree; 5: I completely agree), where a higher score on the scale indicates a greater subjective assessment of school achievement.

Objective school achievement was measured by the average grade in all subjects at the end of the previous school year.

Cronbach’s alpha coefficients were calculated to investigate the internal consistency of the instruments, as shown in Table 2. As a result, the reliability of almost all measures were considered to be very good, whereas reliability of one measure (Ignoring the problem) were considered acceptable since, according to Kline (1998), alpha value is greater than .70.

Table 2. Reliability of the measures used

	Cronbach alpha
Attitude toward school	0.88
CSSF 1	
Active problem-solving	0.81
Thinking about a problem	0.84
CSSF 2	
Avoidance	0.85
Fantasizing	0.86
Distraction	0.82
CSSF 3	
Giving up and reinterpreting	0.81
Ignoring the problem	0.73
Making fun of the problem	0.87
Subjective School Achievement	0.89

Note: CSSF1 (Coping strategy with school failure): Problem-focused; CSSF 2: Emotion-focused; CSSF 3: Ego-focused.

■ RESULTS

Descriptive Statistics

As shown in Table 3, the average value on the Attitude Towards School Scale is slightly lower than the central point of the assessment (3: I neither agree nor disagree), indicating that students have divided attitudes toward school. Students expressed similar assessments regarding emotion-focused and ego-focused coping strategies. More precisely, students moderately use the aforementioned (ineffective) strategies. On the other hand, students show a slightly higher assessment regarding problem-focused coping, which indicates that they use this strategy relatively often. Furthermore, it was determined that the objective school achievement expressed through a grade point average was very good. With regard to the subjective assessment of school achievement, the participants perceived themselves as moderately successful in performing school duties and tasks.

Table 3. Descriptive statistics

	M	SD
Attitude toward school	2.80	.92
CSSF 1	3.68	.83
CSSF 2	2.54	.86
CSSF 3	2.92	.74
Subjective school achievement	3.32	.96
Objective school achievement (GPA)	3.92	.73

Note: GPA stands for grade point average.

Below are the results of the t-test and ANOVA for objective and subjective school achievement, as well as the differences regarding gender, grade, type of high school, and gender differences in different types of schools.

Table 4. Results of the t-test and analysis of variance (ANOVA) for objective school achievement

Objective school achievement (GPA)							
Gender	Male		Female				
	M	SD	M	SD	t		
	3.76	.77	4.02	.69	-2.86**		
Grade	2nd grade		3rd grade		4th grade		
	M ₁	SD	M ₂	SD	M ₃	SD	F
	3.73		3.89		4.24	.75	11.40**
	M _{1<} M ₃ **	.68	M _{2<} M ₃ **	.69			
Type of school	Three-year vocational school		Four-year vocational school		High school		
	M ₁	SD	M ₂	SD	M ₃	SD	F
	3.38		4.06	.67	4.02	.73	18.30**
	M _{1<} M ₂ M ₃ **	.61					
High school	Male		Female				
	M	SD	M	SD	t		
	4.02	.76	4.01	.72	0.07		

Four-year vocational school	Male		Female		t
	M	SD	M	SD	
	3.88	.75	4.14	.63	-1.84
Three-year vocational school	Male		Female		t
	M	SD	M	SD	
	3.29	.59	3.53	.62	-1.32

Note:**p<.01

As can be seen in Table 4, female students had significantly higher school achievement than male students. Furthermore, a *post hoc* test (Scheffè) shows that fourth-grade students have significantly higher school achievement than third- and second-grade students, and those students who attend a three-year vocational school achieve lower school achievement than those at a four-year vocational school and high school students.

Table 5. Results of the t-test and analysis of variance (ANOVA) for subjective school achievement

Subjective school achievement							
Gender	Male		Female		t		
	M	SD	M	SD			
	3.36	.99	3.30	.94	.44		
Grade	2nd grade		3rd grade		4th grade		
	M	SD	M	SD	M	SD	F
	3.31	.96	3.30	.97	3.37	.97	.10
Type of school	Three-year vocational school		Four-year vocational school		High school		
	M ₁	SD	M ₂	SD	M ₃	SD	F
	3.28	1.14	3.30	.95	3.36	.89	.18
High school	Male		Female		t		
	M	SD	M	SD			

	3.41	.90	3.33	.88	.49
Four-year vocational school	Male		Female		
	M	SD	M	SD	t
	3.28	.96	3.30	.95	-.08
Three-year vocational school	Male		Female		
	M	SD	M	SD	t
	3.34	1.16	3.18	1.14	.48

With regard to subjective school achievement (Table 5), t-tests and F-ratios were not statistically significant. In other words, students equally evaluated their success in performing their school duties, regardless of gender, grade, and type of secondary school. Furthermore, there were no statistically significant differences in subjective school achievement between male and female students in different types of schools.

