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Factors influencing rural youth migration in North Macedonia

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Abstract

The migration of young people from rural to urban areas poses a significant challenge to the sustainable development of rural communities in North Macedonia, leading to an aging population and diminished natural growth. This trend exacerbates socioeconomic inequalities, fostering social insecurity and the exclusion of rural youth. The far-reaching consequences of this migration influence both urban and rural landscapes across various developmental domains. To that end, this research aims to investigate the impact of main socioeconomic factors on rural youth migration. A survey of 550 rural residents aged 18-40 addressed was conducted using a tailored questionnaire. The data collection approach ensured nationwide diversity across all Macedonian planning regions, nationalities, genders, and village types. Data processing involved the application of standard descriptive analysis and a binary logistic regression approach. Key findings show that factors such as gender, marital status, region, nationality, education, employment, and ownership of family agricultural holdings do not significantly impact rural youth migration. On the contrary, having children, household size, perceptions of employment opportunities, urban or rural lifestyle preferences, and overall rating of the quality of life in rural areas exhibit notable significance. These findings contribute to a greater understanding of the complexities surrounding rural youth migration. In conclusion, the logistic regression model serves as a powerful tool to pinpoint crucial factors

influencing rural youth migration. These insights provide a solid foundation for shaping targeted policies, essential for retaining and supporting rural youth and fostering sustainable development in both urban and rural areas of North Macedonia.

Key words: binary logistic regression, odds ratio, rural-urban migration, rural policies

Introduction

A critical challenge that jeopardizes the future and sustainable development of rural areas in North Macedonia is mass migration of younger population. The ongoing trend of migration from villages to cities not only results in the aging of the rural population but also contributes to a decline in the natural population growth rate (Black, 2004). The current socioeconomic structure of rural areas significantly influences the degree of social insecurity and social exclusion of the rural youth population (Bock et al., 2015). Due to uncontrolled migration, numerous rural settlements are experiencing complete depopulation. The 2002 census (SSO, 2005) revealed that 145 settlements, constituting 8.5% of the total 1,781 settlements, were depopulated. The number has risen to 205 empty settlements according to the last 2021 census (SSO, 2022), now making up 11.5% of the total. It is particularly alarming in villages with fewer than 10 inhabitants, which now stand at 218 (12.2%), and 684 settlements with fewer than 100 inhabitants (38.4%) out of the total number of villages in Macedonia. This presents a looming risk of depopulation for these settlements as well. Migration from rural areas is more prevalent, reaching up to 80%, compared to migration from urban areas (Jakimovski, 2002). The decision for migration among young people is influenced by the geographical location of rural areas, living conditions, infrastructure development, access to social and other services, the labour market situation, and other factors (EESC, 2011). Due to these factors, young people in rural areas face many serious problems: relatively high unemployment, marginalization, lack of adequate resources, lower levels of education than in urban areas, insufficient career opportunities, and notably, unattractive prospects in the agricultural sector (Jakimovski, 2002). Given these challenges, young people find themselves in a dilemma of "whether to stay in the rural areas or seek opportunities elsewhere". The Macedonian Government enacted various programmes, strategies, and mechanisms for direct financial support for youth in the agriculture and rural development, such as the National Employment Strategies (2021–2027), EU Pre-Accession Assistance Rural Development Programme, National Rural Development Programme, the National Youth Strategy (2016-2025), etc. Despite this policy frame, the impact has been restricted, prompting a detailed investigation into the underlying reasons. To address this, our study delves into a model aiming to estimate the socio-economic factors that cause youth migration.

Material and Methods

The research utilized both primary and secondary data sources to investigate the socio-economic status of young people in rural areas across all planning regions of North Macedonia. A special emphasis was placed on ensuring balanced sample representativeness based on gender, ethnic representation, and equal spatial distribution in survey implementation in all eight Macedonian planning regions. Primary data were collected in 2023, through a survey of 550 rural youth aged 18 to 40 according to the rural policy framework in the country, of which 523 are considered valid. The questionnaire was tested for quality and then distributed digitally by using Microsoft Teams and a hard copy.

The collected data underwent basic descriptive analysis to explain the main characteristics of the sample. The binary logistic regression model in the research was used to determine the general factors that influence the migration process of rural youth, as a binary (dichotomous) response variable. Logistic regression calculates the probability of success over the probability of failure in the form of an odds ratio (David & Lemeshow, 2013). The odds ratio is a measure of effect size, describing the strength of non-independent association between two binary information values. The final result is not a prediction of a numerical cost, as a linear regression, but a probability of belonging to certainly one of the conditions, that may take on any values between 0 and 1 (*ibid*). The general form of the logistic regression equation model is formulated as follows (Rusliyadi et al., 2022):

$$P(Y = 1/\mathrm{X}) = \frac{e^{\beta_0+\beta_1 X_1+\beta_2 X_2+\ldots+\beta_n X_n}}{1 + e^{\beta_0+\beta_1 X_1+\beta_2 X_2+\ldots+\beta_n X_n}}$$

P: the probability of Y occurring (0 = No plan to migrate, 1 = plan to migrate)

e: natural logarithm base

β_0: interception at the y-axis

β_1 β_2,…, β_n: regression coefficients associated with the independent variables X_1,X_2,…,X_n respectively.

