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# PROSOCIAL AND ANTISOCIAL STUDENTS' BEHAVIOUR IN THE CONTEXT OF SCHOOL SAFETY<sup>12</sup>

Prosocial behaviour is recognised as a factor that contributes to adolescent socialisation, psychosocial adjustment, and development. This research examined the prosocial and antisocial students' behaviour in relation to school safety. A sample of 719 students from the 2nd to 4th grades of high school completed a self-report questionnaire (476 girls, 219 boys; Mage = 16.64). The research was conducted in person during the first semester of 2021 at nine high schools in the territory of the Republic of Serbia. The questionnaire items were chosen in cooperation with a team of psychologists and pedagogues from selected high schools. The measures included the Prosocial Behaviour Scale, which includes the factors Prosocial behaviour ( $\alpha$ =.96) and Antisocial behaviour ( $\alpha$ =.89); and the School Safety Scale, which includes the factors Violent behaviour ( $\alpha$ =.92); Unsafe school environments ( $\alpha$ =.90); Victimization ( $\alpha$ =.89); and Violation of norms  $(\alpha = .86)$ . Discriminant analysis established the existence of differences between groups of prosocial and antisocial students in the space defined by school safety variables. Differences between groups of prosocial students were determined in relation to violent behaviour (.766), unsafe school environment (.657) and victimisation (-.480). Differences between groups of antisocial students were determined in relation to violent behaviour (.975), victimisation (-.239), unsafe school environment (.155) and violation of norms (.144). The absence of violent

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behaviour, victimisation and a higher degree of safety in the school environment characterises schools with a higher prevalence of prosocial student behaviour than antisocial. Therefore, promoting positive behaviour patterns in the school environment is important.

Key words: prosocial behavior; school safety; antisocial behavior; students; Republic of Serbia

# 1. INTRODUCTION

Prosocial behaviour is a factor that plays a significant role in the socialisation, psychosocial adjustment and development of children and adolescents (Eisenberg, Spinrad & Knafo-Noam 2015). In contrast to antisocial behaviour, prosocial behaviour is associated with physical and psychosocial well-being, school adjustment and academic success, less peer rejection, and fewer behavioural problems (Caprara et al. 2000; Layous et al. 2012; Vecchio et al. 2023). Namely, children who are not rated as prosocial are less socially adjusted and exposed to peer rejection or neglect (Crick 1996). Prosocial tendencies in peer relations represent a protective factor for children who are antisocial or aggressive, regard rejection by peers and a tendency toward criminal behaviour (Kokko et al. 2006; Luo, Ma & Deng 2023). The views of researchers regarding the connection between prosocial and antisocial behaviour are divided, so these two forms of social behaviour are viewed as separate dimensions that are not significantly correlated or as two different forms of behaviour that are correlated (positive or negative) (Hay et al. 2021). Research on prosocial behaviour and its mechanisms of influence becomes especially important during adolescence. Therefore, at this age, peer relationships in general, especially prosocial peers, can significantly impact school adaptation and academic success and can be a protective factor in relation to the prevalence of problematic behaviour (Coleman & Byrd 2003). Finally, Guao (2017) noted that fostering students' prosocial behaviour is related not only to the formation of social responsibility and moral behaviour but also to the development, progress, harmony and stability of society (Luo, Ma & Deng 2023).

In addition, this paper presents the results of research on prosocial and antisocial behaviour in the context of school safety in a sample of students from nine high schools in the Republic of Serbia, focusing on differences between groups of prosocial and antisocial students in relation to selected school safety variables.

# 2. THEORETICAL CONSIDERATIONS

Prosocial behaviour refers to those categories of actions that are determined to be generally beneficial to other people by some significant segments of society and/or one's social group (Penner et al. 2005). In other words, prosocial behaviours, such as sharing, helping, and caring, are defined as voluntary actions that are beneficial to others and society (Eisenberg, Fabes & Spinrad 2006). Most often, such behaviours involve the costs of helping, and they frequently occur without obligation or coercion to such behaviour (Tadić 2024). Numerous factors impact prosocial behaviour, among which the importance of social, individual, cognitive and situational factors is especially highlighted (Moore, Woodcock & Kielblock 2023). Social and situational factors include time pressure, role models, social norms and others (Wang & Saudino 2015), while in the domain of personal factors, empathy and moral reasoning are recognised as significant predictors of prosocial behaviour (Hoffman 2000). Interpersonal interactions influence the frequency of prosocial behaviour, so trust is recognised as an important component that can encourage prosocial behaviour among students (Guao 2017). Some authors (Kato-Shimizu et al. 2013) point out that positive peer relations can predict prosocial behaviour. Early peer acceptance plays an important role in adolescent prosocial behaviour (Kato-Shimizu et al. 2013; Luo, Ma Deng 2023). Prosocial behaviour is thus associated not only with peers' acceptance but also with better academic success, better subjective well-being, and a lower prevalence of externalised behavioural problems (Vecchio et al. 2023). In other words, most studies indicate that prosocial behaviour is an important factor that can protect against the development of aggressive or antisocial behaviour in adolescence (Caprara et al. 2000).