Table 6. Correlations between variables

	Subjective School Achievement	Objective school achievement (GPA)
Gender	-.03	.17**
Grade	.02	.28**
Type of school	.04	.12
Attitude toward school	.64**	.15*
CSSF 1	.31**	.27**
CSSF 2	-.21**	-.08
CSSF 3	-.08	-.20**

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

As shown in Table 6, there are statistically significant weak correlations between some demographic variables and objective school achievement. Higher-grade students and female students have better school achievement, as expressed by the grade point average (GPA). However, no correlation was found between demographic variables and subjective school achievement.

Students who express a more positive attitude toward school assess their subjective school achievement more favorably and have better school grades. However, there is a moderately positive correlation between the attitude toward school and the subjective school achievement, while the relationship with objective school achievement is low.

Regarding strategies for coping with school failure, there are mostly low correlations with objective and subjective school achievement. When facing school failure, students who use a problem-focused coping strategy more often and those who use an emotion-focused coping strategy less often assess their subjective school achievement more favorably. With regard to objective school success, as in the previous case, students who use a problem-solving coping strategy more often and those who use ego-focused coping strategies less often when facing school failure have better school grades.

Regression Analysis

Hierarchical regression analysis first introduced demographic variables (gender, grade, and type of secondary school), followed by attitudes toward school and strategies for coping with school failure. Thus, it was possible to determine the separate contributions of individual groups of predictors in explaining the variability of students' subjective and objective school achievement (Table 7).

Table 7. Hierarchical regression analysis: prediction of subjective and objective school achievement

Predictor variables	Subjective school achievement	Objective school achievement (GPA)
1 st step	β	β
Gender	-.03	.16**
Grade	.02	.26**
Type of school	.04	.08
ΔR^2	.05	.33
R^2	.002	.11
Adjustment R^2	-.01	.10
$F(3,263)$	.22	10.84
2 nd step	β	β
Gender	.03	.18**

Grade	.07	.28**
Type of school	.03	.08
Attitude toward school	.65**	.19**
ΔR^2	.64	.38
R^2	.41	.14
Adjustment R^2	.40	.13
$F(4,262)$	46.07	11.04
3 rd step	β	β
Gender	.01	.16**
Grade	.10**	.31**
Type of school	-.01	.05
Attitude toward school	.63**	.20**
CSSF 1	.30**	.22**
CSSF 2	-.26**	-.11
CSSF 3	-.09**	-.22**
ΔR^2	.75	.51
R^2	.56	.26
Adjustment R^2	.54	.24
$F(7,259)$	46.42	13.20

Note. ** $p < .01$

In the first step of the hierarchical regression analysis with subjective school achievement as a criterion, a single demographic variable was not found to be significant. By introducing the student's attitude toward school as a predictor in the second step, the percentage of explained variance of the criteria increased significantly (by 40%), although the previously mentioned demographic predictors did not prove to be significant in this step either. More precisely, students' attitudes toward school proved to be a significant positive predictor, which means that students who express a more positive attitude toward school also perceive themselves as more successful in completing school tasks and obligations. Attitude toward school also proved to be a significant positive predictor in the third (last) step of the hierarchical analysis, where grade also proved to be a positive predictor. In other words, students who express a more positive attitude toward school and those who attend higher grades evaluate their achievement in performing school tasks and obligations more favorably. All

three coping strategies with school failure were significant predictors of subjective school success, two of which were negative. More precisely, more frequent use of a strategy aimed at solving problems when receiving a bad grade or a grade that is lower than expected is a significant positive predictor of subjective school success, whereas other strategies related to more frequent use of emotion-focused and ego-focused coping strategies represent significant negative predictors of subjective school success. This group of predictors explained 54% of the variance in the criteria.

