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## Roma in Higher Education— Psychological and Social Capital as Factors of Academic Success<sup>4</sup>

**Abstract:** Given that Roma students are underrepresented in higher education, and that few studies investigated personal and social resources of young Roma adults, our aim was to explore the psychological and social capital of Roma attending college and determine if there are differences compared to non-Roma students. In total, 89 Roma and 105 non-Roma college students filled in the questionnaire. Significant differences between the two groups were obtained for all components of psychological capital, except for self-efficacy. Roma students' family financial and educational status was significantly more unfavorable than that of the non-Roma students. They received support from fewer persons to pursue higher education but have been more civically engaged and received more support from NGO representatives. We can conclude that, despite unfavorable family structure capital, Roma college students have developed a high level of psychological capital. Practical implications are further elaborated.

**Keywords:** psychological capital; social capital; academic success; Roma students; higher education

### Introduction

Although the Europe 2020 strategy promotes social inclusion, in particular through the reduction of poverty, we are currently witnessing that 22.4% of

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adults living in EU are at a risk of poverty and social exclusion (Eurostat, 2019). These figures are even more unfavorable for Serbia, where 25.5% of adults are at such a risk (Government of the Republic of Serbia, 2018), meaning that more than a fourth of adults in Serbia is excluded or is not able to fully participate in society. One of the ways for them to overcome the problem of poverty is through education and vocational training. In this paper we will focus on the Roma national minority, as one of the most vulnerable social groups in Serbia, and specifically on the factors that might contribute towards their greater participation in higher education.

According to the 2011 Census data there were 147,604 ethnic Roma registered in Serbia, composing 2.1% of the total population on the territory of Serbia excluding Kosovo and Metohija. However, some other resources estimate that the number of Roma people living in Serbia ranges from about 250,000 to 600,000 (e.g. Jakšić & Bašić, 2005; Popović & Stanković, 2013). Most of them are facing social exclusion and poverty and are exposed to some form of open or covert discrimination (United Nations, 2014). Many strategic documents, laws and measures were established in Serbia aimed at improving the education, employability and overall status of Roma people, such as The Strategy of Social Inclusion of Roma for the Period from 2016 to 2025 (Government of the Republic of Serbia, 2014), The Strategy for Prevention and Protection against Discrimination (Government of the Republic of Serbia, 2013), The Strategy for the Development of Education in Serbia 2020 (Government of the Republic of Serbia, 2012), measures of affirmative action for admission of Roma students in colleges and obtaining scholarships and loans, etc. However, the representation of Roma at all levels of education is still low. Research shows that only 64% of Roma children complete primary school<sup>5</sup> (compared to 93% in the general population), and that only 22% Roma children continue to secondary school (89% in the general population). Not only that dropout rates for Roma children are higher than for the non-Roma children, but they receive lower quality education, usually in segregated environments and even in “special” schools (Statistical Office of the Republic of Serbia & UNICEF, 2014). Data show that about one percent of people from Roma communities manage to get into college, compared to 42% in the general population<sup>6</sup>. As the Strategy of Social Inclusion of Roma for the Period from 2016 to 2025 suggests, some of the reasons for such a state of affairs are an inadequate process of informing potential beneficiaries about affirmative

<sup>5</sup> Primary education lasting for eight years is mandatory by law and free for all families; however, there are many “hidden” costs, such as textbooks, school material, clothes, meals and transportation, which mostly affect families with disadvantaged backgrounds, including Roma families.

<sup>6</sup> According to the data of the Tempus project Equal Access for All: strengthening the social dimension for a stronger European Higher Education Area, available in Serbian at: <http://www.equied.ni.ac.rs/>

measures, the lack of adequate measures and additional support for Roma in secondary schools, lack of preparation for enrolment in colleges, as well as the absence of highly educated professionals in the Roma community. One of the problems is the lack of exact data on the number of enrolled high school and college Roma students and their academic achievements, as their education was not officially monitored. There is even less data about their psychological well-being during studies, challenges they face and means they use to overcome those challenges. Therefore, the issues of Roma students' psychological and social resources, known as psychological and social capital, will be addressed in this paper.

### Psychological capital and academic success

According to the Conservation of Resources Theory, for a person to be successful in life and to preserve a high level of well-being, it is necessary to accumulate resources in the biological, cognitive, and social domains, so called "resource caravan" (Hobfoll, 1989, 2011; Hobfoll, Halbesleben, Neveu & Westman, 2018). An example of such personal resources is the Psychological Capital construct. Psychological Capital (hereinafter *PsyCap*) is defined as an individual's positive psychological state of development characterized by efficacy, optimism, hope, and resilience (Luthans, Youssef-Morgan & Avolio, 2015). Efficacy, or more precisely *self-efficacy*, refers to having enough confidence to accept and invest the necessary effort to succeed in a challenging task. *Optimism* refers to the expectancy of positive outcomes, while *hope* refers to persevering on realistically set goals and, when necessary, redirecting paths toward goals in order to succeed. Finally, *resilience* relates to holding on and bouncing back in order to achieve success when facing problems (Avolio & Youssef-Morgan, 2017; Luthans, Youssef & Avolio, 2007).

Although *PsyCap* has been studied primarily in adult employees within the context of occupational health psychology (Avey, Luthans, Smith & Palmer, 2010), many researchers explored its potential in other contexts and found that individuals who showed high levels of personal resources are more likely to show positive outcomes in both the private and professional sphere (Oriol-Granado, Mendoza-Lira, Covarrubias-Apablaza & Molina-Lopez, 2017; Ouweneel, Le Blanc & Schaufeli, 2011; Salanova, Llorens & Schaufeli, 2011). Research showed a positive relationship between *PsyCap* and academic adjustment in different cultural contexts (Liao & Liu, 2016; Luthans, Luthans & Jensen, 2012; Carmona-Halty, Salanova, Llorens & Schaufeli, 2019), although its relationship with GPA remained questionable (Liran & Miller, 2019).

There have been considerably fewer studies that investigated the psychological resources of youth from a vulnerable groups (such as minorities or immigrants). In a research with Hispanic students in the US urban school environments it was found that faith in their own cognitive skills was one of the main characteristics of resilient students (Gordon, 1996). A study with indigenous and non-indigenous Australian secondary school students showed that students' reactions to school, measured through frequency of challenging behavior that led to suspension, are stronger predictors of school dropout than socioeconomic status, suggesting that psychological characteristics might be more relevant than structural family capital in predicting school success (Boon, 2008). In the Serbian context, studies showed that Roma students tend to have more belief in self and higher levels of optimism than non-Roma students, as well as a more noticeable internal locus of control, which, on one hand, motivates them to pursue further education, but on the other hand, prevents them from realizing how the system fails in providing various social groups with equal opportunities (Vranješević, Simić & Stančić, 2019; Bhabha et al., 2017).