In contrast to prosocial behaviour, antisocial behaviour refers to forms of negative behaviour that can be subsumed or equated with the term relational violence or victimisation. In this regard, we are talking about forms of behaviour such as teasing, mocking, ignoring, hitting or insulting others. Prosocial and antisocial behaviour are viewed in the literature in different ways (Hay et al. 2021: 19): as opposite ends of one dimension, as two separate dimensions that are negatively correlated, as separate dimensions that are not significantly correlated; or as two forms of social behaviour that are entirely different from each other, but still positively correlated (Hay et al. 2021). Which of the above patterns of connection will be found in the research will depend on the period of life in which these phenomena are examined (early childhood or late adolescence), the definitions used, the context of the study and other charac-

teristics of the research design of the study (Hay et al. 2021). For example, a negative correlation between prosocial and aggressive behaviour was found in a sample of students in elementary school, i.e., in the middle childhood period (Strayer & Roberts 2004), while in younger children, prosocial behaviour was positively related to aggressive behaviour (Garner & Dunsmore 2011). However, prosocial and antisocial behaviour have rarely been examined in the same sample, and the studies conducted thus far on associations between these phenomena provide only limited evidence (Hay et al. 2021).

The protective role of prosocial behaviour in relation to the forms mentioned above of antisocial or aggressive behaviour becomes particularly significant in the school context and in relation to the issue of school safety. School safety is conceptualised as a multidimensional construct that includes issues of (in)security of the school environment, violence, victimisation and violation of norms in schools (Tadić 2023). In relation to these forms of behaviour, school safety refers to those actors (students) who are perpetrators or victims of violence and victimisation, feelings of insecurity, antisocial behaviour and normative expectations, i.e. the system of respecting the rules established by the school (Tadić 2023). In other words, school safety implies that a school is safe where the educational process takes place in a physical and psychosocial environment free from threats to the psychophysical well-being of students. This means that teachers can teach, students learn, and other participants work in an environment free from physical and psychosocial threats, such as intimidation, violence, ridicule, and humiliation (Tadić 2024).

Starting from the importance of prosocial behaviour and the scope and content of the safety concept in school, the relationship between these phenomena can best be shown by relying on the bioecological theory of human development (Tadić 2024). This model provides a comprehensive overview of the issue of peer violence and victimisation and provides insight into the influence of intra/interpersonal protective and risk factors. The school that the child attends represents a microsystem, and the factors of the school system interact with the child and have an impact on their development (Bronfenbrenner 1979, for a review Bojčić & Vidaković Mandić 2022). The important factors are peer relationships, relationships between students and teachers, positive attitudes toward school, clear rules of conduct, consistent negative reinforcement of violence, and school success (Jolliffe et al. 2016; Lösel & Farrington 2012). The same variable can represent both a protective factor and a risk factor, depending on the sign (Bojčić & Vidaković Mandić 2022). In relation to these factors, the focus of this work is on peer relations because most studies have shown that encouraging prosocial be-

haviour at school helps students adjust, while protecting them from the negative consequences of aggression, including peer rejection and antisocial behaviour (Caprara et al. 2000). Furthermore, research shows that prosocial interactions allow children to build self-esteem, gain emotional support, and develop social skills in terms of empathy, conflict resolution, etc. (Eisenberg, Fabes & Spinard 2006; Hodges et al. 1999).

Although the positive and negative aspects of peer relationships have been widely studied (Griese 2011), most research continues to focus on the negative impacts of antisocial or aggressive behaviour and their effects on development (Bagwell & Bukowski 2018). One area, peer victimisation, is often examined in light of the negative consequences it can cause in a child's developmental process (Griese 2011). Peer victimisation (Griese 2011) defined as repeated negative actions toward a child by their peers (Crick & Grotpeter 1996), is associated with increased short- and longterm adjustment problems (Buhs, Ladd & Herald 2006). For example, relational victimisation is defined as behaviours that harm a child's social relationships and feelings of acceptance, friendship, or group inclusion through the use of social exclusion mechanisms (e.g., gossiping, rumour-mongering, and social exclusion (Crick & Grotpeter 1995; Zimmer-Gembeck, Gieger & Crick 2005). Research has established an association between relational victimization and poor psychosocial adjustment, including loneliness and reduced self-esteem (Prinstein, Boergers & Wernberg 2001); poor peer relationships and rejection by peers (Zimmer-Gembeck, Gieger & Crick 2005); and depression, anxiety and aggression (Kochenderfer-Ladd 2001).