In the first step of the hierarchical regression analysis with objective school achievement as a criterion, two of the three demographic variables, gender and grade, were shown to be significant predictors, and 10% of the variance of the criteria was explained. More precisely, older students and female students had higher grade point averages. By introducing attitude toward school as a predictor in the second step of the hierarchical regression analysis, the percentage of explained variance of the criteria increased significantly by 3%. Attitude toward school was shown to be a positive predictor, indicating that students who expressed a more positive attitude toward school had higher grade point averages. Previously significant predictors, namely gender and grade, were shown to be statistically significant positive predictors in this step. Gender and grade were also significant positive predictors in the third (last) step of the hierarchical analysis. Two of the three strategies for coping with school failure were significant predictors of objective school achievement. More precisely, more frequent use of a problem-solving strategy when receiving a bad grade or a grade lower than expected was shown to be a positive predictor of objective school achievement, in contrast to the ego-focused coping strategy as its negative predictor. The introduction of a group of predictors related to coping strategies with school failure significantly contributed to the percentage of explained variance of objective school achievement by an additional 11%. In total, 24% of the variance of this criterion can be explained by the set of predictor variables.

■ DISCUSSION

School achievement has a comprehensive meaning that includes objective and subjective dimensions. In this study, school achievement was examined on the basis of objective school achievement, i.e., grade point average at the end of the previous grade, and subjective assessment of academic achievement, i.e., internal experience of one's achievement in schoolwork. This study examined the predictive values of students' attitudes toward school, coping strategies with school failure, and demographic variables (gender, grade, and type of school) in explaining their subjective and objective school achievement. The results of hierarchical regression analysis indicate that subjective school achievement is contributed to by a more positive attitude toward school, more frequent use of problem-oriented strategies,

less frequent use of emotion-focused and ego-focused coping strategies when dealing with school failure, and a higher grade. This group of predictors explained 54% of the variance in the criteria. Higher grades, female gender, more frequent use of problem-oriented strategies, a more positive attitude toward school, and less use of ego-focused coping strategies with school failure contribute to objective school achievement. This group of predictors explained a smaller proportion of the variance (24%) of this criterion compared to subjective school achievement.

Considering the contribution of gender in this research, it was identified as the weakest predictor of an objective measure of school achievement. However, compared with male students, female students have better objective school achievement, as expressed through the grade point average. These results are consistent with those of previous research (Babarović et al., 2009; Jokić & Ristić Dedić, 2010; Šimić Šašić et al., 2011). Such results can be explained by research findings that indicate that female students are more engaged in class (Vecchione et al., 2014) and more persistent (Kenney-Benson et al., 2006).

In this research, it was determined that students in higher grades have better objective and subjective school achievement. More precisely, grade was identified as the strongest predictor of objective school achievement. Although some research has determined that younger students achieve better subjective and objective school achievement (Lončarić, 2010; Nikčević-Milković & Tatalović Vorkapić, 2020), the findings of this research can be attributed to a greater orientation of students at higher grades towards better school grades, since it is a key criterion for continuation of education. Their greater interest in school achievement should be seen from the perspective of the requirements of higher education institutions and the labor market, since secondary school students will continue their studies or, through employment, will bear the economic development of a certain country (Matijević, 2002). Previous research found that secondary school students predominantly determine school success through grades and that school success is primarily important to them because of their future and employment (Vrcelj et al., 2017). Furthermore, it was found that intrinsic motivation for learning generally decreases with age, while focusing on performance increases (Raboteg-Šarić et al., 2009).

The results of the regression analysis with subjective school achievement as a criterion variable show that a student's positive attitude towards school is its strongest predictor. A student's positive attitude towards school also proved to be a statistically significant predictor of an objective measure of school achievement. However, its contribution to the abovementioned criterion is much smaller than its contribution to the subjective measure of school achievement. Similar results were obtained in another study conducted on a sample of upper elementary school students (Raboteg-Šarić et al., 2009). The above can be understood starting from the understanding that school achievement is related to the attitude toward school in those societies where school achievement is highly valued (Suldo & Huebner,

2006). Previous research found that students achieve better success in learning if the school represents a stimulating environment where students are happy and feel safe (Raboteg-Šarić et al., 2009). Furthermore, it was found that school satisfaction is related to students' self-confidence, self-efficiency, and engagement (Huebner & McCullough, 2000; Karatzias et al., 2002; Elmore & Huebner, 2010; Vidić, 2021). According to Ladd, Buhs, and Seid (2000), students who like school respond better to the teacher's demands and more easily accept school obligations and classroom rules of behavior.