X_1, X_2,…, X_n: independent (predictor) variables (predicts the probability of Y).

The link function used is the logit of π ie. where π is the likelihood of the event of the outcome Y.

$$Logit\left(\frac{\pi_j}{1-\pi_j}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots + \beta_n X_n$$

Independent Research Variables:

1. X_1 - Do you live in a rural area? (0 = No, 1 = Yes)

2. X_2 - Gender (1 = Male, 2 = Female).

3. X_3 - Marital status (1 = Single, 2 = In a relationship, 3 = Married, 4 = Divorced, 5 = Widow)

4. X_4 - Region (1 = Skopje region, 2 = Vardar region, 3 = East region, 4 = Southwest region, 5 = Pelagonia region, 6 = Polog region, 7 = Northeast region, 8 = Southeast region).

5. X_5 - Nationality (1 = Macedonians, 2 = Albanians, 3 = Turks, 4 = Serbs, 5 = Roma).

6. X_6 - Religion (1 = Orthodox, 2 = Muslim, 3 = Other).

7. X_7 -Are you still in the education system? (0 = No, 1 = Yes).

8. X_8 - What is your last completed level of education? (1 = No education, 2 = Primary education, 3 = Secondary Education, 4 = Higher education, 5 = Master's degree, 6 = Ph.D

9. X_9 - Do you have children? (0 = No, 1 = Yes)

10. X_{10} - Number of members in the household?

11. X_{11} - How do you evaluate the possibility of employment in your rural environment? (1 – I am utterly unsatisfied; 7 – I am completely satisfied).

12. X_{12} - Are you employed? (0 = No, 1 = Yes).

13. X_{13} - Does your household have a family agricultural holding (farm)? (0 = No, 1 = Yes).

14. X_{14} - Do you prefer an urban or rural lifestyle? (0 = No, 1 = Yes).

15. X_{15} - How do you evaluate the overall quality of life in your rural environment? (1 – I am utterly unsatisfied; 7 – I am completely satisfied).

Results and Discussion

Description of the sample

The sample size after the questionnaire assessment consists of 523 young individuals, of which 82% reside in rural areas, while 18% live in urban areas but originate from rural backgrounds. In terms of gender distribution in the sample, 65% are males and 35% are females, which is particularly crucial for the research, considering the greater socio-economic challenges faced by women in rural areas compared to their urban counterparts. Regarding territorial representation, the distribution of respondents is almost uniform, with each eight statistical planning regions contributing between 12% and 13%. According to the data on educational attainment, the majority of participants have completed secondary education (54%), followed by those with higher education (36%), elementary education (6%), and postgraduate education (4%). These figures represent the highest level of education completed, but it is important to note that 14% of participants are still in the educational process. In terms of religious affiliation, 71% identify as Orthodox Christians, 28% as Muslims, while other religious communities have minimal representation. Data on the size of rural households show that the average number of

members in rural households in the sample is 4.6, ranging from a minimum of 2 to a maximum of 12.

Rural-urban migration analysis

The survey data on migration indicate that 72% of young respondents do not plan to migrate from their rural environment (Fig. 1), out of which, 71% intend to move abroad (external migration) and 29% to move to another location within the country (internal migration). 26% plan to move specifically to urban areas, and only 3% to another rural setting (Fig. 2).

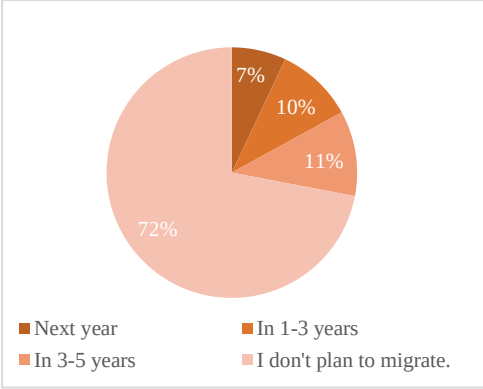

Fig. 1 Answer to the question whether the rural youth intend to migrate in the coming years.

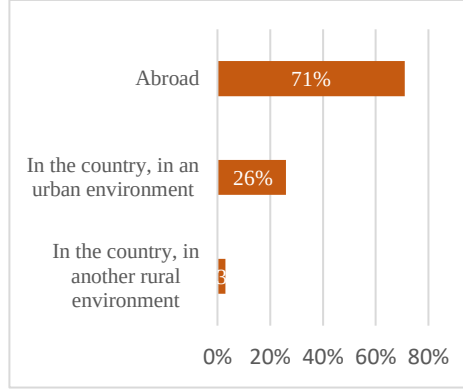

Fig. 2 Answer to the question of where the rural youth would migrate.

