

The Effect of Motivational Incentives and Time Perspectives on Predicting Youth Emigration Intentions and the Agency of Potential Migrants: The Case of Serbia

DOI: https://doi.org/10.11567/met.39.2.2 UDK: 314.15:316.628]:001.891(497.11) Izvorni znanstveni rad Primljeno: 25.04.2023. Prihvaćeno: 06.11.2023.

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SUMMARY

This article aims to test the predictive potential of frequently researched socio-demographic and motivational incentives and time perspectives as a still unexplored personal-level factor affecting the strength of youth emigration intentions and the agency of potential migrants (i.e., activities related to emigration). We tested the incremental validity of motivational incentives and time perspectives in predicting emigration intention and potential migrants' agency, after accounting for sociodemographic variables. Furthermore, to strengthen the estimation of the effect of education on outmigration propensity, we included respondents' grade attainment in their current educational level (upper secondary education), their highest intended level of education, and their parents' level of education. Drawing on psychosocial conceptualisations (Bandura, 2001; Zimbardo and Boyd, 1999) this quantitative study was conducted on a representative sample of 1973 students enrolled in the final grade of upper secondary schools in Serbia. A three-step hierarchical multiple regression analysis was employed for this purpose. The results reveal that emigration intention, as well as potential migrants' agency, cannot be predicted only based on socio-demographic characteristics. However, motivational incentives are important correlates of both emigration intention and migrants' agency. Social motivational incentives tend to reduce both emigration intention and migrants' agency, while economy-related motivational incentives tend to increase emigration intention and migrants' agency. On the other hand, while time perspectives are not significantly related to emigration intention, they do appear as significant predictors of migrants' agency. Concretely, present hedonistic and future time perspective orientations tend to increase migrants' agency. The findings indicate the need for a more differentiated approach in theoretical, empirical and policy considerations.

KEY WORDS: emigration intentions, potential migrants' agency, motivational incentives, time perspective, Serbia

INTRODUCTION

Migration research is increasingly assuming a prominent role in academic disciplines, demanding a multidisciplinary and interdisciplinary approach in investigating this complex and important phenomenon in the globalised world (Pešić, 2013; Poleti, 2013). Moreover, the desire and readiness to permanently leave one's country of origin are features attributed to young people, identified as the most mobile population globally (Esipova et al., 2011; Heckert, 2015). Data from Serbia also show that emigration intentions and the migration process are mostly connected with the young, work active and highly educated population (Bobić and Babović, 2013; Pavlović, Perišić and Šantić, 2021; Rašević, 2016; Todorović, Javor and Radić, 2020).

Emigration intentions are considered important in predicting later migratory behaviour (Ajzen, 2005; Creighton, 2013; van Dalen and Henkens, 2013). In line with Bandura's (2001) psychosocial theorising, this article employs the terms *emigration intention* and *potential migrants' agency* (defined in the text below/measures) as two constituent aspects of potential future outmigration. Since the realisation of emigration intentions requires a specific constellation of macro-level social structures, situational factors and personal characteristics, recent literature emphasises the need for a more complex perspective and a more differentiating approach to the issue (Cairns et al., 2013; van Dalen and Henkens, 2013; Van Mol, 2016). Accordingly, in this article we analyse the predictability of emigration intention and migrants' agency in late adolescents based on frequently researched sociodemographic factors and less-explored personal-level factors, especially in the Serbian context.

The results presented in this article are part of a larger study aimed at illuminating Serbian adolescents' visions of personal futures during the transition to adulthood (in ten years' time). We use the term *vision of personal future* to denote a complex cognitive-motivational system that includes aspirations and present anticipations of future goals (see more in Gril et al., 2018; Polovina, Gundogan and Radulović, 2021; Polovina and Jošić, 2018). This subjective depiction of one's own future contains a link between the present and future time perspective of the individual and holds vital importance in directing current behaviours and personal development across various life domains including the issue of a change in the future place of residence through outmigration.

The article contributes to the literature along two dimensions. Firstly, to strengthen the estimation of the effect of education on outmigration propensity, we included respondents' grade point average (GPA) at the current educational level (upper secondary education), their highest intended level of education, and their parents' level of education. Secondly, we tested the yet unrecognised potential contribution or effect of adolescents' present and future time perspectives concerning their emigration intentions and migrants' agency.

CONCEPTUAL FRAMEWORK: PSYCHOSOCIAL AND SOCIOLOGICAL APPROACH TO DETERMINANTS OF EMIGRATION INTENTION AND MIGRANTS' AGENCY

The complexity of migration processes in contemporary societies urges an interdisciplinary approach in the migration research field, one that links the micro and macro levels (Hagen-Zanker, 2008; Stjernström, 2004). In the centre of such an approach and endeavours to explain the emigration intentions of individuals in a particular socio-economic context is the concept of personal agency. While there is a more or less generally accepted definition of emigration intention as an aspiration stated as a preference to live abroad rather than in the native country (Carling, 2002; Schewel and Fransen, 2018), the situation is somewhat different when it comes to the concept of personal agency, which holds a central position in considerations in both sociology and social psychology. In both disciplines, personal agency is defined similarly but with somewhat different elaborations.

Sociologists emphasise the connection of personal agency with social transformation processes, highlighting "how human agency can condition responses to structural factors" (Castels, 2010: 1565), i.e. "the context-contingent capacity to produce one's own subjectivity, and thus performing actions and behaviors in relation to the power dynamic of a specific social setting" (Safouane, Jünemann and Göttsche, 2020: 14). Social psychologists, led by Albert Bandura as the most prominent figure in this field, punctuate that intentions and personal agency are two inseparable constituent aspects of future behaviours. Intentions, as the "representation of a future course of action to be performed" (Bandura, 2001: 6) are an important, but not a sufficient constituent aspect of future behaviours. To achieve the intended goals, intentions need to be linked to personal agency – a personal characteristic grounded in intentionality and forethought (setting personal goals and creating courses of action likely to produce desired outcomes), as well as in self-reactiveness, self-reflectiveness and self-efficiency beliefs related to one's own capability to realise courses of action that lead to the accomplishment of a desired goal. It is the belief in one's efficacy that is a key personal resource in self-development across diverse spheres of functioning and "the central mechanism of human agency... that exerts impact on cognitive, motivational, affective, and decisional processes" (Bandura et al., 2003: 4). In line with Bandura's conceptualisations, it can be assumed that a young person's potential to realise emigration intention can be considered greater when accompanied by specific activities toward emigration, i.e. explicit preparatory actions. When emigration intentions are considered in the period of late adolescence, the concretisation of potential courses of action and the undertaking of some important preparatory acts must be approached in an age-appropriate manner (information seeking, consulting important others, and exploring possibilities).

Both approaches accentuate the importance of interconnection between contextual and individual factors. When explaining emigration intentions and processes, they include reasons/motivation/ incentives to migrate (Gherheş, Dragomir and Cernicova-Buca, 2020; Hagen-Zanker, 2008) as well as the importance of individual characteristics of potential migrants, especially those connected to educational level and educational aspirations (Nuhoğlu Soysal and Cebolla-Boado, 2020; Hagen-Zanker, 2008).

Similar to Bandura, Zimbardo and Boyd (1999) stress bidirectional continual flows of personal and social experiences in postulating the construct of *time perspective*. An individual's time perspective represents a relatively stable personal dimension based on cognitive processes and learning, resulting in the formation of general temporal frames (TFs). TFs enclose a combination of motivational, emotional, and social aspects, helping the individual give order, coherence and meaning to personal functioning. Based on the processes of "encoding, storing and recalling experienced events and in forming expectations, goals, consequences and imaginative scenarios" (Zimbardo and Boyd, 1999: 1272), TFs "exert a dynamic influence on many important judgments, decisions and actions". In the mind of an individual, personal

and social experiences are parcelled out into past, present and future temporal frames; "while prior past and anticipated future events are abstract psychological constructions, there is concrete, empirically centred representation of the present" (Zimbardo and Boyd, 1999: 1271-1272). TFs are measurable through the empirically well-established and widely used Zimbardo Time Perspective Inventory (ZTPI), designed to assess both the temporal frame "bias" of an individual (related to the dominant or balanced influence of the three TFs) and individual differences. Zimbardo and Boyd (1999) further elaborated on the three TFs on both the conceptual and assessment levels. In that regard, both past and present TFs include two perspectives, while the future TF covers one general perspective. The past relates to its positive and negative aspects. Since the focus of our work is on the link between present and future time, we will dedicate more attention to the elaboration of these two TFs. The present temporal frame encompasses hedonistic tendencies (seeking immediate pleasure with little concern for consequences; adopting a risk-taking attitude toward time and life) and fatalistic expression (a pessimistic viewpoint that extends to the future, helplessness and a hopeless attitude toward future and life) expressions. On the other hand, the future temporal frame relates to a general future orientation focused on goal setting, planning, commitments and endeavours to achieve goals.