### Social capital and academic success

Compared to PsyCap, the concept of social capital has been a subject of scientific studies and sociological debates for a longer period. The first mentioning of social capital can be traced back to John Dewey (Farr, 2004), while Pierre Bourdieu (Bourdieu, 1986) in Europe and James Coleman in the USA (Coleman, 1988, 1990) have been the most prominent authors who explored this construct. Bourdieu defined social capital as: "the aggregate of the actual or potential resources which are linked to . . . membership in a group—which provides each of its members with the backing of the collectivity-owned capital" (1986, p. 249). According to Coleman, it refers to instrumental, productive relationships or networks that provide access to opportunity or lead to advantageous outcomes (Coleman, 1988; Stanton-Salazar, 1997). Further studies showed that one can differentiate between formal, structural aspects of the social capital (i.e. family socioeconomic status) and subjective (i.e. relationships between actors) aspects of social capital (Teachman, Paasch & Carver, 1996). Putnam (2000) introduced a distinction between *bonding* and *bridging* social capital, with the first one referring to relationships with close friends or family, and the latter one referring to relationships with acquaintances, and being of particular importance for a future career, as stated by Granovetter (1983). Coleman proposed two types of social capital as well—within the family and outside the family. When discussing fam-

ily social capital, Coleman proposed its five main components: family structure, quality of parent-child relations, adult's interest in the child, parents' monitoring of the child's activities and obligations of trust and reciprocity and established norms and values in relationships (Ferguson, 2006). Social capital outside the family entails the cultural norms and the value system of the community, as well as the density and quality of networks of friends and acquaintances.

Although there is no consensus as to a precise definition of social capital in educational and academic context, most major theorists agree that social networks, including family ties and peer relationships, are of fundamental importance to the creation and maintenance of this resource (Field, 2003). Therefore, most studies explored the effects of structural family characteristics and the quality of relationships within family and with friends on academic outcomes and well-being in school. As for the structural and relational aspects of family social capital, studies showed that family socioeconomic status is a good predictor of the risk of dropping out (e.g. Smith, Beaulieu & Israel, 1992) and probability of students' graduation and entering a post-secondary education (Kim & Schneider, 2005; Sandefur, Meier & Hernandez, 1999). Similarly, positive parents-children interactions, parental monitoring of children's activities and parental involvement predict better achievement and higher levels of psychological adjustment across different grade levels and ethnic groups (Ferguson, 2006; Virtanen, Ervasti, Oksanen, Kivimaki & Vahtera, 2013). Israel, Beaulieu, and Hartless (2001) showed that social capital (both family and community) influenced high school students' educational achievement. Research on peer social capital revealed that pre-college and college resources gained through participation in extracurricular activities, such as clubs and organizations, are one of the most powerful predictors of academic achievement (e.g., Warburton, Bugarin, & Nunez, 2001; Pascarella, Pierson, Wolniak, & Terenzini, 2004). However, there are studies that found only limited support for the benefits of social capital on achievement and that suggested that effects of social capital vary by the type of outcome examined (McNeal, 1999; Muller & Ellison, 2001). There are even studies that reported negative associations between different types of social capital and educational outcomes (McNeal, 2001; Morgan & Sorensen, 1999). Moreover, most of the social capital research has neglected racial and ethnic minorities, and those which included these characteristics in their analyses showed that we can expect different relationship between social capital and academic achievement in different racial and ethnical groups (Kao & Rutherford, 2007; Sun, 1999).

Concerning specifically research on social capital among vulnerable groups' members, such as minorities or immigrants, it was found that educational support received from parents was the single most important factor affecting high academic goals and achievements of low-income Mexican adolescents in USA

(Gándara, 1982), but that the support from teachers and other adults play a role, as well (Bernard, 1995). In a more recent study with undocumented Latino students, it was determined that extracurricular participation and volunteering (bridging social capital) have a protective role, as well (Perez, Espinoza, Ramos, Coronado & Cortes, 2009).

### Research goals

Given that the number of studies addressing psychological and social capital among socially vulnerable groups, such as ethnic minorities, has remained scarce, in this research our goal was to explore both the psychological and social capital of Roma college students and their relationship with academic success. Knowing that only one percent of Roma pursues higher education, in this research we have defined academic success as being a college student, regardless of study year or GPA.

As studies that explored psychological and social capital among individuals from socially vulnerable groups yielded inconsistent results, pointing to either similar or different tendencies than in the general population, an additional goal was to compare Roma college students with students from the general population and determine if there are differences in psychological and social capital between these two groups. Better understanding of psychological and social capital as potential protective or risk factors for young Roma people could help us define recommendations for practitioners and policy makers that would result in greater involvement of Roma youth in secondary and tertiary education and consequently their better social inclusion.

### Methodology

#### *Participants and procedure*

The sample for this research was convenient and it consisted of 89 Roma college students (56.2% female) and 105 college students from the general population (70.5% female). At the time of the research they were studying mostly social sciences and humanities (45.36%), followed by medical sciences (38.14%) and technology and technical sciences (9.27%) at one of the four state universities in Serbia (Belgrade, Niš, Novi Sad and Kragujevac). Their mean age was 22.43 (ranging from 18 to 34) and the highest percentage of them (29.9%) attended the fourth year, followed by the second (21.6%) and the third (18.6%) (see Table 1).

**Table 1.** Breakdown of Roma and non-Roma participants by gender and study year

| <i>Study year</i> | <b>Roma students</b> |               | <b>General population students</b> |               | <i>Total</i> |
|-------------------|----------------------|---------------|------------------------------------|---------------|--------------|
|                   | <i>Male</i>          | <i>Female</i> | <i>Male</i>                        | <i>Female</i> |              |
| 1 <sup>st</sup>   | 9                    | 12            | 2                                  | 6             | 29           |
| 2 <sup>nd</sup>   | 12                   | 7             | 6                                  | 17            | 42           |
| 3 <sup>rd</sup>   | 8                    | 6             | 2                                  | 20            | 36           |
| 4 <sup>th</sup>   | 4                    | 11            | 17                                 | 26            | 58           |
| Prolonged         | 3                    | 4             | 4                                  | 5             | 16           |
| Masters           | 3                    | 10            | /                                  | /             | 13           |
| <i>Total</i>      | 39                   | 50            | 31                                 | 74            | 194          |

Roma students were approached within the project “Romani Champions”, aimed at exploring the success factors of young Roma adults. An additional aim was to empower selected students for the role of a researcher and more active participant in pro-social initiatives and awareness-raising activities. Therefore, four Roma social sciences students were trained for the role of a researcher by the authors of this paper and were encouraged to reach out to as many as possible Roma students from their universities using their personal contacts and Roma student organizations. At the same time, the authors collected data for non-Roma students, using the online questionnaires distributed through social media, with no control over the study disciplines or study years. Both groups of students were informed about the research aims and accepted to participate on voluntary basis.