An important issue in relation to prosocial behaviour research is the age of the participants. Specifically, a small number of studies examined prosocial behaviour during adolescence, while a much larger number of studies have focused on early childhood (Tadić 2024). For instance, adolescence is marked by the transition to high school and a change in the nature of peer relationships (El Mallah 2019). For some children, the transition to high school is difficult, resulting in a decline in self-confidence, self-concept, and school performance (Eccles, Wigfield & Schiefele 1998, for a review Zimmer-Gembeck, Gieger & Crick 2005). In the adolescent period, the nature of peer relationships changes, so peer relationships at this age can become a protective or risk factor in relation to the representation of problematic and/or prosocial behaviour (Tadić 2024). In relation to this thesis, appeals to expand the study of peer interaction by emphasising that positive or prosocial behaviour and mechanisms of influence during the transition to adolescence seem justified (Karmakar 2017; Zimmer-Gembeck, Gieger & Crick 2005).

# 3. METHOD

The main objective of the research was to examine the prosocial and antisocial students' behaviour in relation to school safety. The study was conducted in person during the first semester of 2021/2022 in selected high schools in the territory of the Republic of Serbia using questionnaires constructed in cooperation with the Center for Applied Psychology of the Serbian Psychologists' Society, i.e. with professional associates of the Section of Psychologists of Professional Associates of High Schools. The questionnaire items were chosen based on initial definitions of prosocial behaviour (Eisenberg, Fabes & Spinrad 2006) and school safety (Tadić 2022) by selecting indicators and instruments that measure them. More precisely, the expert team, which consisted of professional associates, psychologists and pedagogues from high schools included in the sample, reviewed the questionnaire, removed certain items and reformulated others so that they would be understandable to high school students (Tadić 2024). The expert team members conducted the research with a questionnaire both for the sake of familiarity with the students and for the easier adjustment of time and place due to special measures taken during the COVID-19 pandemic.

# 3.1. Data analysis

The data were processed using multivariate statistics. By analysing the main components according to Zorić-Opačić's (1997) analytical operationalization of Cattell's scree criterion, a decision was made on the number of important factors for each of the variables individually. First-order factors were singled out, on which further analyses were performed. Based on the Prosocial Behaviour Scale (Tadić 2023), 2 factors were extracted that explained a total of 33.882% of the variance (Prosocial behaviour = 26.412% of the variance; Antisocial behaviour = 7.470% of the variance). Based on the School Safety Scale (Tadić 2023), 4 factors were identified that explained 45.539% of the variance (Violent behaviour = 9.513% of the variance; Unsafe school environment = 7.786% of the variance; Victimization = 4.300% of the variance; Violation of norms = 3.941% of the variance). Discriminant analysis was used to examine the differences between groups of prosocial and antisocial students in relation to selected school safety variables. A *p-value*<0.01 was considered statistically significant. All statistical analyses were performed via IBM SPSS Statistics 20.0 (IBM SPSS Statistics for Windows, Version 20.0).

# 3.2. Sample

The total sample consisted of 719 students from the second to fourth grades of high school (of which 476 were girls and 219 were boys; the average age of the respondents was M<sub>age</sub> = 16.64). The sample includes nine high schools in the territory of the Republic of Serbia. The sample is uniform according to grade: II (33.9%), III (34.3%), and IV (31.8%). The average grade for almost half of the sample is very good (47.7%), followed by excellent (28.1%), good (22.6%), and slightly sufficient (1.6%).

#### 3.3. Measures

The **Prosocial Behaviour Scale** (Tadić 2023) contains 75 items with answers on a five-point Likert scale measuring prosocial and antisocial behaviour dimensions. Examples of items for the prosocial behaviour dimension are (Tadić 2023): *If someone is upset, I help that person calm down; I offer help to students who have a problem with an assignment; I share with my peers (food, drinks, pencils, etc.); <i>If I see someone being mistreated, I stand by that person.* Examples of items for antisocial behaviour are: *I provoke people I do not like; I hit others when they make me angry; I ignore my schoolmates when they tell me to stop doing something*; and *I get my schoolmates to do my way when we do a team task.* The reliability measured by Cronbach's  $\alpha$  coefficient is very high for both dimensions: prosocial behaviour ( $\alpha$ =.96) and antisocial behaviour ( $\alpha$ =.89).