We recognise the relevance of Zimbardo and Boyd's conceptualisation of psychological time in considering the issue of emigration intentions among adolescents, particularly in the alignment of certain TF features with the realisation of potential emigration. Features of the present TF, such as a risk-taking attitude toward time and life and optimism/pessimism in strivings for future goals, correspond with the readiness to take risks and cope with the uncertainty brought by the many challenges and obstacles characteristic of realisation of outmigration (Salzano, 2013).

FACTORS ASSOCIATED WITH YOUNG PEOPLE'S EMIGRATION INTENTIONS

Empirical studies conducted within a multidisciplinary research field have confirmed that multiple factors are associated with young people's emigration intentions. In this paper, we will focus on both macro and micro factors and their interconnection.

Several studies address the motives of East European youth behind emigration intentions. Frieze et al. (2004) found higher levels of work centrality and lower levels of family centrality among university students who wanted to emigrate from five post-socialist countries (Serbia not included) in comparison with those who wanted to stay in their country of origin. Makni (2011) found that incentives for the potential long-term emigration of Bulgarian students included expectations of better possibilities for work in a highly qualified area and for professional development abroad. The integrative analysis of a series of youth studies exploring attitudes, beliefs, and expectations in eight countries of Southeastern Europe (Serbia not included) indicated that youth across this region expressed high emigration intentions, ranging from 66.7% in Albania to 26.7% in Croatia (Taleski and Hoppe, 2015). They emphasised that the main reasons for potentially leaving their homeland are the improvement of their standard of living, gaining access to better employment possibilities, and better education (Taleski and Hoppe, 2015). Results from a few recent studies in Serbia involving respondents under 35 years old indicated that the most commonly stated reasons for potential outmigration were economic/life standard improvement, followed by easier employment, better (paid) jobs and more prospective careers (Bobić and Vesković-Anđelković, 2016; Jarić and Živadinović, 2012; Tomanović and Stanojević, 2015).

Research focused on individual characteristics associated with emigration intentions has indicated the importance of age, gender, social status and educational attainment (Braun and Arsene, 2009; Carling, 2002; De Jong, 2000; Feliciano, 2005; Makni, 2011; Vandenbrande et al., 2006). In this context, findings suggest that the youngest, males, those more connected abroad, and those with higher levels of education are more likely to prepare to move (Migali et al., 2018). Research indicates that education has a significant effect on migration i.e. that migration and education are interwoven on many different levels (Hoppe and Fujishiro, 2015; Ivlevs and King, 2012; Melzer, 2013; Migali et al., 2018). However, past research did not provide a consistent interpretation of the observed relationship, whether the analysis focused on the macro level (based on aggregate data, often investigating the so-called "brain drain") or on the individual level of functioning. In accordance with the topic of this paper, we will briefly consider only research based on individual data. They indicated a clear trend for the effect of education on migration, meaning that attitudes and values of individuals regarding their own education (aspired level of education) and career are related to emigration intentions and behaviours (Hoppe and Fujishiro, 2015; Ivlevs and King 2012; Melzer, 2013). For further insight into the relationship between education and migration, the challenging question is whether young people with high educational capital (high educational aspiration and plans; a high level of parental education) are more inclined towards outmigration compared to young people who are less qualified and belong to a lower educational and social background. While the former have the means and resources to depart more easily and access better opportunities abroad, the latter are in a greater state of need since they are more often faced with unemployment and low-paid jobs.

More recently, there has been a growing theoretical interest in upgrading economic and social drivers to include personal-level factors such as values, beliefs and expectations, temporalities, and personal characteristics as predictors of the decision to emigrate (Carling and Collins, 2018). Some recent studies have indicated that personal-level factors, such as risk attitude and sensation seeking, expecting adaptation difficulties, and self-efficacy, are important predictors of future outmigration (Bauernschuster et al., 2014; Goldbach and Schlüter, 2018; Hoppe and Fujishiro, 2015; Jasinskaja-Lahti and Yijälä, 2011; van Dalen and Henkens, 2013; Williams et al., 2018). Goldbach and Schlüter (2018) found that migration is a highly selective process based on individual risk and time preferences. Out-migrants are significantly less risk-averse and have lower time preferences (greater patience, willingness to wait) than non-migrants. Similarly, the findings of Bauernschuster and his associates (2014) indicated that skilled and risk-loving people are more mobile over longer distances.

CONTEXT OF THE STUDY

The case of Serbia is important for exploring this topic because of the specific, broader aspects of youth living situations that reflect the interaction of unique dynamics of local time-place factors and factors of unfolding globalisation. Adolescents who participated in our study were born, grew up and created their vision of their personal future in the context of the abovementioned interaction.

Situated in Southern Europe and in close proximity to the Eastern European cultural and economic sphere, Serbia has undergone a long and complex process of post-socialist transformation. This period has been marked by economic and political restructuring, as well as value transformations that have given rise to a context depicted as "a chronic social crisis" (Tomanović, 2021: 19). As a consequence of both global and local economic crises, eco-

nomic inequalities in Serbia have increased while social mobility has decreased (Lazić and Cvejić, 2004; Lazić, 2011). According to Eurostat data, Serbia ranks among the European countries with the highest levels of material and social inequalities.¹ Negative trends in the labour market, including employment and unemployment rates and a high rate of informality, affect the chances of young people to achieve economic independence, secure their first jobs, and improve their skills. In the period following the year 2000, when the economic and political situation became more stable, young people, being the most highly educated segment of Serbian population, developed high expectations regarding the improvement of their socio-economic position. However, they instead found themselves facing a lack of opportunities to obtain decent employment and achieve autonomous living, leading to feelings akin to those of being losers (Mojić, 2012). At the same time, they were exposed to discrepancies in historical times: on one side, there was a slow process of local social transformations, while on the other, rapid changes were occurring in the global world. One such global change was the eastward enlargement of the European Union, stimulating expectations among young people and, more than before, enabling access to labour markets (Favell, 2008). This situation certainly influences activities and decisions at the micro level, particularly the desires and decisions of young people to out-migrate.

There is no exact data on emigration in this period, but the estimates suggest that, during the 1990s, between 4.5% and 15% of the highly-educated elite moved from the country (Grečić, 2003). In the subsequent decades, this trend continued and even more people left the country (Grečić, 2016), especially the young population and highly educated individuals (Pavlov, 2009; Bolčić, 2003). Although after the year 2000, the economic and political situation stabilised, more than half of young people in Serbia expressed emigration intentions (Mojić, 2012; Tomanović and Stanojević, 2015). In the study by Mojić and Petrović (2013), which included young people aged 19 to 35, more than half of the respondents (53.6%) expressed the willingness to move to another country, although 60% of them did not take any action to implement their goals and ambitions. One-fourth had a conversation with their friends and less than 10% had contacts with potential employers. Results of another research also confirm that young people have a "passive attitude toward emigration" (Jarić and Živadinović, 2012: 217). Interpreting

Retrieved on 28 January 2019 from https://ec.europa.eu/eurostat/data/database?node_ code=ilc_di12.

the results of a few studies from the perspective of the wider economic and social context of post-socialist transformation and the de-legitimisation of the social order, paralleled with the disintegration of youth in the social system, Tomanović (2021: 22) concluded that young people do not have a "voice strategy" (political and civil activism) but they are rather oriented toward an "exit strategy" (emigrating) and creating their lives somewhere else.

Similar trends have been identified in other countries of South Eastern Europe, where a large number of young people, often highly educated, express intentions to immigrate to Western countries (Taleski and Hoppe, 2015). The effects of such a negative trend pose a significant challenge for policy- and decision-makers in these countries.