With regard to strategies for coping with school failure, the problem-focused strategy has been shown to be a predictor of both objective and subjective school achievement. More precisely, its contribution to subjective school achievement is somewhat larger compared to its contribution to the objective measure of school achievement. Therefore, students who focus more often on solving problems when receiving a bad grade or a grade that is lower than expected have higher grade point average and assess their subjective school achievement more positively. In a study conducted by Nikčević-Milković and Tatalović Vorkapić (2020), a statistically significant contribution of the frequency of using problem-focused coping strategy with school failure to objective and subjective school achievement was not found. The obtained results are conditionally comparable, given that subjective school achievement was examined through school satisfaction. In another study it was found that students with better academic achievement use the problem-solving coping strategy more often (Brdar & Rijavec, 1997). The obtained results were explained by understanding that more successful students have better grades because they know how to overcome stressful situations. Furthermore, it can be assumed that students with better school achievement will ignore a bad grade less often and try to improve it as soon as possible. With awareness of the importance of a good grade for the continuation of their education, it can be assumed that students with better school achievement have better work habits that allow them to focus on the problem itself more easily. Unlike students who report that they have no control over the source of stress and therefore focus more on emotions, students who report that they have control will more likely focus on problem-solving (Brdar & Bakarčić, 2006). Furthermore, it was determined that the emotion-focused coping strategy is also a statistically significant negative predictor of subjective school achievement. Namely, students who perceive themselves as less successful in performing their school duties and obligations use the distancing strategy more often to protect their emotions when receiving a negative grade or a grade that is lower than expected. Students with poor school performance more often apply strategies for coping with school failure that focus on emotions because it is important for them to reduce discomfort (Brdar & Bakarčić, 2006; Brdar & Rijavec, 1997). In other words, students who often get bad grades are more focused on reducing discomfort than on solving the problem itself. On the other hand, the frequency of using an emotion-focused

coping strategy did not prove to be a statistically significant predictor of objective school achievement. Similar findings were confirmed in another study in which it was found that the emotion-focused coping strategy with school failure is a negative predictor of subjective but not objective measure of school achievement (Nikčević-Milković & Tatalović Vorkapić, 2020).

Ego-focused coping strategies are negative predictors of both objective and subjective school achievement. More precisely, its contribution to objective school achievement is somewhat larger compared to its contribution to the subjective measure of school achievement. Namely, students who use this strategy more often when receiving a bad grade or a grade that is lower than expected have higher grade point average and assess their subjective school achievement more positively. In a study conducted by Nikčević-Milković and Tatalović Vorkapić (2020), there was no confirmation of the contribution of the abovementioned strategy to either objective or subjective measures of school achievement.

Since objective and subjective school achievements are different indicators of school success, it is not surprising that their predictors differ to a certain extent, as do their strengths. For example, a higher grade, a more positive attitude toward school, more frequent use of problem-solving strategies, and less frequent use of ego-focused coping strategies with school failure were joint predictors of better subjective and objective school achievement. The fact that a higher grade is a better (and, at the same time, the strongest) predictor of objective school achievement can be explained by greater pressure and expectations for obtaining higher grades, which are important for continuing education. On the other hand, a more positive attitude toward school proved to be a better (and, at the same time, the strongest) predictor of subjective school achievement. Such findings can be understood by research results that indicate that school satisfaction is related to students' self-confidence, self-efficiency, and engagement (Huebner & McCullough, 2000; Karatzias et al., 2002; Elmore & Huebner, 2010; Vidić, 2021), which can be related to their perception of themselves in terms of success in completing school tasks and obligations. Ego-focused coping strategies proved to be a slightly better negative predictor of objective school achievement, whereas problem-focused coping strategies proved to be a better positive predictor of subjective school achievement. Such results can be understood by the fact that grades are not an objective enough measure of school achievement. Namely, teachers' differences in criteria for evaluating school achievement and related inconsistency may confuse students.