The **School Safety Scale** (Tadić 2023) contains 81 items answered on a five-point Likert scale and measures four dimensions of school safety: violent behaviour, unsafe school environment, victimisation, and violation of norms. Examples of items for the given dimensions individually are (Tadić 2023): violent behaviour (*During the previous school year I hit, pulled or pushed someone harder*; *During the previous school year I made fun of or made rude jokes at the expense of another*); an unsafe school environment (*I was threatened with a knife at school*; *I do not feel safe in this school*); victimisation (*During the previous school year, someone urged others not to hang out with me*; *During the previous school year, someone yelled at me*); and violation of norms (*At school, I saw that other students were insulted, teased and ridiculed*; *At school, students ran away from classes*). The reliability measured by the Cronbach's  $\alpha$  coefficient is very high for all dimensions: violent behaviour ( $\alpha$ =.92), unsafe school environment ( $\alpha$ =.91), victimization ( $\alpha$ =.89), and violation of norms ( $\alpha$ =.86).

# 4. RESULTS

Using discriminant analysis, we examined which of the selected school safety variables significantly differentiate groups of prosocial and antisocial students. In relation to prosocial behaviour, a statistically significant discrimination function was obtained ( $\lambda$ = .135, Wilks' Lambda .874,  $\chi^2$  = 95.520, p <.000) whose canonical correlation is .345. Table 1 shows the mean values of school safety variables according to groups of prosocial and antisocial students. The largest number of students enters the groups of highly prosocial and low antisocial students, in which the function of violent behaviour is the least pronounced, followed by Unsafe school environment and Victimization. Table 2 shows the matrix of tests of equality of arithmetic means of the groups of prosocial students at each independent variable.

Table 1. Mean values of school safety variables

	N	Violent behaviour	Unsafe school environment	Victimisation	Violation of norms
groups of students					
low prosocial	16	1.94	2.12	1.98	2.76
medium prosocial	102	1.55	1.65	1.66	2.88
highly prosocial	596	1.21	1.32	1.46	2.62
low antisocial	576	1.16	1.29	1.40	1.58
medium antisocial	106	1.68	1.75	1.83	1.99
highly antisocial	32	1.97	1.84	2.07	3.10

**Table 2.** Tests of Equality of Group Means (prosocial students)

variables	Wilks' Lambda	F	р
Violent behaviour	.910	35.333	.000
Unsafe school environment	.916	32.578	.000
Victimisation	.984	5.906	.003
Violation of norms	.988	4.265	.014

By reviewing the standardised coefficients for the first function and the coefficients of the structure of this function, we can see that the variables Violent behaviour and Unsafe school environment make the most significant specific contribution to defining the first function (Table 3). The first discriminating function can be presented as a relationship between prosocial behaviour and school safety, characterised by low

violent behaviour, safe assessment of the school environment, and high prosocial behaviour among students. Victimisation plays a weak role in defining this function, and Violation of norms did not prove significant.

**Table 3.** Canonical Discriminant Function Coefficients and Structure Matrix

variables	Discrim. coefficients	Structure of function
Violent behaviour	.766	.857*
Unsafe school environment	.657	.822*
Victimisation	480	.349*
Violation of norms	116	.248

Examining the centroids of the groups on the first function (group 1: 1.64; group 2: .62; group 3: -.15), we see that this function very well differentiates the first group (low prosocial students) from the remaining two groups, but poorly differentiates group 2 (medium prosocial students) and group 3 (highly prosocial students) (Table 4).

**Table 4.** Functions at Group Centroids

groups	1
1	1.642
2	.622
3	151

In relation to antisocial students, a statistically significant discrimination function was obtained by discrimination analysis ( $\lambda$ = .274, Wilks' Lambda .781,  $\chi^2$  = 175.387, p< .000), whose canonical correlation is .463. Table 5 shows the matrix of tests of equality of arithmetic means of the groups of antisocial students at each independent variable.

**Table 5.** Tests of Equality Group Means (antisocial students)

variables	Wilks' Lambda	F	р
Violent behaviour	.793	92.559	.000
Unsafe school environment	.877	49.780	.000
Victimisation	.934	24.949	.000
Violation of norms	.955	16.808	.000

By reviewing the standardised coefficients for the first function and the coefficients of the structure of this function, we can see that the variables Violent behaviour, Unsafe school environment, Victimization and Violation of norms make the most significant specific contribution to defining the first function (Table 6). The first discriminating function can be presented as a relationship between antisocial behaviour and school safety, which is characterised by highly violent behaviour, assessment of the school environment as unsafe, violation of norms, and victimisation, and the above is accompanied by highly expressed antisocial behaviour among students.