PROBLEM AND AIM OF THE RESEARCH

The above-mentioned data indicate that, although a relatively large number of young people express a desire to leave their homeland, a much smaller number take concrete action in that direction. This discrepancy makes the problem/question – who really wants to migrate and why – a continually relevant issue for both creators of youth policy and researchers. In that regard, our research aimed to investigate the extent to which the aspirational future mobility (pure intention and personal agency) of young people reflects both socio-economic determinants in the actual environment and more basic and general personal characteristics, such as specificities of present and future time perspective. More specifically, our research introduces a new individual difference variable, time perspective, as an important predictor of the potential future mobility of young people. We postulate that the predictive potential of migration intentions in adolescents is best seen as an expression of both socio-economic determinants in the actual environment and more basic and general human characteristics, such as personal agency and specificities of present and future time perspective.

METHOD

Respondents and procedure

The study was conducted on a representative sample of 1973 students from 94 schools, with a mean age of 18.84 years (SD=0.46). In total, 52.4% of respondents were girls. Respondents in our study were distributed across four

geographical regions: Vojvodina (24.5%), Belgrade (19.9%), Central Serbia (33.1%), and South Serbia (22.6%). Most of our respondents live in cities with populations ranging from 50,000 to 200,000 residents (19%) while the smallest proportion comes from cities with populations between 200,000 and 1,000,000 residents (6%) or from villages with fewer than 500 residents (7%). In the capital city of Belgrade, 14% of respondents reside. Students were enrolled in the final grade of three types of educational programmes/ schools - gymnasium (four-year), professional (four-year), and vocational schools (three-year). Only one class per school was examined and out of the total number of respondents, 67.4% were enrolled in professional schools, 11.7% in vocational schools and 20.9% were enrolled in gymnasiums.² While professional and vocational schools offer specific qualifications and prepare students for employment in the labour market, gymnasiums provide students with theoretical knowledge, preparing them more for further education than for immediate participation in the labour market (Strategija razvoja obrazovanja u Srbiji..., 2012).

The comprehensive questionnaire related to adolescents' envisioning of their personal future in various life domains was administered at the beginning of the 2015/2016 school year. The questionnaire was administered collectively in one school class. Initially, respondents received instructions to think about their lives in the next 10–15 years (imagining themselves at the age of 27–32), and then, with that in mind, to answer the questions.

Measures

The measures used in this study cover sections referring to socio-demographic characteristics, motivational incentives (i.e., factors that motivate potential future emigration), emigration intentions, features of potential migrants' agency, and time perspective (Zimbardo Time Perspective Inventory, ZTPI, Zimbardo and Boyd, 1999).

Socio-demographic characteristics

Socio-demographic characteristics are commonly considered when studying youth emigration intention. Besides age and sex, we used the students' father's and mother's obtained level of education (ranging from elementary

² Regarding the number of years of upper secondary schooling, the majority of respondents attended four-year schools, including gymnasiums and professional schools (88.3%), while the remaining attended three-year schools – vocational schools (11.7%).

education³ to vocational training, secondary school, or university-level education). Students' educational success, represented by their grade point average (GPA) in the last school year (ranging from 1 to 5), and their expressed aspirations for further education at the university level, were also included. We also took into consideration the geographical location of their actual living region, since it denotes some socio-economic and socio-cultural characteristics (conditions/opportunities; high-/low-income regions of Serbia; experience of mobility; discourses about what constitutes a desirable city size).

Motivational incentives

For the assessment of factors adolescents perceive as incentives/motives important for a decision regarding the future state of residence (Serbia or abroad), we used an 11-item scale. Answers were provided on a five-point scale, ranging from "not at all" (1), to "to a great extent" (5). The scale included items related to job possibilities, proximity of parents and other family members, closeness of broader family, future romantic partner, possibilities of maintaining friendships, economic and political stability of the future state of living, knowledge of the language; possibilities to exert influence on social changes in Serbia; level of state organisation and good living conditions; geography and climate; and possibilities of social integration.

We applied principal component analysis to detect possible higher-order dimensions covering individual items. The analysis revealed three latent dimensions (components) explaining 64.18% of the total variance. These dimensions were subsequently rotated using the Varimax method to reveal a clearer component structure for interpretation. Based on the items included in each latent dimension (component structure), we interpreted these dimensions as social, socio-political and economy-related incentives (see Appendix 1).

Emigration intention

In line with existing theorising (Carling and Collins, 2018; van Dalen and Henkens, 2013; Nurmi, 1991), we operationalised *emigration intentions* as the beliefs of individuals that emigration is preferable to non-migration and that emigration is an important goal with a certain probability of realisation

³ In Serbia, elementary education includes compulsory primary and lower secondary education within a single structure, lasting a total of eight years (e.g. https://eurydice.eacea.ec.europa.eu/national-education-systems/serbia/single-structure-primary-and-lower-secondary-education).

within a 10-year time frame. In this study, individuals' emigration intentions were determined by their responses to the question: *Do you imagine your future more in Serbia or abroad*? (answers were provided on a 7-point scale; "circle -3 if you imagine yourself exclusively abroad", "circle +3 if you imagine yourself exclusively abroad", "circle +3 if you imagine yourself exclusively in Serbia", or "circle zero if you are undecided").

Potential migrants' agency (also referred to as migrants' agency)

Potential migrants' agency or *migrants' agency*⁴ is considered at an individual level as *his/her activities toward emigration*. The term encompasses cognitive and evaluative self-engagement activities based on intentionality and fore-thought regarding potential future actions likely to produce desired outmigration. Individual's activities toward outmigration were measured by an 8-item scale (answers were provided as "Yes" or "No"). The scale included items that relate to thinking, information-seeking on different levels of so-cial networks and direct planning – to engage those with access to resources or expertise.

In the same manner, we applied principal component analysis to items intended to measure potential migrants' agency i.e. *his/her activities toward emigration*. The analysis revealed one latent dimension (component) explaining 33.48% of the variance, indicating that it is possible to calculate one composite score of *potential migrants' agency* (Appendix 1).

Time perspective

In line with the focus on adolescents' visions of a personal future, we used a modified version of the original ZTPI (Zimbardo Time Perspective Inventory, Zimbardo and Boyd, 1999), incorporating only the present and future time frames. Specifically, we employed a three-scale form relating to the Present-Hedonistic, Present-Fatalistic, and Future scales, with the Past-Negative and Past-Positive scales excluded. To measure general patterns of orientation toward the present (involving hedonistic⁵ and fatalistic⁶ expressions) and the future⁷ (involving goal setting and planning), we used 37 items from the original 56-item ZTPI scale. Respondents rated each item on

⁴ These two terms are used throughout this article synonymously as generic-level terms.

⁵ Present-Hedonistic scale – item examples: "I often follow my heart more than my head"; "Taking risks keeps my life from becoming boring."

⁶ Present-Fatalistic scale – item examples: "My life path is controlled by forces I cannot influence"; "Luck frequently pays off better than work."

⁷ Future scale – item examples: "I complete projects on time by making steady progress" and the negative form of the same question "I take each day as it is rather than plan it out."

a scale from 1 ("I do not agree at all") to 5 ("I totally agree"), indicating the degree to which they agreed with each of the 37 items.

Statistical analyses

We used frequencies and percentages to describe categorical variables or means and standard deviations to describe numerical characteristics and scores. The validity of composite scores was tested through principal component analysis, while Cronbach's alpha coefficient was used as a measure of their reliability. The predictive potential of socio-demographic characteristics, motivational incentives, and time perspectives for the detection of emigration intention and migrants' agency was tested through hierarchical regression analyses. Multicollinearity was assessed using tolerance and VIF coefficients. Since missing values were below 1% for most variables, we excluded those participants from the multivariate analyses.

RESULTS

Socio-demographic characteristics

The majority of our students came from families where parents had finished secondary school or gymnasium. Generally, our respondents expressed high educational aspirations. Additionally, almost two-fifths of respondents expressed emigration intentions as exclusive or certain intention (table 1).