### *Variables and instruments*

In the research within the Project a complex questionnaire comprised of several thematic sections was applied, but for this paper we will focus only on those variables and items/scales that relate to psychological and social capital.

The independent variables consisted of several predictors. The first set included four elements of *PsyCap*. As a measure of *efficacy*, a three-item, 4-point Likert type subscale of The Social Emotional Health Module—Middle & High School Questionnaire (Furlong, You, Renshaw, Smith & O’Malley, 2013) named Self-Efficacy, was applied. For the construct of *optimism*, we applied a three-item, 4-point Likert type subscale of the same instrument (Furlong et al., 2013), named Optimism. In one study conducted in the Serbian context this scale demonstrated acceptable internal consistency with Cronbach alpha being 0.69 (Vranješević et al., 2019). Given the aims of this research, we decided to focus

on *academic resilience*, defined as the ability to persevere despite challenges in the academic context and therefore, we applied the Academic Resilience Scale (ARS, seven-point Likert-like scale, Martin & Marsh, 2006). In a study done in the Serbian context this scale proved to have excellent internal consistency with Cronbach alpha reaching 0.91 (Vranješević et al., 2019). Since we did not have a comprehensive measure of hope, entailing agency (goal-directed energy), pathways (planning to accomplish goals) and emotions related to accomplishing one's goals, as postulated by Snyder's theory (Snyder, 1995; Snyder, 2002), we opted for the *emotional aspect of hope* only. Therefore, we used one item of the Personal Wellbeing Index (International Wellbeing Group, 2013) on which students assessed the level of satisfaction with personal chances for the future on a ten-point Likert type scale. For all variables mean values have been calculated for each participant, so the higher values implied higher levels of self-efficacy, optimism, academic resilience and hope.

The second set included several elements of *social capital*. As measures of bonding social capital, we used the quality of relationships with mother/female guardian and father/male guardian, as well as measures of what Coleman called *family structure*: parents' (or guardians') educational status and family financial status. Participants were asked to rate the *quality of their relationship with both mother and father* on a five-point Likert type item. *Parents' educational status* was assessed through six categories (from "Did not finish primary school" to "Graduated from college"); however due to low frequencies of certain categories, for the further statistical analyses we merged these six categories into three ("Finished primary school or less", "Completed either three- or four-year secondary school" and "Graduated from either junior college or college"). The family (of origin) *financial status* was assessed through six categories (from "We don't have enough money, even for food" to "We can afford most of the things we want"); however, for further statistical analyses we had to merge two lowest categories into one, so we operated with five categories. For the bridging social capital, we focused on distant social networks gained through potential *engagement in pro-social initiatives*. Participants answered the question "Have you been civically engaged?" with yes or no. Finally, we asked the students about the social support, specifically, *encouragement and support to enroll in college*. Participants ticked all the persons who supported them go to university (mother, father, sibling, peer, teacher, local community representative, etc.). The score for the social support was calculated by adding all the check marks, so one could get a total score ranging from 0 (support from no one) to 13 (support obtained from all the listed persons).



### *Statistical analyses*

In order to get a clear picture about the psychological and social capital of Roma college students, descriptive statistical analyses were performed and relations between variables determined using SPSS 24.0. Descriptive statistics will be presented for both groups of students, although it will be only discussed for the Roma students, given that their psychological and social “profiles” are of particular interest for this paper. For Roma and non-Roma students to be compared, we applied either parametric (t-test) or non-parametric (Chi-square) tests. Finally, binary logistic regression with Forward LR method was performed in order to check if we can predict the belongingness to a student category/group by knowing the values for certain psychological and social capital components. The group (Roma or non-Roma) was set as a dependent variable, while variables relating to psychological and social capital were predictors (with civic engagement being set as categorical covariates).

Reliability analysis was performed, and for the Self-efficacy scale Cronbach alpha was .662, for the Optimism scale  $\alpha=.839$ , while for the ARS  $\alpha=.913$ , indicating satisfactory internal consistencies of the scales. For the single-item scales it was not feasible to calculate the internal consistencies, however, research suggest they can be equally reliable and valid as the multi-item scales (e.g. Leisen Pollack & Alexandrov, 2013; Yohannes, Dodd, Morris & Webb, 2011).

## **Results**

### *“Profiles” of Roma college students*

Descriptive statistics performed with a group of Roma college students showed that they perceive themselves as very efficacious in working out their problems and achieving what they want. On average they are very optimistic, have high level of hope and academic resilience (see Table 2).

**Table 2.** Descriptive statistics for the elements of PsyCap in Roma and non-Roma students

|                     | Roma         |          |           | Non-Roma     |          |           |
|---------------------|--------------|----------|-----------|--------------|----------|-----------|
|                     | <i>Range</i> | <i>M</i> | <i>SD</i> | <i>Range</i> | <i>M</i> | <i>SD</i> |
| Self-efficacy       | 2.33–4.00    | 3.27     | 0.41      | 2.00–4.00    | 3.30     | 0.46      |
| Optimism            | 1.67–4.00    | 3.42     | 0.58      | 1.00–4.00    | 3.18     | 0.67      |
| Academic resilience | 1.33–7.00    | 5.31     | 1.31      | 1.33–7.00    | 4.78     | 1.33      |
| Hope                | 1–10         | 7.89     | 2.25      | 1–10         | 7.13     | 2.26      |

As for the components of social capital, it was determined that 51.1% of Roma college students' mothers and 63.4% fathers completed secondary school, while 6.8% of mothers and 14.6% of fathers completed college. Financial status of 16.9% of them was extremely low, while 15.7% reported they could afford most of the things they want (see Table 3). Relationships with parents were positively assessed, particularly with mothers. More than a half of them have been civically engaged. When it comes to the decision to enroll in college, they received social support to do so from four to five persons on average (see Table 3).