Furthermore, the frequency of use of emotion-focused coping strategies is a significant negative predictor of subjective school achievement but not objective school achievement. Such results, consistent with the findings of research conducted by Nikčević-Milković & Tatalović Vorkapić (2020), indicate that students who are more focused on reducing discomfort when receiving bad grades have less confidence in their abilities regarding performing school duties and tasks.

The fact that female gender is a predictor of objective school success is consistent with the findings of research that systematically points to gender differences regarding school achievement in favor of girls (Babarović et al., 2009; Jokić & Ristić Dedić, 2010; Šimić Šašić et al., 2011).

■ CONCLUSION

This study provides new empirical information on the predictive values of attitudes toward school, coping strategies with school failure, and demographic variables such as gender, grade, and type of school in explaining the objective and subjective school achievement.

The results of hierarchical regression analysis showed that gender, grade, attitude toward school, problem-focused, and ego-focused coping strategies were singled out as predictors of objective school achievement, whereas grade, attitude toward school, and all three coping strategies with school failure (problem-focused, emotion-focused, and ego-focused) were predictors of students' subjective school achievement.

One of the pedagogical implications of the findings refers to students who react differently to a bad grade or a grade that is worse than expected, and some students who tend to use ineffective strategies, such as ignoring and avoiding the problem, making fun of it, directing attention to other things or giving up. In this sense, it is necessary to determine on a timely basis which strategies for coping with school failure are mostly used by students, where the school and teachers play a significant role and should provide adequate support accordingly. Teachers should direct such students to actively think about the problem and teach them how to use effective coping strategies to solve problems. It is of great importance to show students that by thinking about the problem (i.e., how they can solve it) and by actively solving it, they can overcome it and thus expect better school success (both objective and subjective). Teachers should praise and set high expectations for all students, not only in terms of getting a high school grade but also in terms of the effort made to correct a bad grade by using effective coping strategies with school failure, i.e., strategies that are aimed at solving problems. Teachers should act in such a way as to let students know that a problem at school, such as getting a bad grade, cannot be solved by walking away, but only by thinking about ways to solve it and by actively solving it, which implies investing effort, commitment, and cooperation. In this sense, teachers should motivate students to learn through activities that will, in an interesting way, encourage students' roles in actively thinking about problems and the most effective ways to solve them through different forms of collaborative learning, so that they understand that helping each other is the way to solve problems. Teachers should support students in setting realistic expectations

and goals, assign tasks appropriate to their abilities, and point out the connection between their effort and success. In that sense, teachers and other professionals could improve communication with students and the atmosphere in a school context, and thus improve students' subjective school achievement and attitude toward school. According to Milošević and Šimonji-Černak (2019), a motivational climate should be created that emphasizes personal advancement, effort, learning, and mastering skills, as well as the perception of mistakes as an immanent part of the learning process. Teachers should encourage students to strengthen their self-confidence and sense of self-efficacy in this process. Attitude toward school also plays an important role in the formation of one's self-image as a successful or unsuccessful student, which undoubtedly has important pedagogical implications for the academic, social, and emotional functioning of students. In daily educational work with students and cooperation with parents, teachers and pedagogues can find out how students of different age groups (grades) feel at school, how they perceive it, and how they deal with school failure to work on changes that can increase their satisfaction with school and strengthen positive strategies for coping with school failure to improve objective and subjective school achievement.

One of the limitations of this study is the somewhat larger number of female students compared to male students, the uneven number of students of different grades, and the relatively small sample of respondents. Furthermore, since this study relies on self-assessment measures, socially desirable responses may be an issue. Future research should include assessments by parents, teachers and pedagogues. In addition, it is suggested that the assessment of objective school achievement be based on the average grades in individual subjects. In light of other findings in this area, other variables that correlate with school achievement can be included in the research, such as socio-economic status, parental support, educational aspirations, school engagement, self-regulation strategies for learning, and help-seeking intentions (Babarović et al., 2009; Karababa, 2022; Kuterovac Jagodić et al., 2013; Nikčević-Milković, & Tatalović Vorkapić, 2020; Raboteg-Šarić et al., 2009; Sotardi et al., 2021; Šimić Šašić et al., 2011).

This research can help teachers, professional associates, and parents who play a significant role in identifying areas in which students are successful and enabling them to realize their full potential.

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