N=1973		Frequency	Percent
	Male	935	47.4
Gender	Female	1030	52.2
	Missing	8	.4
	Gymnasium	412	20.9
Type of school	Professional school	1557	78.9
	Missing	4	.2
	Vojvodina	482	24.4
	Belgrade	391	19.8
Region	Central Serbia	651	33.0
	Southern Serbia	445	22.6
	Missing	4	.2

Table 1.Descriptive statistics for socio-demographic characteristics –
frequency and percentage for categorical variables, mean and
standard deviation for numerical ones

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N=1973		Frequency	Percent
	Below elementary school	24	1.2
	Elementary school	193	9.8
	Secondary education	1140	57.8
lighest education	College – professional higher education	224	11.4
of the mother	Higher education – University bachelor	167	8.5
	University postgraduate (master's or PhD)	100	5.1
	Missing	125	6.3
	Below elementary school	15	.8
	Elementary school	181	9.2
	Secondary education	1092	55.3
lighest education	College – professional higher education	264	13.4
of the father	Higher education – University bachelor	173	8.8
	University postgraduate (master's or PhD)	101	5.1
	Missing	147	7.5
	Secondary education – professional school	258	13.1
	Secondary education – gymnasium	12	.6
lighest expected	College – professional higher education	232	11.8
evel of formal	Higher education – University bachelor	676	34.3
ducation (student)	Master studies	402	20.4
	Doctoral studies	179	9.1
	Don't know	187	9.5
	Missing	27	1.4
	Abroad	406	20.6
	Probably abroad	197	10.0
	Less likely abroad	125	6.3
Do students see	Don't know	448	22.7
heir future in Serbia or abroad?	Less likely in Serbia	135	6.8
	Probably in Serbia	220	11.2
	In Serbia	394	20.0
	Missing	48	2.4
		Mean	SD
Grade point average	(GPA)	3.89	0.79
Age		18.84	0.46

Based on the results of the principal component analysis, we calculated composite scores for all extracted components: social, socio-political and economy-related motivational incentives and migrants' agency. For all these scores, we determined reliability (Cronbach's alpha) and basic descriptive statistics, including means and standard deviations (table 2). Reliability and basic descriptive statistics were also determined for three subscales of Zimbardo's *Time Perspective Inventory*: present hedonistic, future and present fatalistic. As previously mentioned, for emigration intention, we used a single-item measure, and accordingly, reliability was not calculated. It is notable that most of the calculated scores show satisfactory reliability (above 0.7), while migrants' agency is slightly below that (0.663).

N=1430	Mean	SD	Items	Cronbach's α
Motivational incentives: social	3.11	0.90	4	.792
Motivational incentives: socio-political	2.99	0.91	4	.749
Motivational incentives: economy	3.79	0.85	4	.734
Emigration intention	4.01	2.18	1	-
Potential migrants' agency	3.85	1.94	7	.663
Present hedonistic	3.57	0.58	15	.817
Future	3.46	0.55	13	.711
Present fatalistic	2.94	.72	9	.776

Table 2. Reliability and basic descriptive statistics for calculated scores

Note: Motivational incentive items that have similar and high loadings on two components were included in both scores. Accordingly, the sum of items from motivational incentives scores is higher than the total number of items.

Predictive potential of motivational incentives and time perspective for emigration intention and potential migrants' agency

We tested the predictive potential of socio-demographic characteristics (age, sex, region, size of a place of residence, grade point average (GPA), parents' education and own educational aspirations), motivational incentives (social, socio-political and economy-related) and time perspectives (present hedonistic, present fatalistic, and future) for the detection of emigration intention and migrants' agency. In other words, we planned to test the incremental validity of motivational incentives and time perspectives for the prediction of emigration intention and migrants' agency. To achieve this, we performed two

hierarchical regression analyses, with emigration intention and potential migrants' agency as the two criterion variables. Both analyses included the same three steps:

1. In the first step (Model 1), we added only socio-demographic variables as predictors.

2. In the second step (Model 2), besides socio-demographic variables, we added motivational incentives as new predictors;

3. In the third step (Model 3), besides socio-demographic characteristics and motivational incentives, we added time perspectives as new predictors.

Emigration intention

Hierarchical regression analyses showed that Model 1 does not reach statistical significance, meaning that emigration intention cannot be predicted solely based on socio-demographic characteristics (table 3). Although regression coefficients suggest that the education of the mother might appear as a significant predictor, since the overall model did not achieve significance, and the mother's education level did not attain statistical significance in the subsequent models, we can conclude that none of the socio-demographic characteristics appears as a significant predictor of emigration intention (table A3 in Appendix 2).

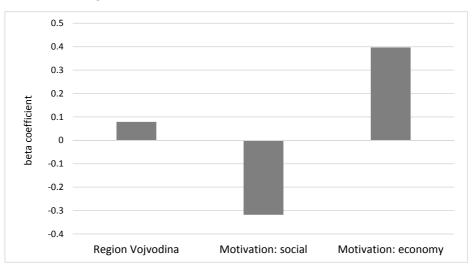
However, Model 2, which contains motivational incentives in addition to socio-demographic characteristics, did reach statistical significance and it demonstrated a statistically significant increase in emigration intention prediction. This result clearly shows that incorporating motivational incentives into the model significantly improves the prediction of emigration intention by 17.1%, after controlling for socio-demographic characteristics (table 3). Regression coefficients show that only two additional predictors were statistically significant (table A3 in Appendix 2). Specifically, higher social motivational incentives were associated with a less pronounced emigration intention (negative beta coefficient and correlation), while higher economyrelated motivational incentives were linked to a more pronounced emigration intention (positive beta coefficient and correlation). Socio-political motivational incentives did not have a statistically significant effect on emigration intention. Additionally, in the second model, the Vojvodina region appeared as a significant predictor (respondents from this region tend to show a slightly higher emigration intention), although it was not significant in the first model.

Model 3, which includes time perspectives in addition to motivational incentives and socio-demographic characteristics, did not exhibit a statistically significant increase in emigration intention prediction. This result shows that adding time perspectives to the model does not significantly improve the prediction of emigration intention, after controlling for sociodemographic characteristics and motivational incentives (table 3). Regression coefficients show that the same predictors remain significant as in the previous model: social and economy-related motivational incentives and the Vojvodina region (figure 1).

Table 3.Significance of emigration intention prediction in three
hierarchical models

Model	R	R ²	df	F	р	R ² change	F Change	df1	df2	p (F Change)
1	.098	.010	10; 1403	1.359	.194	.010	1.359	10	1403	.194
2	.425	.181	13; 1400	23.788	.000	.171	97.615	3	1400	.000
3	.428	.183	16; 1397	19.567	.000	.002	1.224	3	1397	.300

Figure 1. Standardised regression coefficients for significant predictors of emigration intention from the Model 3



Finally, we can conclude that motivational incentives, social and economy-related, are the most important predictors of emigration intention. Increased social incentives reduce the emigration intention, while increased economy-related incentives tend to increase the emigration intention. Socio-demographic variables did not show significant effects, except the Vojvodina region, which slightly increases emigration intentions, but only when motivational incentives are taken into account.

Potential migrants' agency

The same procedure was applied (hierarchical regression analysis: Model 1, Model 2, and Model 3) to test whether it is possible to predict the agency of potential migrants based on three groups of predictors: socio-demographic characteristics, motivational incentives, and time perspective.

The analysis showed that Model 1 does not reach statistical significance, meaning that migrants' agency cannot be predicted based only on sociodemographic characteristics (table 4). Although regression coefficients suggest that the Vojvodina region might appear as a significant predictor, since the whole model did not achieve significance, and the Vojvodina region did not continue to reach statistical significance in the following models, we can conclude that none of the socio-demographic characteristics appears as a significant predictor of migrants' agency (table A4 in Appendix 2).

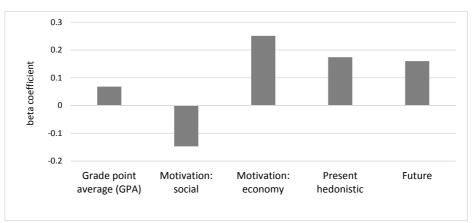
However, Model 2, which includes motivational incentives in addition to socio-demographic characteristics, did reach statistical significance, and it demonstrated a statistically significant increase in migrants' agency prediction. This result clearly shows that adding motivational incentives to the model significantly improves the prediction of migrants' agency by 10.7%, after controlling for socio-demographic characteristics (table 4). Regression coefficients show that all three additional predictors were statistically significant (table A4 in Appendix 2). Higher social motivational incentives were associated with a less pronounced migrants' agency (negative beta coefficient and correlation), while higher socio-political and economy-related motivational incentives were linked to a more pronounced migrants' agency (positive beta coefficient and correlation). Additionally, in this model, the grade point average appeared as a significant predictor (respondents with lower grade point averages tend to show a slightly higher migrants' agency), although it was not significant in the first model.