**Table 3.** Descriptive statistics for the components of social capital in Roma and non-Roma students

|   | Roma<br><i>Percent</i> | Non-Roma<br><i>Percent</i> |
|---|------------------------|----------------------------|
| Mother's educational level  |                        |                            |
| Primary school or less  | 42.1                   | 4.8                        |
| Three- or four-year secondary school  | 51.1                   | 53.3                       |
| Junior college or college   | 6.8                    | 41.9                       |
| Father's educational level  |                        |                            |
| Primary school or less  | 22.0                   | 5.8                        |
| Three- or four-year secondary school  | 63.4                   | 55.3                       |
| Junior college or college   | 14.6                   | 38.8                       |
| Family's financial status   |                        |                            |
| Barely have enough money for food, but not for regular utility costs (heating, electricity)                               | 16.9                   | 2.9                        |
| Have enough money for food and regular utility costs, but buying clothes and shoes is a problem                           | 27.0                   | 6.7                        |
| Have enough money for food, regular utility costs and clothes, but buying furniture and household appliances is a problem | 20.2                   | 8.6                        |
| Have enough money for food, regular utility costs, clothes and household appliances, but can hardly afford anything else  | 20.2                   | 21.9                       |
| Can afford most of the things they want   | 15.7                   | 60.0                       |
| Civic engagement  |                        |                            |
| Yes   | 55.7                   | 13.3                       |
| No  | 44.3                   | 86.7                       |
| Social support  |                        |                            |
| No one  | 1.1                    | /                          |
| One person  | 10.1                   | 4.8                        |
| Two persons   | 16.9                   | 3.8                        |

|                          | Roma         |          |           | Non-Roma     |          |           |
|--------------------------|--------------|----------|-----------|--------------|----------|-----------|
|                          | Percent      |          |           | Percent      |          |           |
| Three persons            | 14.6         |          |           | 7.6          |          |           |
| Four persons             | 6.7          |          |           | 12.4         |          |           |
| Five persons             | 16.9         |          |           | 11.4         |          |           |
| Six persons              | 13.5         |          |           | 19.0         |          |           |
| Seven persons            | 3.4          |          |           | 13.3         |          |           |
| Eight persons            | 7.9          |          |           | 10.5         |          |           |
| Nine persons             | 4.5          |          |           | 11.4         |          |           |
| Ten persons              | 2.2          |          |           | 2.9          |          |           |
| Twelve persons           | 2.2          |          |           | 2.9          |          |           |
|                          | <i>Range</i> | <i>M</i> | <i>SD</i> | <i>Range</i> | <i>M</i> | <i>SD</i> |
| Relationship with mother | 1-5          | 4.56     | 0.88      | 1-5          | 4.5      | 1.02      |
| Relationship with father | 1-5          | 3.82*    | 1.61      | 1-5          | 4.13     | 1.33      |

\* Seven Roma participants answered that this question is N/A for them, meaning that they do not have any relationship with their fathers.

Further analysis of support network showed that the most important persons to Roma students were mothers, selected as those who supported them enroll in college in 88.8% of cases. In the second place are fathers, selected in 69.7% of cases, followed by siblings (61.8%) and teachers (44.9%). The wider social network, represented through the neighbors, local community leaders and NGO representatives proved to be relevant in 18%, 5.6% and 15.7% of cases, respectively.

Correlations between all components of psychological and social capital at the entire sample are presented in Table 1 in Appendix.

### *Differences between Roma and non-Roma students*

Roma students and students from general population were firstly compared on the four elements of PsyCap. Statistically significant differences were obtained for optimism ( $t(192)=2.646$ ,  $p=.009$ ), academic resilience ( $t(191)=2.768$ ,  $p=.006$ ) and hope ( $t(192)=2.321$ ,  $p=.021$ ), while inter-group differences for self-efficacy proved not to be significant ( $t(191)=-.451$ ,  $p=.653$ ). The direction of these differences reveal that Roma college students see themselves as more optimistic, more academically resilient and full of hope, compared to their counterparts from the general population.

As for the social capital, educational and financial status were firstly compared. Statistically significant differences between Roma and non-Roma students

appeared for both mother's and fathers' education ( $\chi^2(2, N=193)=53.376, p=.000$  and  $\chi^2(2, N=185)=19.170, p=0.000$  respectively), and family's financial status ( $\chi^2(4, N=194)=51.142, p=.000$ ), indicating that Roma students' family structure was less advantageous than those of the students from general population. No statistical differences were determined for the relationship with parents/guardians (for the mother:  $t(192)=.413, p=.680$ , and for the father:  $t(192)=-1.485, p=.192$ ). Differences in the frequency of civic engagement proved to be significant ( $\chi^2(1, N=192)=39.883, p=.000$ ), as well as in the number of persons who represented support for pursuing a higher education ( $\chi^2(10, N=193)=24.715, p=0.006$ ), indicating that Roma students from our sample tend to be more civically engaged, but have fewer persons in their social support network than their counterparts from the general population. When we compared frequencies of selected persons from our list, we noticed that statistically significant differences appeared for fathers ( $\chi^2(1)=9.489, p=.002$ ), grandmothers ( $\chi^2(1)=14.640, p=.000$ ), grandfathers ( $\chi^2(1)=8.265, p=.005$ ), relatives ( $\chi^2(1)=8.444, p=.004$ ), partners ( $\chi^2(1)=7.932, p=.006$ ), peers ( $\chi^2(1)=6.665, p=.014$ ), teachers ( $\chi^2(1)=10.118, p=.002$ ), and NGO representatives ( $\chi^2(1)=8.132, p=.006$ ), meaning that Roma students have been receiving less support for pursuing higher education from all these persons, except for NGO representatives where non-Roma students received support in fewer cases.

A forward binary logistic regression model with four predictors (see Table 4) was statistically significant,  $\chi^2(4)=104.464, p=.000$ , indicating that it provides a better fit to the data than the intercept-only model. It explained 59% (Nagelkerke  $R^2$ ) of the variance in membership to a student group and correctly classified 84.4% of cases/ students. The Hosmer and Lemeshow Test, that yielded a  $\chi^2(8)$  of 9.149 and was insignificant ( $p=.330$ ), indicated a good fit, as well.

**Table 4.** Binary logistic regression coefficients

| Predictors                | B      | Wald $\chi^2$ | df | p    | Odds Ratio |
|---------------------------|--------|---------------|----|------|------------|
| Hope                      | -.272  | 6.416         | 1  | .011 | .762       |
| Mother's education        | 1.791  | 20.636        | 1  | .000 | 5.993      |
| Family's financial status | .597   | 12.780        | 1  | .000 | 1.817      |
| Civic engagement          | -1.990 | 16.903        | 1  | .000 | .137       |

Although statistical differences between the two groups of students appeared on almost all components of psychological and social capital, logistic regression showed that the differences in the mother's educational level, family's financial status, level of hope and engagement in socially responsible activities are the most prominent, contributing mostly to prediction of whether a student is a Roma or from general population.

## Discussion

Through this research it was determined that Roma college students are characterized by high levels of optimism, hope, academic resilience and self-efficacy, suggesting that their PsyCap is at an advantageous level, which is in line with previous research addressing similar topics and samples (Vranješević et al., 2019). However, self-efficacy proved not to be of such importance as it was determined in a study with Hispanic students in the USA (Gordon, 1996), compared to other components of PsyCap.