 Table 6. Canonical Discriminant Function Coefficients and Structure Matrix

variables	Discrim. coefficients	Structure of function
Violent behaviour	.975	.975*
Unsafe school environment	.155	.710*
Victimisation	239	.506*
Violation of norms	.144	.414*

Examining the centroids of the groups on the first function (group 1: -.25; group 2: .90; group 3: 1.50), we see that this function very well differentiates the first group (low antisocial students) from the remaining two groups, but poorly differentiates group 2 (medium antisocial students) and group 3 (highly antisocial students) (Table 7).

**Table 7.** Functions at Group Centroids

groups	1
1	250
2	.905
3	1.497

# 5. DISCUSSION

Using discriminant analysis to examine differences between groups of prosocial and antisocial students in relation to school safety variables, it was determined that all dimensions of school safety explained antisocial behaviour. In contrast, prosocial behaviour was described only by some dimensions of school safety, namely violent behaviour and an unsafe school environment. Violation of norms was not found to

be significant, and victimisation plays a weak role in explaining prosocial behaviour. This means that the presence of antisocial behaviour among students, in the sense of provocation, ridicule, ignoring, and insulting, can explain the presence of violent behaviour (physical, verbal and relational), victimisation and violation of norms, and, therefore, the perception of the school environment as unsafe (Tadić 2023). Conversely, the presence of prosocial behaviour among students (e.g., respect for others, providing help and support when needed) is accompanied by the absence of violent behaviour and the perception that the school environment is safe.

If we were to start from the thesis about the social adaptation of students in the explanation of the obtained findings, we could assume that those students who are not adapted and accepted and who do not have a positive orientation in interaction with peers and school show a greater tendency toward negative behaviour patterns (Tadić 2024). Previous research has shown that students' social adaptation, acceptance and positive interactions influence a lower prevalence of behavioural problems and better achievement (Dryfoos 1990). This thesis is supported by the pedagogical model of social competence. In this model, social competencies are classified in the area of social relations and pedagogical interaction, which refer to the child's ability to initiate and maintain a relationship with peers, while the basic determinants of peer relations and friendship are social knowledge and understanding, skills, dispositions and regulation emotion (Katz & McClellan 2005, for a review Radovanović 2022). In this context, some authors point out that social competencies are the most significant indicator and outcome of prosocial behaviour (Jurčević-Lozančić 2016, for a review Radovanović 2022). Numerous other studies have shown that prosocial behaviour is associated with adequate social competence in relation to peers, that is, adequate interaction skills and conflict resolution, as well as an increased level of empathy and emotional regulation (Eisenberg, Fabes & Spinard 2006). Furthermore, research has shown that prosocial interactions allow children to build self-esteem and gain emotional support (Hodges et al. 1999). Contrary to these findings, children with lower emotional regulation skills and coping abilities have been found to have greater levels of internalising problems (Langrock et al. 2002, for a review Griese 2011).

Prosocial behaviour and prosocial support from peers have been recognised as protective factors against the negative effects of victimisation (Martin & Huebner 2007). This explains the findings of our research in which we observe a weak and negative association between prosocial behaviour and victimisation. Victimisation is present in students who have pronounced antisocial behaviour, but it is also present in the rest of the student population. Victimised students are more focused on them-

selves and potential danger, but they can deal with others. Therefore, they are less focused on prosocial behaviour and consequently have worse peer relationships (Tadić 2024). These findings may be related to the connection between loneliness and victimisation (Kochenderfer-Ladd & Wardrop 2001). Namely, loneliness appears as a response to victimisation and rejection by peers, and as victimised children withdraw from their peers either due to fear or mistrust, their loneliness or vulnerability begins to grow (Griese 2011). On the other hand, studies show that the effect of peer victimisation on loneliness can be moderated by prosocial peer support (Griese 2001).

Additionally, concerning the absence of prosocial behaviour among students who are prone to victimisation or who have been victimised, Dinić and colleagues (2014) confirmed the connection between aggressiveness and victimisation. They characterise the obtained result as expected, emphasising that among the victimised students a group of bully victims can be distinguished (Dinić et al. 2014). The authors (Jansen-Campbell et al. 2002, for a review Dinić et al. 2014) explain the greater tendency of victims of violence toward aggressive forms of behaviour data that victims have a greater tendency to assess certain provocative and unpredictable situations as threatening, reacting to them with aggression as a way of defence (Tadić 2023). Other research shows no differences in prosocial behaviour in peer relationships between aggressive and nonaggressive adolescents (Crick & Grotpeter 1995).