Model 3, which includes time perspectives in addition to motivational incentives and socio-demographic characteristics, did reach statistical significance, and it demonstrated a statistically significant increase in migrants' agency prediction. This result shows that adding time perspectives to the model significantly improves the prediction of migrants' agency by 5.5%, after controlling for socio-demographic characteristics and motivational incentives (table 4). Regression coefficients show that the *present hedonistic* and *future* dimensions of time perspectives appear as statistically significant predictors, indicating that more intense time perspectives (hedonistic and future) lead to higher migrants' agency. In addition, in this model, socio-political motivational incentives did not reach statistical significance, while the other two motivational incentives and the grade point average remained statically significant predictors of migrants' agency (table A4 in Appendix 2). Figure 2 presents standardised regression coefficients for significant predictors of emigration intention and potential migrants' agency from the third model.

Table 4.Significance of prediction for potential migrants' agency in three
hierarchical models

Model	R	R2	df	F	р	R2 change	F Change	df1	df2	p (F Change)
1	.090	.008	10; 1419	1.149	.322	.008	1.149	10	1419	.322
2	.338	.115	13; 1416	14.091	.000	.107	56.782	3	1416	.000
3	.411	.169	16; 1413	17.999	.000	.055	31.043	3	1413	.000

Figure 2. Standardised regression coefficients for significant predictors of potential migrants' agency from the Model 3



Finally, we can conclude that economy-related motivational incentives are the most important predictors of migrants' agency (highest beta coefficient), followed by present hedonistic and future time perspectives, social motivational incentives and grade point average. Increased social incentives reduce migrants' agency, while increased economy-related incentives, present hedonistic, and future-oriented time perspectives tend to increase it. Socio-demographic variables did not show significant effects, except grade point average, which slightly decreases migrants' agency, but only when motivational incentives and time perspectives are taken into account.

DISCUSSION AND CONCLUSIONS

In accordance with the chosen theoretical framework (Bandura's conceptualisations, 2001), we approached data analysis assuming that emigration intentions (pure intention) and potential migrants' agency (what the person does in the name of intention) are two different but linked features important for the realisation of future behaviours. In that regard, we examined the extent to which each of the two features can be predicted with three different groups of variables: socio-demographic variables, motivational incentives and time perspectives. Particularly, we aimed to verify whether improvements or increases in the predictive ability to assess emigration intentions and potential migrant's agency can be achieved with the inclusion of time perspective as a person-level factor alongside already existing sociodemographic and motivational incentives. To that end, two hierarchical regression analyses were conducted with emigration intentions and potential migrants' agency as criterion variables.

The most important findings indicate that motivational incentives are important correlates of both emigration intention and migrants' agency (Model 2). More precisely, economy-related motivational incentives tend to increase both emigration intention and migrants' agency, while social motivational incentives tend to reduce both emigration intention and migrants' agency - a finding reported by others (Frieze et al., 2004; Makni, 2011; Tomanović and Stanojević, 2015). On the other hand, time perspectives are not significantly related to emigration intention, but they do appear as significant predictors of migrants' agency (Model 3). Present hedonistic and future time perspective orientation tends to increase migrants' agency, aligning with previous research findings that highlight potential migrants' risk-taking attitudes and time preferences in terms of lack of patience and unwillingness to wait (Goldbach and Schlüter, 2018). In addition, the result just mentioned (future time perspective) in a specific way upgrades existing findings, emphasising the potential migrant's focus on goal setting and commitment to achieving the goal. It is also important to note

that the results of our research show that socio-demographic characteristics alone did not appear as significant predictors of emigration intention and migrants' agency (Model 1). However, when considered in connection with motivational incentives (Model 2, Model 3), the region shows some weak effects on emigration intention (Vojvodina region slightly increases it). There is also an effect of grade point average on migrants' agency (a higher GPA leads to lower agency). The results for Vojvodina can be explained by the fact that this multicultural and multinational region has a high history of migration experiences, including both emigration and immigration. Therefore, the change of residence is still a common occurrence in everyday life experience.

The contribution of our study relates to theoretical, empirical and policymaking issues. On the theoretical level, we illustrated the importance of two topics. One is an interdisciplinary designed approach, fruitful in investigating this complex theme as it provides the opportunity to empirically connect some widely recognised socio-demographic (macro level), motivational (macro to micro level) and personal-level factors influencing youth emigration intentions. In that manner, we offered a more differentiated picture of factors in the background of youth emigration intentions and migrants' agency. The other theoretically important topic relates to the need for differentiated consideration of the factors that jointly and separately determine intentions and personal agency relevant to particular intentions in a variety of behavioural domains. Our findings provide an initial point for hypothesising that personal characteristics may be more related to what the person does in the name of emigration intention than to his/her "pure" intention to live abroad in the future.

The results are fruitful for designing appropriate youth policies. Currently, the development of appropriate youth policies regarding the emigration intentions of young people in Serbia is shaped by two groups of factors. One relates to census data on a modest share of the young population (15–30 years old) in the total population and research data about the expressed emigration intentions of young people in Serbia. The other relates to a change in view and valorisation of international emigration, reflecting the influences of scientific and policy literature. Specifically, our findings reveal that 20.6% of respondents imagine themselves exclusively abroad, while 16.3% imagine themselves abroad to a certain extent. It is important to state that, according to the 2011 census data, the young population (15–30 years old) in Serbia encompasses 18.4% of the total population, highlighting the long-

term trend of an ageing population (Bubalo-Živković and Lukić, 2015), influenced by a low natality rate and the emigration processes. Moreover, the first data from the 2022 census show that the number of inhabitants has decreased, assuming that the rate of the young population has also shrunk.⁸ On the other side, in the context of new theoretical and policy insights on emigration processes, migration flows have become more individualised, depending less on social surroundings (Saar, 2016). The previously prevailing assumptions were that the emigration of young, highly educated and talented individuals from developing countries is a negative phenomenon labelled as the brain drain (Avramović, 2012; Mitrović, 2020). However, today researchers are stating that the emigration of the youth is still challenging, but it can also lead to positive effects for both sending and receiving countries (Pavlović, Perišić and Šantić, 2021; Rašević, 2016; Grečić, 2019; Polovina, 2011; Radonjić and Bobić, 2021). For example, economic and human resources, as well as the experience and knowledge gained abroad, can be transferred to the country of origin (Grečić, 2019). For this reason, it is stressed that decision-makers in sending countries should carefully and wisely manage and monitor emigration processes. It is crucial to track and thoroughly investigate the existing and potential emigrant population in order to understand their socio-economic characteristics, motivational incentives, and visions of their personal future. These factors incline and inspire them to make life plans and decisions about their future. In that manner, we believe that our contribution to this notable topic, which shapes our contemporary world, stresses the importance of acknowledging and becoming familiar with the youth's personal strivings and how the macro sphere intervenes and influences individuals' plans and endeavours. The results of our research indicate that policymakers should approach the problems of youth emigration by considering the young population's vision of the future and the perception of the lifestyle that attracts contemporary young generations.

Finally, certain limitations of this study need to be mentioned. First of all, there is a risk of over-interpreting obtained findings related to the chosen method of analysis i.e. hierarchical multiple regressions. Since this method is grounded on a correlational design/technique and incremental validity, it focuses on marginal improvements to what already exists (the models are compared based on added variables). In addition, the generalisation of the results is, to some extent, limited by the specificity of the developmental

⁸ See: https://publikacije.stat.gov.rs/G2022/HtmlL/G20221350.html.

and life stages of our study participants. Specifically, adolescents who participated in our study expressed their emigration intentions and migrants' agency while envisioning their future in the period of transition to adulthood, i.e. in the life period when perceptions of time and opportunities in local environment/place of residence versus places abroad, as well as pursuing their own goals and interests, are more important than in other life stages. However, we believe that the results of our study can be stimulating for further research into the emigration intentions and behaviours of young people.