We determined that Roma college students mostly come from families with low financial status—almost half of them reported that maintaining everyday costs, buying clothes and shoes represent a difficulty for their families of origin. Their parents, and particularly mothers have lower levels of education—for example, almost one half of the Roma college students reported their mothers have completed primary school or less, while every fifteenth graduated from college. This indicates very low levels of what Coleman called family structure capital (Coleman, 1988) or what Teachman called structural, formal social capital (Teachman et al., 1997). Like in Boon's study (2008), psychological characteristics proved to be more relevant than structural family capital in predicting academic success.

On the other hand, subjective aspects of social capital, parent-child relationship, was assessed as favorable, particularly the relationship with mother. When asked about persons who supported them enroll in the college, which we considered a specific and potentially relevant aspect of social capital, it was determined that mothers are the persons who provided the strongest support. However, one should not oversee the relevance of a wider social network, *bridging* social capital, given that every sixth Roma college student was supported to pursue higher education by an NGO representative. Moreover, over a half of them have been civically engaged, meaning they developed strong ties with the local community, their peers and informal mentors. These ties, along with positive relationship with parents (particularly mothers), could have contributed toward the greater PsyCap, which in turn might have contributed to their decision to enroll in college.

Comparison of Roma college students with non-Roma students indicated that Roma students' optimism, academic resilience and, in particular, hope, are significantly higher, which gives additional support to the theses that their personal resources have been very developed. When compared in terms of family social capital, significant differences appeared on structural aspects, but no differences appeared on subjective, relational aspects, meaning that the quality of

the relationship with parents in both samples was similar. Aspects of family social capital that make the most significant difference between Roma and non-Roma students were the mother's education and family financial status.

When asked specifically about the persons who supported them to enroll in college, Roma students reported significantly fewer number of persons. They received less support from their fathers, grandmothers, grandfathers, relatives, partners, peers and teachers, while they received more support from NGO representatives than their non-Roma counterparts, so we can assume that NGO's representatives' support was of particular relevance. Moreover, Roma students proved to be more civically engaged than students from the general population, which altogether points to the importance of distant social networks, or Putnam's bridging social capital, as Granovetter (1983) or Perez and colleagues (Perez et al., 2009) have already suggested.

### Conclusions and implications

Knowing that the educational system tends to reproduce inequalities and make them legitimate (Bourdieu, 1986), we can conclude that Roma college students succeeded *despite* social factors, not *thanks to* them. The results of this study support the premise that a constellation of personal protective resources, such as optimism, hope and academic resilience can protect students from the effects of very unfavorable socioeconomic conditions. Although our research design prevents us from making conclusions about the causal effects, we may assume that positive relationships with mothers, their high academic aspirations (despite their low educational level), along with the support from networks built through the engagement in pro-social activities, contributed towards the development of high PsyCap in Roma students, and the decision to pursue higher education. Our findings expands the literature on the positive education paradigm (Seligman, Ernst, Gillham, Reivich & Linkins, 2009) through showing that positive psychological constructs, like PsyCap, may be linked to the academic success of Roma students in a context which is somewhat different from typical Western academic context, where most of the similar studies have been conducted.

Knowing that PsyCap can play such an important role in shaping educational and career paths of young Roma adults, several recommendations for the policy and practice improvements can be defined. Secondary school and university teachers should, rather than focusing exclusively on increasing knowledge and academic skills (i.e., academic performance), focus on students' feelings, which can, in turn, through academic PsyCap, translate into better academic perfor-

mance. They should boost optimism, hope and academic resilience in all students, and, particularly, in Roma students or students coming from other vulnerable groups. They can accomplish this by giving positive feedback about students' effort and by supporting their autonomy (i.e., allowing students the freedom to make choices and identifying connections between academic work and students' interests) and connectedness through the promotion of group work (e.g. project-based learning) extracurricular participation and volunteerism. In order to support students in the process of building PsyCap, both secondary school and university teachers need to be "equity literate" (Gorski, 2013). They need to be able to recognize biases and discriminatory practices in education, to respond to them and to redress them in order to cultivate and sustain oppression-free and equitable learning environment for all students. One way of responding to and redressing discriminatory practices on the local and state level might be through diverse initiatives aimed at connecting young Roma and engaging them in socially relevant activities that make them more visible in community. Either in the educational institutions or in the local communities, Roma families should be provided with opportunities to meet the academically successful representatives of their own community who could motivate them to pursue higher education.

In order to improve the quality of structural family capital, educational policies should also be adjusted. We need a more thorough process of informing potential beneficiaries about affirmative measures, and support mechanisms for Roma secondary school students intending to enroll in college. Apart from stable financial and material support to Roma families, introduction of social programs in order to attract families to school and university activities is recommendable. As stated by some authors (Zhang, BeBlois, Deniger & Kamanzi, 2008), where family human, social and financial capital is weak, the school and community human, social and financial capital need to serve as a safety net and help the children build up their PsyCap in spite of the unfavorable environment.

### **Limitations and recommendations for future research**

Although this research yielded results that can be relevant both theoretically and practically, we should point to several limitations that one should consider when interpreting results and drawing conclusions. First of all, the cross-sectional study cannot allow us to establish the causality of the phenomena examined. Although we might assume that some aspects of relational social capital affected some aspects of PsyCap, with our research design we cannot claim the causal relationship.

The second limitation is related to the small sample size that prevented us from drawing more generalizable and reliable conclusions. Moreover, involving young Roma adults who do not study as a third comparison group would certainly build on our results significantly. Therefore, in the future studies it would be useful to compare the psychological and social capital between Roma who managed to study at the college and those who dropped out before completing secondary education or did not continue to college after completing the secondary school. Longitudinal studies would additionally enable us to determine if psychological and social capital are related not only to academic achievement, but also to the career success and overall life satisfaction in middle adulthood. Qualitative research would help us better understand the interplay of all these constructs and mechanisms, events or persons that had the key impact on the Roma students' decision to pursue higher education.

Finally, we should point to the limitations stemming from the usage of single-item scales. Although some researchers argue for their reliability and wide applicability (Leisen Pollack & Alexandrov, 2013; Yohannes et al., 2011), more reliable results could have been obtained if multiple-items scales had been used or, at least—single-item scales with more points (e.g. instead of five for the measure of relationship with parents, a ten-point scale could have been used). Concerning the Hope single-item scale specifically, we should point to an additional limitation. Since hope is a complex construct entailing pathway (planning to accomplish goals) and agency (goal-directed energy) component, as well as emotions related to the process of accomplishing these goals, with single-item measure we used, we covered only this emotional aspect of Hope. Given that this aspect of hope proved to be a significant differentiator between Roma and non-Roma students, we believe that future studies need to include the entire construct of hope, with all its components.