The abovementioned findings regarding the parallel representation of prosocial and antisocial behaviour and the impact on school safety align with similar results of other authors (e.g. Hay 2009). Other research shows that prosocial and antisocial behaviour are still separate phenomena (McGinley & Carlo 2006). Overall, we can conclude that prosocial behaviour plays a significant role in creating a safe school environment and that weak safety in school is accompanied by a lack of prosocial behaviour among students and significantly pronounced antisocial behaviour, as well as the opposite (Tadić 2024).

#### 6. CONCLUSION

Humans are social beings who use symbols, primarily language, to communicate. Therefore, human behaviour is always connected to the human environment. After the family, which is the basic environment for development, educational institutions carry out the upbringing and education of students to prepare individuals for life in society as a whole. An individual's behaviour always reflects on others, either positively or negatively. Acceptable behaviour aimed at the welfare of others is designated

as prosocial behaviour, while unacceptable behaviour that harms others is antisocial behaviour. It logically follows that prosocial behaviour is desirable for school safety, while antisocial behaviour is not. This is precisely what the research presented in this paper addresses. According to the research results, the direction towards which the function defining - discriminative coefficients is going shows that all variables of school safety, except for the violation of norms by prosocial students, make a difference between the groups. Schools with a higher prevalence of prosocial behaviour of students than antisocial behaviour are characterised by the absence of violent behaviour, victimisation, and a higher degree of safety in the school environment. The importance of this research is that it focuses on positive patterns of behaviour as a counterweight to those forms of school work focused on suppressing negative patterns of behaviour. This is to emphasise the importance of promoting the prosocial behaviour of students (and school staff), which creates an environment that fosters a school climate with resilience and a self-protective function in relation to negative forms of behaviour such as antisocial behaviour.

# REFERENCES

- 1. Bagwell, Catherine, William Bukowski (2018), "Friendship in childhood and adolescence: Features, effects and processes", In: W. M. Bukowski, B. Laursen, & K. H. Rubin (eds.), *Handbook of peer interactions, relationships, and groups*, 2nd ed., Guilford Press, 371-390.
- 2. Bojčić, Karlo, Vidaković Mandić, Sanela (2022), "Peer violence and student perception of school climate", *Školski vjesnik: Časopis za pedagogijsku teoriju i praksu*, 71(1), 84-98.
- 3. Buhs, Eric, Gary Ladd, Sarah Herald (2006), "Peer exclusion and victimization: Processes that mediate the relation between peer group rejection and children's classroom engagement and achievement?", *Journal of Educational Psychology*, 98, 1-13.
- 3. "Caprara, Gian Vittorio, Claudio Barbaranelli, Concetta Pastorelli, Albert Bandura, Phillip Zimbardo, (2000), "Prosocial foundations of children's academic achievement", *Psychological Science*, 11(4), 302-306.
- 4. Coleman, Priscilla, Caroline Byrd (2003), "Interpersonal correlates of peer victimization in young adolescents", *ournal of Youth and Adolescence*, 32(4), 301-314.