REFERENCES

- Ajzen, I. (2005). *Attitudes, Personality and Behavior* (2nd edition). London: Open University Press.
- Avramović, Z. (2012). "Brain drain" from Serbia: One face of globalization of education?, *Sociološki pregled*, 46 (2): 189–202. https://doi.org/10.5937/socpreg1202189a
- Bandura, A. (2001). Social cognitive theory: An Agentic Perspective, Annual Review of Psychology, 52 (1): 1–26. https://doi.org/10.1146/annurev.psych.52.1.1
- Bandura, A., Caprara, G. V., Barbaranelli, C., Gerbino, M. and Pastorelli, C. (2003). Role of Affective Self-Regulatory Efficacy in Diverse Spheres of Psychosocial Functioning, *Child Development*, 74 (3): 769–782. https://doi.org/10.1111/1467-8624.00567
- Bauernschuster, S., Falck, O., Heblich, S., Suedekum, J. and Lameli, A. (2014). Why are educated and risk-loving persons more mobile across regions?, *Journal of Economic Behavior & Organization*, 98: 56–69. https://doi.org/10.1016/j.jebo.2013.12.011
- Bobić, M. and Babović, M. (2013). Međunarodne migracije u Srbiji: stanje i politike, *Sociologija*, 55 (2): 209–228. https://doi.org/10.2298/soc1302209b
- Bobić, M. and Vesković-Anđelković, M. (2016). Profile and statements of potential migrants from Serbia, *Glasnik Etnografskog instituta SANU*, 64 (3): 469–491. https://doi. org/10.2298/gei151019003b
- Bolčić, S. (2003). Blocked transition and post-socialist transformation: Serbia in the nineties, *Review of Sociology*, 9 (2): 27–49. https://doi.org/10.1556/revsoc.9.2003.2.2
- Braun, M. and Arsene, C. (2009). The Demographics of Movers and Stayers in the European Union, in: E. Recchi and A. Favell (eds). *Pioneers of European Integration: Citizenship and Mobility in the EU*. Cheltenham: Edward Elgar, 26–51. https://doi.org/10.4337/9781849802314.00007
- Bubalo-Živković, M. and Lukić, T. (2015). *Popis Stanovništva, domaćinstava i stanova* 2011. *u Repulici Srbiji Mladi u Srbiji početkom 21. veka*. Beograd: Republički zavod za statistiku.
- Cairns, D., Growiec, K. and Smyth, J. (2013). Leaving Northern Ireland: Youth Mobility Field, Habitus and Recession among Undergraduates in Belfast, *British Journal of Sociology of Education*, 34 (4): 544–562. https://doi.org/10.1080/01425692.2012.723869
- Carling, J. (2002). Migration in the age of involuntary immobility: Theoretical reflections and Cape Verdean experiences, *Journal of Ethnic and Migration Studies*, 28 (1): 5–42. https://doi.org/10.1080/13691830120103912

- Carling, J. and Collins, F. (2018). Aspiration, desire and drivers of migration, *Journal of Ethnic and Migration Studies*, 44 (6): 909–926. https://doi.org/10.1080/136918 3X.2017.1384134
- Castels, S. (2010). Understanding Global Migration: A Social Transformation Perspective, *Journal of Ethnic and Migration Studies*, 36 (10): 1565–1586. https://doi.org/10.108 0/1369183x.2010.489381
- Creighton, M. (2013). The Role of Aspirations in Domestic and International Migration, Social Science Journal, 50 (1): 79–88. https://doi.org/10.1016/j.soscij.2012.07.006
- De Jong, G. (2000). Expectations, Gender, and Norms in Migration Decision-making, *Population Studies*, 54 (3): 307–319. https://doi.org/10.1080/713779089
- Favell, A. (2008). The New Face of East West Migration in Europe, *Journal of Ethnic and Migration Studies*, 34 (5): 701–716. https://doi.org/10.1080/13691830802105947
- Feliciano, C. (2005). Educational Selectivity in U.S. Immigration: How do Immigrants Compare to Those Left Behind?, *Demography*, 42 (1): 131–152. https://doi.org/10.1353/ dem.2005.0001
- Frieze, I., Bonova, B., Šarlija, N., Horvat, J., Ferligoj, A., Kogovšek, T., Miluska, J., Popova, L., Korobanova, J., Sukhareva, N., Erokhina, L. and Jaroševa, E. (2004). Psychological Differences in Stayers and Leavers: Emigration Desires In Central and Eastern European University Students, *European Psychologist*, 9 (1): 15–23. https://doi. org/10.1027/1016-9040.9.1.15
- Gherheş, V., Dragomir, G. M. and Cernicova-Buca, M. (2020). Migration intentions of Romanian engineering students, *Sustainability*, 12 (12): 4846. https://doi.org/10.3390/ su12124846
- Goldbach, C. and Schlüter, A. (2018). Risk aversion, time preferences, and out-migration. Experimental evidence from Ghana and Indonesia, *Journal of Economic Behavior* & Organization, 150: 132–148. https://doi.org/10.1016/j.jebo.2018.04.013
- Grečić, V. (2019). The importance of social remittances for the economy and society of a less developed country, *The Review of International Affairs*, 70 (1173): 5–23.
- Grečić, V. (2016). How can the Serbian diaspora contribute much more to the development at home country?, *Glasnik Srpskog geografskog drustva*, 96 (2): 65–82. https://doi. org/10.2298/gsgd1602063g
- Grečić, V. (2003). Stable Population Movements as a Factor of Economic Stabilization and Integration of the Western Balkans into the European Union. Budapest: Policy Documentation Center.
- Gril, A., Polovina, N., Ćirović, I., Autor, S. and Radulović, M. (2018). Value Changes in Adolescents' Anticipation of Possible Career Selves in Slovenia and Serbia, in: N. Lebedeva, R. Dimitrova, and J. Berry (eds). *Changing Values and Identities in the Post-Communist World*. Cham: Springer, 383–403.
- Hagen-Zanker, J. (2008). Why do people migrate? A review of the theoretical literature, SSRN Electronic Journal. https://doi.org/10.2139/ssrn.1105657
- Heckert, J. (2015). New perspective on youth migration: Motives and family investment patterns, *Demographic Research*, 33: 765–800. https://doi.org/10.4054/demres.2015.33.27
- Hoppe, A. and Fujishiro, K. (2015). Anticipated Job Benefits, Career Aspiration, and Generalized Self-efficacy as Predictors for Migration Decision-Making, *International Journal of Intercultural Relations*, 47: 13–27. https://doi.org/10.1016/j.ijintrel.2015.03.025

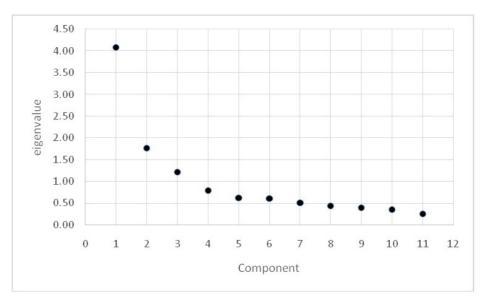
- Ivlevs, A. and King, R. (2012). Does More Schooling Make You Run for the Border? Evidence from Post-Independence Kosovo, *Journal of Development Studies*, 48 (8): 1108– 1120. https://doi.org/10.1080/00220388.2012.658377
- Jarić, I. and Živadinović, I. (2012). Otići ili ostati: identiteti mladih i orijentacija ka iseljenju, in: S. Tomanović, D. Stanojević, I. Jarić, D. Mojić, S. Dragišić Labaš, M. Ljubičić and I. Živadinović (eds). *Mladi naša sadašnjost. Istraživanje socijalnih biografija mladih u Srbiji*. Beograd: Čigoja štampa – Institut za sociološka istraživanja FF, 211–220.
- Jasinskaja-Lahti, I. and Yijälä, A. (2011). The model of pre-acculturative stress A premigration study of potential migrants from Russia to Finland, *International Journal* of Intercultural Relations, 35 (4): 499–510. https://doi.org/10.1016/j.ijintrel.2010.11.003
- Lazić, M. (2011). Postsocijalistička transformacija i restratifikacija u Srbiji, *Politička misao*, 48 (3): 123–144.
- Lazić, M. and Cvejić, S. (2004). Promene društvene strukture u Srbiji slučaj blokirane postsocijalističke transformacije, in: A. Milić (ed.). Društvena transformacija i strategije društvenih grupa: svakodnevica Srbije na početku trećeg milenijuma. Beograd: Institut za sociološka istraživanja Filozofskog fakulteta Univerziteta u Beogradu, 39–70.
- Makni, V. (2011). Student Migration Potential: The Case of Bulgaria, South-Eastern Europe Journal of Economics, 2: 187–206.
- Melzer, S. M. (2013). Reconsidering the Effect of Education on East–West Migration in Germany, European Sociological Review, 29 (2): 210–228. https://doi.org/10.1093/esr/ jcr056
- Migali, S., Natale, F., Tintori, G., Kalantaryan, S., Grubanov-Boskovic, S., Scipioni, M., Farinosi, F., Cattaneo, C., Benandi, B., Follador, M., Bidoglio, G., McMahon, S. and Barbas, T. (2018). *International Migration Drivers*. Luxembourg: Publications Office of the European Union.
- Mitrović, D. (2020). Stavovi studentske populacije srpske intelektualne dijaspore o uzrocima i posledicama fenomena "odliva mozgova" iz Srbije, Sociološki pregled, 54 (1): 104–125. https://doi.org/10.5937/socpreg54-25916
- Mojić, D. and Petrović, I. (2013). Mladi i legitimnost društvenog poretka u Srbiji razmišljanja i delanja u pravcu emigracije, *Sociologija*, 55 (2): 229–244. https://doi. org/10.2298/soc1302229m
- Mojić, D. (2012). Means of Getting Ahead in Post-socialist Serbia: Perceptions and Preferences of Young People, *Sociologija*, 54 (2): 303–314. https://doi.org/10.2298/ soc1202303m
- Nurmi, J. E. (1991). How do adolescents see their future? A review of the development of future orientation and planning, *Developmental Review*, 11 (1): 1–59. https://doi. org/10.1016/0273-2297(91)90002-6
- Nuhoglu Soysal, Y. and Cebolla-Boado, H. (2020). Observing the unobservable: Migrant selectivity and agentic individuality among higher education students in China and Europe, *Frontiers in Sociology*, 5, 9. https://doi.org/10.3389/fsoc.2020.00009
- Pavlov, T. (2009). Migration Potential of Serbia. Belgrade: Group 484.
- Pavlović, D., Perišić, N. and Šantić, D. (2021). Migracije u nacionalnom kontekstu mapiranje istraživačkih izazova, *Sociologija*, 63 (4): 669–687. https://doi.org/10.2298/ soc2104669p
- Pešić, J. (2013). Rodna perspektiva u proučavanju migracija, *Sociologija*, 55 (2): 317–332. https://doi.org/10.2298/soc1302317p