## References

- AVEY, J. B., LUTHANS, F., SMITH, R. M., & PALMER, N. F. (2010). Impact of positive psychological capital on employee well-being over time. *Journal of Occupational Health Psychology, 15*(1), 17–28. <https://doi.org/10.1037/a0016998>
- BERNARD, B. (1995). *Fostering resilience in children* (ERIC Digest No. EDOPS959). Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education.
- BHABHA, J., FULLER, A., MATACHE, M., VRANJEŠEVIĆ, J., CHERNOFF, M. C., SPASIĆ, B., & IVANIS, J. (2017). Reclaiming adolescence: A Roma youth perspective. *Harvard Educational Review, 87*(2), 186–224. <https://doi.org/10.17763/1943-5045-87.2.186>



- BOON, H. J. (2008). Risk or Resilience? What Makes a Difference? *The Australian Educational Researcher*, 35(1), 81–102. <https://doi.org/10.1007/BF03216876>
- BOURDIEU, P. (1986). The forms of capital. In J. Richardson (Ed.) *Handbook of Theory and Research for the Sociology of Education* (pp. 241–258). New York: Greenwood Press.
- CARMONA-HALTY, M., SALANOVA, M., LLORENS, S., & SCHAUFELI, W. B. (2019). Linking positive emotions and academic performance: The mediated role of academic psychological capital and academic engagement. *Current Psychology*. Advance online publication. <https://doi.org/10.1007/s12144-019-00227-8>
- COLEMAN, J. S. (1988). Social Capital in the Creation of Human Capital. *The American Journal of Sociology*, 94, Supplement: Organizations and Institutions: Sociological and Economic Approaches to the Analysis of Social Structure, 95–120.
- COLEMAN, J. S. (1990). *Foundations of Social Theory*. Cambridge, MA: Harvard University Press.
- EUROSTAT (2019). *People at risk of poverty and social exclusion*. Retrieved from: [https://ec.europa.eu/eurostat/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=t2020\\_50&language=en](https://ec.europa.eu/eurostat/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=t2020_50&language=en)
- FARR, J. (2004). Social Capital: A Conceptual History. *Political Theory*, 32(1), 6–33. <https://doi.org/10.1177/0090591703254978>
- FERGUSON, K. M. (2006). Social capital and children's wellbeing: a critical synthesis of the international social capital literature. *International Journal of Social Welfare*, 15(1), 2–18. <https://doi.org/10.1111/j.1468-2397.2006.00575.x>
- FIELD, J. (2003). *Social capital*. London: Routledge.
- FURLONG, M. J., YOU, S., RENSHAW, T. L., SMITH, D. C., & O'MALLEY, M. D. (2013). Preliminary development and validation of the Social and Emotional Health Survey for secondary school students. *Social Indicators Research*, 6(4), 753–775. <https://doi.org/10.1007/s12187-013-9193-7>
- GÁNDARA, P. (1982). Passing through the eye of the needle: high-achieving Chicanas. *Hispanic Journal of Behavioral Sciences*, 4(2), 167–179. <https://doi.org/10.1177/07399863820042003>
- GORDON, K. (1996). Resilient Hispanic youths' self-concept and motivational patterns. *Hispanic Journal of Behavioral Sciences*, 18(1), 63–73. <https://doi.org/10.1177/07399863960181007>
- GORSKI, P. (2013). *Reaching and teaching students in poverty: Strategies for erasing the opportunity gap*. New York: Teachers College Press.
- GOVERNMENT OF THE REPUBLIC OF SERBIA (2012). *Strategy for education development in Serbia 2020*. Belgrade: The Ministry of Education, science and technological development of the Republic of Serbia. Retrieved from: <http://erasmusplus.rs/wp-content/uploads/2015/03/Strategy-for-Education-Development-in-Serbia-2020.pdf>
- GOVERNMENT OF THE REPUBLIC OF SERBIA (2013). *Strategy for Prevention and Protection against Discrimination*. Vlada Republike Srbije, Kancelarija za ljudska i manjinska prava. Retrieved from: [https://www.praxis.org.rs/images/praxis\\_downloads/Strategija\\_prevenicije\\_i\\_zastite\\_od\\_diskriminacije%202.pdf](https://www.praxis.org.rs/images/praxis_downloads/Strategija_prevenicije_i_zastite_od_diskriminacije%202.pdf)

- GOVERNMENT OF THE REPUBLIC OF SERBIA (2014). *The Strategy of social inclusion of Roma for the period from 2016 to 2025*. Official Gazette of RS. Retrieved from: [https://www.ljudskaprava.gov.rs/sites/default/files/dokument\\_file/national\\_strategy\\_for\\_roma\\_inclusion\\_2016-2025\\_0.pdf](https://www.ljudskaprava.gov.rs/sites/default/files/dokument_file/national_strategy_for_roma_inclusion_2016-2025_0.pdf)
- GOVERNMENT OF THE REPUBLIC OF SERBIA (2018). *Nacionalni izveštaj o socijalnom uključivanju i smanjenju siromaštva u Republici Srbiji za period 2014-2017. godine [National report on social inclusion and poverty reduction in the Republic of Serbia for the period 2014-2017]*. Vlada Republike Srbije. Retrieved from: [http://socijalnoukljucivanje.gov.rs/wp-content/uploads/2019/02/Treci\\_nacionalni\\_izvestaj\\_o\\_socijalnom\\_ukljucivanju\\_i\\_smanjenju\\_siromastva\\_2014%E2%80%932017.pdf](http://socijalnoukljucivanje.gov.rs/wp-content/uploads/2019/02/Treci_nacionalni_izvestaj_o_socijalnom_ukljucivanju_i_smanjenju_siromastva_2014%E2%80%932017.pdf)
- GRANOVETTER, M. (1983). The Strength of Weak Ties: A Network Theory Revisited. *Sociological Theory*, 1(1), 201-233. <https://doi.org/10.2307/202051>
- HOBFOLL, S. (1989). Conservation of resources a new attempt at conceptualizing stress. *American psychological association*, 44(3), 513-524.
- HOBFOLL, S. (2011). Conservation of resource caravans and engaged settings. *Journal of Occupational and Organizational Psychology*, 84(1). <https://doi.org/10.1111/j.2044-8325.2010.02016.x>
- HOBFOLL, S., HALBESLEBEN, J., NEVEU, J., & WESTMAN, M. (2018). Conservation of Resources in the Organizational Context: The Reality of Resources and Their Consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5(1), 103-128. <https://doi.org/10.1146/annurev-orgpsych-032117-104640>
- INTERNATIONAL WELLBEING GROUP (2013). *Personal Wellbeing Index: 5th Edition*. Melbourne: Australian Centre on Quality of Life, Deakin University.
- ISRAEL, G. D., BEAULIEU, L. J., & HARTLESS, G. (2001). The Influence of Family and Community Social Capital on Educational Achievement. *Rural Sociology*, 66(1), 43-68.
- JAKŠIĆ, B. & BAŠIĆ, G. (2005). *Umetnost preživljavanja – gde i kako žive Rome u Srbiji [The art of surviving – where and how Roma live in Serbia]*. Beograd: Institut za filozofiju i društvenu teoriju.
- KAO, G., & RUTHERFORD, L. T. (2007). Does Social Capital Still Matter?: Immigrant Minority Disadvantage in School-Specific Social Capital and its Effects on Academic Achievement. *Sociological Perspectives*, 50(1), 27-52.
- KIM, D. H., & SCHNEIDER, B. (2005). Social Capital in Action: Alignment of Parental Support in Adolescents' Transition to Postsecondary Education. *Social Forces*, 84(2), 1181-1206.
- LEISEN POLLACK, B. & ALEXANDOV, A. (2013). Nomological validity of the Net Promoter Index question, *Journal of Services Marketing*, 27(2), 118-129. <https://doi.org/10.1108/08876041311309243>
- LIAO, R. X., & LIU, Y. H. (2016). The impact of structural empowerment and psychological capital on competence among Chinese baccalaureate nursing students: A questionnaire survey. *Nurse Education Today*, 36, 31-36. <https://doi.org/10.1016/j.nedt.2015.07.003>