- 5. Crick, Nicki, Jennifer Grotpeter (1996), "Children's treatment by peers: Victims of relational and overt aggression", *Development and Psychopathology*, 8, 367-380.
- 6. Crick, Nicki, Jennifer Grotpeter (1995), "Relational aggression, gender, and social-psychological" adjustment, *Child Development*, 66(3), 710-722.
- 7. Dinić, Bojana, Valentina Sokolovska, Ilija Milovanović, Milan Oljača (2014), "Oblici i činioci školskog nasilništva i viktimizacije", *Zbornik Instituta za pedagoška istraživanja*, 46(2), 399-424.
- 8. Eisenberg, Nancy, Richard Fabes, Tracy Spinrad (2006), "Prosocial Development", In: N. Eisenberg, W. Damon, R. M. Lerner (eds.), *Handbook of child psychology: Social, emotional, and personality development*, 6th ed, John Wiley & Sons, Inc., 646–718.
- 9. Eisenberg, Nancy, Tracy Spinrad, Ariel Knafo-Noam (2015), "Prosocial development", In: M. E. Lamb, & R. M. Lerner (eds.), *Handbook of child psychology and developmental science: Socioemotional processes*, 7<sup>th</sup> ed., John Wiley & Sons, Inc., 610-656.
- 10. El Mallah, Shereen (2019), "Conceptualization and Measurement of Adolescent Prosocial Behaviour: Looking Back and Moving Forward", *Journal of Research on Adolescence*, 30(S1), 15-38.
- 11. Furlong, Michael, Jennifer Greif, Michael Bates, Angela Whipple, Terese Jimenez (2005), "Development of the California School Climate and Safety Survey-short form", *Psychology in the Schools*, 42(2), 137-149.
- 12. Garner, Pamela, Julie Dunsmore (2011), "Temperament and maternal discourse about internal states as predictors of toddler empathy and aggression-related behaviour", *Journal of Early Childhood Research*, 9(1), 81-99.
- 13. Griese, Emily (2011), *Prosocial Behaviour as a Protective Factor for Children's Peer Victimization*, Public Access Theses and Dissertations from the College of Education and Human Sciences, University of Nebraska
- 14. Guao, Yuan (2017), "The influence of social support on the prosocial behaviour of college students: The mediating effect based on interpersonal trust", *Engl. Lang. Teach.*, 10, 158-163.
- 15. Hay, Dale (2009), "The roots and branches of human altruism", *British Journal of Psychology*, 100(3), 473-479.
- 16. Hay, Dale, Amy Paine, Oliver Perra, Kaye Cook, Salim Hashmi, Charlotte Robinson, Victoria Kairis, Rhiannon Slade (2021), "Prosocial and aggressive behaviour: A longitudinal study", *Monographs of the Society for Research in*

- *Child Development*, 86(2), 7-103.
- 17. Hodges, Ernest, Michael Boivin, Frank Vitaro, William Michael Bukowski (1999), "The power of friendship: Protection against an escalating cycle of peer victimisation", *Developmental Psychology*, 35, 94-101.
- 18. Hoffman, Martin (2000), *Empathy and moral development: Implications for caring and justice*, Cambridge University Press, UK
- 19. Jolliffe, Darrick, David Farrington, Rolf Loeber, Dustin Pardini (2016), "Protective factors for violence: Results from the Pittsburgh Youth Study", *Journal of Criminal Justice*, 45, 32–40.
- 20. Karmakar, Rita (2017), "The impact of perception of consistency and inconsistency in parenting style on pro-social motives of adolescents", *Soc. Psychol. Soc.* 8, 101-115.
- 21. Kato-Shimizu, Mayuko, Kenji Onishi, Tedehiro Kanazawa, Toshihiko Hinobayashi (2013), "Preschool children's behavioural tendency toward social indirect reciprocity", *PLoS ONE*, 8:e70915.
- 22. Kochenderfer-Ladd, Backy (2001), "Variations in peer victimization: Relations to children's maladjustment", In: J. Juvonen, S. Graham (eds.) *Peer harassment in school: The plight of the vulnerable and victimized*, The Guildford Press, 25-48.
- 23. Kochenderfer-Ladd, Backy, James Wardrop (2001), "Chronicity and instability of children's peer victimization experiences as predictors of loneliness and social satisfaction trajectories", *Child Development*, 72, 134-151.
- 24. Kokko, Katja, Richard Tremblay, Eric Lacourse, Daniel, Nagin, Frank Vitaro (2006), "Trajectories of Prosocial Behaviour and Physical Aggression in Middle Childhood: Links to Adolescent School Dropout and Physical Violence", *Journal of Research on Adolescence*, 16(3), 403-428.
- 25. Layous, Kristin, Katherine Nelson, Eva Oberle, Kimberly Schonert-Reichl, Sonja Lyubomirsky (2012), "Kindness counts: Prompting prosocial behaviour in preadolescents boosts peer acceptance and well-being", *PLoS One*, 7.
- 26. Lösel, Friedrich, David Farrington (2012), "Direct Protective and Buffering Protective Factors in the Development of Youth Violence", *American Journal of Preventive Medicine*, 43(2), 8-23.
- 27. Luo, Yun, Tangsheng Ma, Yuting Deng (2023), School climateand adolescents' prosocial behaviour: themediating role of perceived social support and resilience", *Front. Psychol.*, 14, 1095566.