- Poleti, D. (2013). Savremene radne migracije u evropskom kontekstu-ekonomski i politički aspekti, *Sociologija*, 55 (2): 333–348. https://doi.org/10.2298/soc1302333p
- Polovina, N. (2011). Are scholarships and mobility programmes sources of brain gain or brain drain: The case of Serbia, in: N. Polovina. and T. Pavlov (eds). *Mobility and Emigration of Professionals: Personal and Social Gains and Losses*. Belgrade: Group 484 – Center for migration and intercultural studies – Institute for Educational Research, 164–181.
- Polovina, N., Gundogan, D. and Radulović, M. (2021). Visions of Personal Future among Adolescents with Different Orientations toward Education Mobility: The Case of Serbia, *Revija za sociologiju*, 51 (1): 21–50. https://doi.org/10.5613/rzs.51.1.0226
- Polovina, N. and Jošić, S. (2018). Vision of Personal Future as a Tool for Supporting Adolescents' Transition to Adulthood, *Managing Global Transition*, 17 (3): 239–258. https:// doi.org/10.26493/1854-6935.17.239-258
- Radonjić, O. and Bobić, M. (2021). Brain Drain Losses A Case Study of Serbia, International Migration, 59 (1): 5–20. https://doi.org/10.1111/imig.12710
- Rašević, M. (2016). Migracije u funkciji razvoja: mogućnost ili mit, in: V. Vukotić, D. Šuković, M. Rašević, S. Maksimović and V. Goati (eds). *Seobe i razvoj*. Beograd: Centar za ekonomska istraživanja Instituta društvenih nauka, 50–58.
- Saar, M. (2016). Individualisation of migration from the East? Comparison of different socio-demographic groups and their migration intentions, *Studies of Transition States and Societies*, 8 (3): 45–59.
- Safouane, H., Jünemann, A. and Göttsche, S. (2020). Migrants' agency: A re-articulation beyond emancipation and resistance, *New Political Science*, 42 (2): 197–217. https:// doi.org/10.1080/07393148.2020.1761736
- Salzano, C. K. (2013). Youth, Employment and Migration MDG-F Thematic Study: Review of Key Findings and Achievements. MDG Achievement Fund, http://www.mdgfund.org/ sites/default/files/YEM_Thematic%20Study.pdf (15 April 2023).
- Schewel, K. and Fransen, S. (2018). Formal Education and Migration Aspirations in Ethiopia, *Population and Development Review*, 44 (3): 555–587. https://doi.org/10.1111/ padr.12159
- Stjernström, O. (2004). Theory and migration. Towards a framework of migration and human actions, *Cybergeo: European Journal of Geography*. https://doi.org/10.4000/cybergeo.3827
- Strategija razvoja obrazovanja u Srbiji do 2020. godine, Službeni glasnik RS, 107/2012.
- Taleski, D. and Hoppe, B. (2015). *Youth in South East Europe Lost in Transition*. Berlin: Friedrich-Ebert-Stiftung.
- Todorović, M., Javor, V. and Radić, N. (2020). Emigracioni potencijal mladih u Srbiji, *Migracijske i etničke teme*, 36 (2-3): 155–171. https://doi.org/10.11567/met.36.2.2
- Tomanović, S. (2021). Na svom putu: longitudinalno kvalitativno istraživanje socijalnih biografija mladih. Beograd: Institut za sociološka istraživanja Filozofskog fakulteta Univerziteta u Beogradu.
- Tomanović, S. and Stanojević, D. (2015). *Mladi u Srbiji 2015. Stanja, opažanja, verovanja i nadanja / Youth in Serbia 2015: Structures, Perceptions, Beliefs and Hopes.* Beograd: Se-ConS, Fridrih Ebert Stiftung.
- van Dalen, H. and Henkens, K. (2013). Explaining emigration intentions and behaviour in the Netherlands, 2005–10, *Population Studies*, 67 (2): 225–241. https://doi.org/10.10 80/00324728.2012.725135

- Van Mol, C. (2016). Migration aspirations of European youth in times of crisis, *Journal of Youth Studies*, 19 (10): 1303–1320. https://doi.org/10.1080/13676261.2016.1166192
- Vandenbrande, T., Coppin, L., Van der Hallen, P., Ester, P., Fourage, D., Fasang, A., Gerdens, S. and Schömann, K. (2006). *Mobility in Europe*. Luxemburg: Luxemburg Office of Official Publications in the European Communities.
- Williams, A. M., Jephcote, C., Janta, H. and Li, G. (2018). The Migration Intentions of Young Adults in Europe: A Comparative, Multi-Level Analysis, *Population, Space and Place*, 24 (1). https://doi.org/10.1002/psp.2123
- Zimbardo, P. G. and Boyd, J. N. (1999). Putting time in perspective: A valid, reliable individual-differences metric, *Journal of Personality and Social Psychology*, 77 (6): 1271– 1288. https://doi.org/10.1037/0022-3514.77.6.1271

APPENDIX

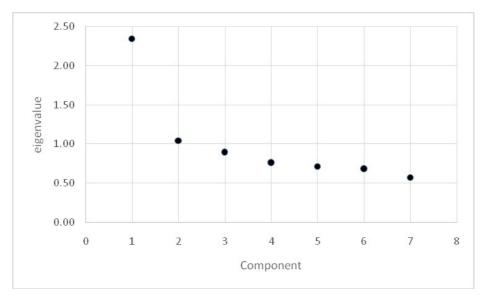
- APPENDIX 1. Eigenvalues and component structure for motivational incentives and potential migrants' agency
- Figure A1. Scree plot with eigenvalues of all possible components of motivational incentives



	Social	Socio- political	Economy
Proximity to parents and other family members	.827		
Possibility of making and maintaining friendships	.761		
Your future partner	.736		
Proximity to members of extended family	.682	.484	
Opportunity to influence changes in society		.854	
Opportunity to be actively involved in society (participation in associations and the local community)		.834	
Climatic and geographical conditions		.468	.351
The possibility of finding the desired job or starting your own business			.745
Orderliness of the state and good living conditions		.384	.742
Knowledge of language			.741
Economic and political stability of the country		.513	.553

Table A1. Motivational incentives extracted component structure

Figure A2. Scree plot with eigenvalues of all possible components of migration agency



	Potential migrants' agency
I've been thinking about it for a long time (a year or more)	.636
I gather information online and explore the possibilities of living (schooling, employment) in another country/place	.621
I talk to parents to find out what they think about it and what they can do	.652
I talk to my peers about their thoughts and plans to move to another country/place	.460
I talk to relatives and friends who already have experience of living in another country/place	.636
I try to travel as much as possible to see how people live in other countries/places	.493
I am making a concrete plan to move to another country/place	.520

Table A2. Potential migrants' agency extracted component structure

APPENDIX 2. Significance of regression coefficients for emigration intention prediction and potential migrants' agency prediction in three hierarchical models