- LIRAN, B. H., & MILLER, P. (2019). The Role of Psychological Capital in Academic Adjustment Among University Students. *Journal of Happiness Studies*, 20(1), 51–65. <https://doi.org/10.1007/s10902-017-9933-3>
- LUTHANS, B. C. & LUTHANS, K. W. & JENSEN, S. M. (2012). The Impact of Business School Students' Psychological Capital on Academic Performance. *Journal of Education for Business*, 87(5), 253–259. <https://doi.org/10.1080/08832323.2011.609844>
- LUTHANS, F., YOUSSEF, C. M., & AVOLIO, B. J. (2007). *Psychological capital: Developing the human competitive edge*. New York: Oxford University Press.
- LUTHANS, F., YOUSSEF, C. M., & AVOLIO, B. J. (2015). *Psychological capital and beyond*. New York: Oxford University Press.
- LUTHANS F., & YOUSEF-MORGAN, C. M. (2017). Psychological Capital: An Evidence-Based Positive Approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 4(1), 339–366. <https://doi.org/10.1146/annurev-orgpsych-032516-113324>
- MARTIN, A. J., & MARSH, H. W. (2006). Academic resilience and its psychological and educational correlates: a construct validity approach. *Psychology in the schools*, 43(3), 267–281. <https://doi.org/10.1002/pits.20149>
- MCNEAL, R. B. (2001). Differential effects of parental involvement on cognitive and behavioural outcomes by socioeconomic status. *The Journal of Socio-Economics*, 30(2), 171.
- MCNEAL, R. B. (1999). Parental Involvement as Social Capital: Differential Effectiveness on Science Achievement, Truancy, and Dropping Out. *Social Forces*, 78(1), 117–144. <https://doi.org/10.1093/sf/78.1.117>
- MORGAN, S. & SORENSEN, A. (1999). Parental Networks, Social Closure, and Mathematics Learning: A Test of Coleman's Social Capital Explanation of School Effects. *American Sociological Review*, 64(5), 661–681.
- MULLER, C., & ELLISON, C. G. (2012). Religious Involvement, Social Capital, and Adolescents' Academic Progress: Evidence from the National Education Longitudinal Study of 1988. *Sociological focus*, 34(2), 155–183. <https://doi.org/10.1080/00380237.2001.10571189>
- ORIOLO-GRANADO, X., MENDOZA-LIRA, M., COVARRUBIAS-APABLAZA, C., & MOLINA-LOPEZ, V. (2017). Positive Emotions, Autonomy Support and Academic Performance of University Students: The Mediating Role of Academic Engagement and Self-efficacy. *Revista de Psicodidáctica*, 22(1), 45–53. <https://doi.org/10.1387/RevPsicodidact.14280>
- OUWENEEL, E., LE BLANC, P.M., & SCHAUFELI, W.B. (2011). Flourishing students: A longitudinal study on positive emotions, personal resources, and study engagement. *Journal of Positive Psychology*, 6(2), 142–153. <https://doi.org/10.1080/17439760.2011.558847>
- PASCARELLA, E. T., PIERSON, C. T., WOLNIKA, G. C., & TEREZINI, P. T. (2004). First-generation college students: Additional evidence on college experience and outcomes. *The Journal of Higher Education*, 75(3), 249–284. <https://doi.org/10.1353/jhe.2004.0016>

- PÉREZ, W., ESPINOZA, R., RAMOS, K., CORONADO, H., & CORTES, R. (2009). Academic Resilience among Undocumented Latino Students. *Hispanic Journal of Behavioral Sciences*, 31(2), 149–181. <https://doi.org/10.1177/0739986309333020>
- POPOVIĆ, A. & STANKOVIĆ, J. (2013). *Nacionalni izveštaj: Srbija*. Niš: Ekonomski fakultet Univerziteta u Nišu.
- POTNAM R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York, Simon & Schuster.
- SALANOVA, M., LLORENS, S., & SCHAUFELI, W.B. (2011). “Yes, I can, I feel good, and I just do it!” On gain cycles and spirals of efficacy beliefs, affect, and engagement. *Applied Psychology: An International Review*, 60(2), 255–285. <https://doi.org/10.1111/j.1464-0597.2010.00435.x>
- SANDEFUR, G., MEIER, A., & HERNANDEZ, P. (1999). *Families, Social Capital and Educational Continuation*. Center for Demography and Ecology, University of Wisconsin-Madison.
- SELIGMAN, M. E. P., ERNST, R. M., GILLHAM, J., REIVICH, K., & LINKINS, M. (2009). Positive education: positive psychology and classroom interventions. *Oxford Review of Education*, 35(3), 293–311. <https://doi.org/10.1080/03054980902934563>
- SMITH, M. H., BEAULIEU, L. J., & ISRAEL, G.D. (1992). Effects of human capital and social capital on dropping out of high school in the South. *Journal of Research in Rural Education*, 8(1), 75–88.
- SNYDER, C. R. (1995). Conceptualizing, measuring, and nurturing hope. *Journal of Counseling and Development*, 73(3), 355–360. <https://doi.org/10.1002/j.1556-6676.1995.tb01764.x>
- SNYDER, C. R. (2002). TARGET ARTICLE: Hope Theory: Rainbows in the Mind, *Psychological Inquiry*, 13(4), 249–275. [https://doi.org/10.1207/S15327965PLI1304\\_01](https://doi.org/10.1207/S15327965PLI1304_01)
- STANTON-SALAZAR (1997). A Social Capital Framework for Understanding the Socialization of Racial Minority Children and Youths. *Harvard educational review* 67(1), 1–41. <https://doi.org/10.17763/haer.67.1.140676g74018u73k>
- STATISTICAL OFFICE OF THE REPUBLIC OF SERBIA (2013). *2011 Census of Population, Households and Dwellings in the Republic of Serbia – Book 4: RELIGION, MOTHER TONGUE AND ETHNICITY – Data by municipalities and Cities*. Belgrade: Statistical Office of the Republic of Serbia.
- STATISTICAL OFFICE OF THE REPUBLIC OF SERBIA AND UNICEF (2014). *MICS – Multiple Indicator Cluster Survey 2014 and Serbian Roma Settlements*. Belgrade: UNICEF.
- SUN, Y. (1999). The Contextual Effects of Community Social Capital on Academic Performance. *Social Science Research*, 28(4), 403–426. <https://doi.org/10.1006/ssre.1999.0661>
- TEACHMAN J. D, PAASCH K., & CARVER K. (1997). Social capital and the generation of human capital. *Social Forces*, 75(4), 1343–1359.
- UNITED NATIONS, ECONOMIC AND SOCIAL COUNCIL (2014). *Concluding observations on the second periodic report of Serbia* (E/C.12/SRB/CO/2).
- VIRTANEN, M., ERVASTI, J., OKSANEN, T., KIVIMAKI, M., & VAHTERA, J. (2013). Social capital in schools. In Kawachi I., Takao S., Subramanian S. (Eds.), *Global Perspectives on Social Capital and Health* (pp. 65–85). New York: Springer.