- 28. Martin, Kellie, Scott Huebner (2007), "Peer victimization and prosocial experiences and emotional well-being of middle school students", *Psychology in the Schools*, 44(2), 199-208.
- 29. McGinley, Meredith, Gustav Carlo (2006), "Two Sides of the Same Coin? The Relations between Prosocial and Physically Aggressive Behaviours", *Journal of Youth and Adolescence*, 36(3), 337-349.
- Moore, Brian, Stuart Woodcock, Stephan Kielblock (2023), "How students' pro-social behaviour relates to their resilience: Implications for an inclusive environment", *International Journal of Educational Research Open*, 5, 100269.
- 31. Prinstein, Mitchell, Julie Boergers, Eric Vernberge (2001), "Overt and relational aggression in adolescents: Social-psychological adjustment of aggressors and victims", *Journal of Clinical Child Psychology*, 30(4), 479-491.
- 32. Strayer, Janet, William Roberts (2004), "Empathy and observed anger and aggression in five-year-olds", *Social Development*, 13, 1-13.
- 33. Tadić, Violeta (2022), "O pristupima definisanju i operacionalizaciji pojma bezbednosti u školi", *Nastava i vaspitanje*, 71(2), 249-266.
- 34. Tadić, Violeta (2023), School climate and prosocial behaviour as security factors in secondary schools (doctoral dissertation), Faculty of Security Studies, Belgrade
- 35. Tadić, Violeta (2024), *Učeničko ponašanje i bezbednost u školi*, Institut za kriminološka i sociološka istraživanja, Beograd
- 36. Vecchio, Giovanni Maria, Federica Zava, Elena Cattelino, Antonio Zuffianò, Susanna Pallini (2023), "Children's prosocial and aggressive behaviours: The role of emotion regulation and sympathy", *Journal of Applied Developmental Psychology*, 89, 101598.
- 37. Wang, Manjie, Kimberley Saudino, (2015), "Positive affect: phenotypic and etiologic associations with prosocial behaviours and internalizing problems in toddlers", *Frontiers in Psychology*, 6(416), 1-10.
- 38. Zorić, Aleksandar, Goran Opačić (1997), "A new criterion for determination of the number of important principal components of standardized image variables", Rad izložen na *X Kongres psihologa Jugoslavije*, Savez društava psihologa Jugoslavije
- 39. Zimmer-Gembeck, Melanie, Tracey Geiger, Nancy Crick (2005), "Relational and Physical Aggression, Prosocial Behaviour, and Peer Relations Gender Moderation and Bidirectional Associations", *Journal of Early Adolescence*, 25(4), 421-452.

# PROSOCIJALNO I ASOCIJALNO PONAŠANJE UČENIKA U KONTEKSTU BEZBEDNOSTI U ŠKOLI

#### Sažetak:

Prosocijalno ponašanje je prepoznato kao faktor koji doprinosi socijalizaciji adolescenata, psihosocijalnom prilagođavanju i razvoju. Ovo istraživanje je ispitivalo prosocijalno i asocijalno ponašanje učenika u kontekstu bezbednosti u školi. Ukupan uzorak činilo je 719 učenika od II do IV razreda srednje škole (476 devojčica, 219 dečaka; M = 16,64). Istraživanje je sprovedeno tokom prvog polugodišta školske 2021/22. godine u devet srednjih škola na teritoriji Republike Srbije. Stavke upitnika izabrane su u saradnji sa timom koji su činili psiholozi i pedagozi iz odabranih srednjih škola. Mere su uključivale Skalu prosocijalnog ponašanja, koja uključuje faktore Prosocijalno ponašanje (α=.96) i Antisocijalno ponašanje (α=.89); i Skalu školske bezbednosti koja uključuje sledeće faktore: Nasilno ponašanje  $(\alpha=.92)$ , Nebezbedna školska sredina  $(\alpha=.90)$ , Viktimizacija  $(\alpha=.89)$ , i Kršenje normi  $(\alpha=.86)$ . Diskriminacionom analizom utvrđeno je postojanje razlika među grupama prosocijalnih i asocijalnih učenika u prostoru koji je definisan varijablama bezbednosti u školi. Razlike između grupa prosocijalnih učenika utvrđene su u odnosu na nasilno ponašanje (.766), nebezbednu školsku sredinu (.657) i viktimizaciju (-.480). Razlike između grupa asocijalnih učenika utvrđene su u odnosu na nasilno ponašanje (.975), viktimizaciju (-.239), nebezbednu školsku sredinu (.155) i kršenje normi (.144). Škole sa većom prevalencijom prosocijalnog ponašanja učenika od asocijalnog karakteriše odsustvo nasilnog ponašanja, viktimizacije i veći stepen bezbednosti u školskom okruženju i stoga je važno fokus staviti na promovisanje pozitivnih obrazaca ponašanja u školskom okruženju.

**Ključne reči:** prosocijalno ponašanje; bezbednost u školi; antisocijalno ponašanje; učenici; Republika Srbija

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