Table A3.Significance of regression coefficients for emigration intentionprediction in three hierarchical models

		Beta	t	р	Correlation
	Age	025	934	.351	011
	Sex	010	358	.720	009
	Region Vojvodina	.035	1.044	.297	.035
	Region Belgrade	043	-1.196	.232	035
M. 1.11	Region Central Serbia	.008	.240	.810	.004
Model 1	Place of residence – size	.018	.594	.553	.008
	Grade point average (GPA)	016	532	.595	.003
	Education of the mother	.060	1.959	.050	.068
	Education of the father	.017	.542	.588	.041
	Education aspirations	.041	1.392	.164	.039

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		Beta	t	р	Correlation
	Age	015	585	.559	011
	Sex	004	167	.868	009
	Region Vojvodina	.079	2.583	.010	.035
	Region Belgrade	.001	.034	.973	035
	Region Central Serbia	.047	1.499	.134	.004
	Place of residence – size	003	090	.928	.008
Model 2	Grade point average (GPA)	049	-1.836	.067	.003
	Education of the mother	.034	1.207	.228	.068
	Education of the father	.038	1.349	.177	.041
	Education aspirations	027	985	.325	.039
	Motivation: social	306	-11.221	.000	231
	Motivation: socio-political	051	-1.453	.147	.076
	Motivation: economy	.392	11.929	.000	.277
	Age	010	419	.675	011
	Sex	004	168	.866	009
	Region Vojvodina	.079	2.580	.010	.035
	Region Belgrade	.004	.136	.892	035
	Region Central Serbia	.049	1.574	.116	.004
	Place of residence – size	004	147	.883	.008
	Grade point average (GPA)	038	-1.372	.170	.003
Model 3	Education of the mother	.036	1.270	.204	.068
wodel 3	Education of the father	.039	1.381	.168	.041
	Education aspirations	027	-1.005	.315	.039
	Motivation: social	318	-11.183	.000	231
	Motivation: socio-political	056	-1.574	.116	.076
	Motivation: economy	.397	11.959	.000	.277
	Present hedonistic	.025	.907	.364	.016
	Future	023	900	.368	.029
	Present fatalistic	.026	.877	.380	060

	Beta	t	р	Correlation
Age	020	738	.460	014
Sex	.001	.032	.974	012
Region Vojvodina	067	-2.004	.045	054
Region Belgrade	023	656	.512	.002
Region Central Serbia	009	266	.790	.024
Place of residence – size	009	303	.762	.002
Grade point average (GPA)	051	-1.759	.079	036
Education of the mother	.056	1.819	.069	.044
Education of the father	015	483	.629	.011
Education aspirations	.026	.884	.377	.011
Age	006	226	.822	014
Sex	.002	.082	.935	012
Region Vojvodina	038	-1.192	.234	054
Region Belgrade	.001	.024	.981	.002
Region Central Serbia	.010	.316	.752	.024
Place of residence – size	016	548	.584	.002
Grade point average (GPA)	062	-2.251	.025	036
Education of the mother	.041	1.429	.153	.044
Education of the father	004	135	.893	.011
Education aspirations	015	548	.584	.011
Motivation: social	112	-3.994	.000	005
Motivation: socio-political	.090	2.500	.013	.230
Motivation: economy	.281	8.292	.000	.310
	SexRegion VojvodinaRegion BelgradeRegion Central SerbiaPlace of residence – sizeGrade point average (GPA)Education of the motherEducation of the fatherEducation aspirationsAgeSexRegion VojvodinaRegion BelgradeRegion Central SerbiaPlace of residence – sizeGrade point average (GPA)Education of the motherEducation of the fatherEducation of the fatherEducation spirationsMotivation: socialMotivation: social	Age020Sex.001Region Vojvodina067Region Belgrade023Region Central Serbia009Place of residence – size009Grade point average (GPA)051Education of the mother.056Education of the father015Education aspirations.026Age006Sex.002Region Vojvodina038Region Belgrade.001Region Central Serbia.010Place of residence – size016Grade point average (GPA)062Education of the mother.041Education of the mother.041Education of the father004Education of the father015Motivation: social112Motivation: socio-political.090	Age 020 738 Sex $.001$ $.032$ Region Vojvodina 067 -2.004 Region Belgrade 023 656 Region Central Serbia 009 266 Place of residence – size 009 303 Grade point average (GPA) 051 -1.759 Education of the mother $.056$ 1.819 Education of the father 015 483 Education aspirations $.026$ $.884$ Age 006 226 Sex $.002$ $.082$ Region Vojvodina 038 -1.192 Region Belgrade $.001$ $.024$ Region Central Serbia $.010$ $.316$ Place of residence – size 016 548 Grade point average (GPA) 062 -2.251 Education of the mother $.041$ 1.429 Education of the father 004 135 Education of the father 004 135 Education aspirations 015 548 Motivation: social 112 -3.994 Motivation: social 112 -3.994	Age 020 738 .460 Sex .001 .032 .974 Region Vojvodina 067 -2.004 .045 Region Belgrade 023 656 .512 Region Central Serbia 009 266 .790 Place of residence – size 009 303 .762 Grade point average (GPA) 051 -1.759 .079 Education of the mother .056 1.819 .069 Education aspirations .026 .884 .377 Age 006 226 .822 Sex .002 .082 .935 Region Vojvodina 038 -1.192 .234 Region Belgrade .001 .024 .981 Region Central Serbia .010 .316 .752 Place of residence – size 016 548 .584 Grade point average (GPA) 062 -2.251 .025 Education of the mother .041 1.429 .153

Table A4.Significance of regression coefficients for potential migrants'
agency prediction in three hierarchical models

980 560 272 949	014 012 054 .002
272	054
949	002
	.002
917	.024
602	.002
014	036
095	.044
725	.011
445	.011
000	005
146	.230
000	.310
000	.213
000	.213
445	.071
	.917 .602 .014 .095 .725 .445 .000 .146 .000 .000 .000 .445

Učinak motivacijskih poticaja i vremenske perspektive na predviđanje emigracijskih namjera mladih i djelovanja potencijalnih migranata: slučaj Srbije

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SAŽETAK

Cilj je rada ispitati prediktivni potencijal često istraživanog učinka sociodemografskih čimbenika i motivacijskih poticaja te rijetko istraživanog čimbenika osobnosti, označenog pojmom vremenska perspektiva, na snagu emigracijskih namjera mladih i djelovanje potencijalnih migranata, tj. aktivnosti povezane s emigracijom. U radu se provjerava inkrementalna valjanost motivacijskih poticaja i vremenske perspektive za predviđanje namjera iseljavanja i djelovanja potencijalnih migranata, uz kontrolu sociodemografskih varijabli. Također, kako bi se istražila važnost učinka obrazovanja na želju za iseljavanjem, u analizu je uključen školski uspjeh ispitanika na trenutačnoj obrazovnoj razini (srednje obrazovanje), najviša željena razina obrazovanja i najviši stupanj završenog obrazovanja roditelja. Na temelju psihosocijalnih konceptualizacija (Bandura, 2001; Zimbardo i Boyd, 1999), ovo kvantitativno istraživanje provedeno je na reprezentativnom uzorku od 1 973 učenika završnih razreda srednjih škola u Srbiji. U tu svrhu provedena je trorazinska hijerarhijska regresijska analiza. Rezultati pokazuju da se emigracijske namjere i s njima povezano djelovanje potencijalnih migranata ne mogu predvidjeti samo na temelju sociodemografskih karakteristika. No, motivacijski poticaji važni su korelati emigracijskih namjera i djelovanja migranata. Društveno usmjerena motivacija teži smanjenju namjera iseljavanja i djelovanja potencijalnih migranata, dok motivacija vezana uz ekonomske čimbenike teži povećanju namjera iseljavanja i djelovanja migranata. S druge strane, vremenske perspektive nisu statistički značajno povezane s namjerama iseljavanja, ali se pokazuju kao značajni prediktori djelovanja migranata. Konkretnije, hedonistički aspekt vremenske perspektive sadašnjosti i vremenske perspektive budućnosti imaju tendenciju povećati djelovanje potencijalnih migranata. Nalazi istraživanja upućuju na potrebu diferenciranog pristupa u razmatranju teorijskih, empirijskih i javnopolitičkih pitanja.

KLJUČNE RIJEČI: emigracijske namjere, djelovanje potencijalnih migranata, motivacijski poticaji, vremenske perspektive, Srbija