- VRANJEŠEVIĆ, J., SIMIĆ, N., & STANČIĆ, M. (2019). Psychological Capital as a Factor of Roma College Students' Academic Success. In K. Damnjanović, O. Tošković & S. Marković (Eds.), *Proceedings of the XXI scientific conference Empirical Studies in Psychology* (pp. 61–63). Belgrade: Institute of Psychology & Laboratory for Experimental Psychology, Faculty of Philosophy, University of Belgrade.
- WARBURTON, E. C., BUGARIN, R., NUNEZ, A. (2001). *Bridging the Gap: Academic Preparation and Postsecondary Success of First-Generation Students*. Washington: Education Statistics Quarterly.
- YOHANNES, A. M., DODD, M., MORRIS, J., & WEBB, K. (2011). Reliability and validity of a single item measure of quality of life scale for adult patients with cystic fibrosis. *Health Quality Life Outcomes*, 9, Article number: 105. <https://doi.org/10.1186/1477-7525-9-105>
- ZHANG, X. Y., BEBLOIS, L., DENIGER, M., & KAMANZI, C. (2008). A Theory of Success for Disadvantaged Children: Reconceptualization of Social Capital in the Light of Resilience. *The Alberta Journal of Educational Research*, 54(1), 97–111.

## Appendix

**Table A1.** Correlations between components of psychological and social capital

|                             | 1.          | 2.          | 3.          | 4.          | 5.          | 6.          | 7.          | 8.          | 9.          | 10.  | 11. |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------|-----|
| 1. Self-efficacy            | -           | <b>.269</b> |             |             |             |             |             |             |             |      |     |
| 2. Optimism                 | <b>.269</b> | -           |             |             |             |             |             |             |             |      |     |
| 3. Academic resilience      | <b>.300</b> | <b>.420</b> | -           |             |             |             |             |             |             |      |     |
| 4. Hope                     | .147        | <b>.399</b> | <b>.382</b> | -           |             |             |             |             |             |      |     |
| 5. Relationship with mother | .124        | .181        | <b>.189</b> | <b>.244</b> | -           |             |             |             |             |      |     |
| 6. Relationship with father | .126        | .184        | .036        | .124        | <b>.185</b> | -           |             |             |             |      |     |
| 7. Mother's* education      | .012        | -.107       | -.113       | -.019       | -.024       | .113        | -           |             |             |      |     |
| 8. Father's education*      | .025        | -.122       | -.102       | -.033       | -.111       | .032        | <b>.494</b> | -           |             |      |     |
| 9. Financial status*        | .042        | .046        | -.075       | .014        | .050        | <b>.254</b> | <b>.432</b> | <b>.321</b> | -           |      |     |
| 10. Social support*         | .111        | .015        | .015        | <b>.230</b> | .135        | .141        | <b>.243</b> | .131        | <b>.293</b> | -    |     |
| 11. Civic engagement**      | -.053       | -.152       | -.063       | -.052       | -.070       | .155        | <b>.249</b> | <b>.248</b> | <b>.314</b> | .171 | -   |

Note. Bolded numbers indicate that correlation is significant at the .01 level.

\* For the ordinal variables Spearman's coefficient was calculated

\*\* For the categorical variable point-biserial coefficient was calculated

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## Romi i više/visoko obrazovanje – psihološki i društveni kapital kao faktori akademskog uspeha<sup>10</sup>

**Apstrakt:** S obzirom na nisku zastupljenost studenata romske nacionalnosti u oblasti višeg/visokog obrazovanja i na mali broj studija koje su istraživale lične i društvene resurse mladih odraslih Roma, naš cilj je bio da ispitamo psihološki i društveni kapital Roma koji pohađaju institucije višeg/visokog obrazovanja i da utvrdimo da li postoje razlike u odnosu na studente koji nisu romske nacionalnosti. Upitnik je ispunilo ukupno 89 studenata romske nacionalnosti i 105 studenata koji nisu romske nacionalnosti. Utvrđene su značajne razlike između ove dve grupe u pogledu svih komponenti psihološkog kapitala, sa izuzetkom samoefikasnosti. Finansijski i obrazovni status porodica studenata romske nacionalnosti znatno je nepovoljniji nego kod studenata koji nisu romske nacionalnosti. Oni dobijaju podršku za sticanje višeg/visokog obrazovanja od manjeg broja osoba, ali su građanski angažovaniji i uživaju veću podršku predstavnika nevladinih organizacija. Možemo da zaključimo da su uprkos nepovoljnom kapitalu porodične strukture studenti romske nacionalnosti razvili visok nivo psihološkog kapitala. Praktične implikacije su dodatno razmotrene u radu.

**Ključne reči:** psihološki kapital, društveni kapital, akademski uspeh, studenti romske nacionalnosti, više/visoko obrazovanje

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<sup>10</sup> Ovaj rad je proizvod dva projekta: „Identifikacija, merenje i razvoj kognitivnih i emocionalnih kompetencija važnih društvu orijentisanom na evropske integracije“ (179018), pod pokroviteljstvom Ministarstva obrazovanja, nauke i tehnološkog razvoja Republike Srbije, i „Romski šampioni“ (Romani Champions), pod pokroviteljstvom FXB centra za zdravlje i ljudska prava pri Univerzitetu Harvard, koji sprovodi Centar za interaktivnu pedagogiju (CIP).