In order to predict the population's predisposition towards the migration as a critical question in the research "Whether the respondent plans to migrate from the rural environment or not?", a binary (dichotomous) dependent categorical variable was considered with two categories: Yes (coding as 1) and No (coding as 0). The interaction or dependence of this variable with multiple independent variables led to the creation of a binary logistic regression model using the SPSS statistical analysis software.

Block 0:

This block contains the results of the analysis without the independent variables used in the model. The classification table of the dependent variable (Table 1), the equation's dependent variable table (Table 2), and the table of variables not included in the equation (Table 3) are presented in this block, which serves as a baseline for comparing the model with the included variables for prediction.

Tab. 1 Classification table without independent variables

Classification Table[a,b]					
Observed			Predicted		
			Do you intend to migrate?		Percentage Correct
			No	Yes	
Step 0	Do you intend to migrate?	No	379	0	100
		Yes	144	0	0
	Overall Percentage				72.5
a. Constant is included in the model.					
b. The cut value is 0.500					

Tab. 2 Variables in the Equation

Variables in the Equation							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-0.968	0.098	97.724	1	0.000	0.38

Tab. 3 Variables not in the equation

Variables not in the Equation					
			Score	df	Sig.
Step 0	Variables	Do you live in a rural area?	0.292	1	0.589
		Gender	0.600	1	0.439
		Marital status	3.154	1	0.076
		Region	2.683	1	0.101
		Nationality	0.142	1	0.706
		Religion	1.064	1	0.302
		Are you still in the education system?	0.112	1	0.738
		What is your last completed level of education?	3.426	1	0.064
		Do you have children?	9.978	1	0.002
		Number of members in the household?	0.069	1	0.793
		How do you evaluate the possibility of employment in your rural environment?	34.850	1	0.000
		Are you employed?	1.148	1	0.284
		Does your household have a family agricultural holding/farm?	12.54	1	0.000
		Do you prefer an urban or rural lifestyle?	37.076	1	0.000
		How do you evaluate the overall quality of life in your rural environment?	43.882	1	0.000
	Overall Statistics		89.886	15	0.000

Block 1:

This block displays the results of the regression analysis with the inclusion of independent variables. When comparing this block to the previous Block 0, there is an enhancement in the model due to the inclusion of independent variables. The omnibus test of model coefficients (Table 4) produces a chi-square goodness-of-fit test that determines whether or not the model is adequate (David & Lemeshow, 2013). The value of p which is < 0.05 confirms the significance of the model, which implies that the model adequately explains the data.

Tab. 4 Omnibus tests of model coefficients

Omnibus Tests of Model Coefficients				
		Chi-square	df	Sig.
Step 1	Step	93.653	15	0.000
	Block	93.653	15	0.000
	Model	93.653	15	0.000

Nagelkerke's R-squared, which is an adjusted version of Cox & Snell's R Square, is a modified version of the R-squared statistic commonly used in logistic regression. It is designed to provide a measure of the proportion of the variance in the dependent variable that can be explained by independent variables in a logistic regression model (Menard, 2010). Unlike traditional R-squared, Nagelkerke's version is bounded between 0 and 1, making it easier to interpret as a percentage of explained variance in the logistic regression model. In this research case, approximately 23.7% of the variation in the dependent variable is explained by the model, indicating a relatively modest explanatory power (Table 5).

Tab. 5 Model summary

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	521.911[a]	0.164	0.237
a. Estimation terminated at iteration number 5 because parameter estimates changed by less than 0.001.			

Table 6 pertains to the Hosmer-Lemeshow test, which also produces a chi-square statistic for model fit. Unlike the Omnibus test, here the p-value must be > 0.05, indicating no statistical significance, to confirm model fit. This is because there should be no difference between the observed model and the predicted model in the contingency table for unexpected situations in the Hosmer-Lemeshow test, as observed in Table 7.

Tab. 6 The Hosmer and Lemeshow test

The Hosmer and Lemeshow Test			
Step	Chi-square	df	Sig.
1	12.848	8	0.117

Table 7 displays the observed and expected values for the two categories, "Yes" and "No." Notably, there is almost no difference between the observed and expected values. This indicates that the model is appropriate and effectively represents the data. The alignment between observed and expected values serves as an indicator of the model's adequacy.

Tab. 7 Contingency table for the Hosmer and Lemeshow Test

Contingency Table for the Hosmer and Lemeshow Test						
		Do you intend to migrate? = No		Do you intend to migrate? = Yes		Total
		Observed	Expected	Observed	Expected	
Step 1	1	51	48.913	1	3.087	52
	2	49	47.169	3	4.831	52
	3	41	45.436	11	6.564	52
	4	43	43.985	9	8.015	52
	5	46	41.85	6	10.15	52
	6	39	39.403	13	12.597	52
	7	33	35.828	19	16.172	52
	8	33	31.681	19	20.319	52
	9	21	26.4	31	25.6	52
	10	23	18.335	32	36.665	55

Table 8 provides information on how successfully the model predicts the correct category when including independent variables in the study. We have compared this table with Table 1 for classification shown in Block 0 to assess the improvement. The model accurately classifies a total of 75.9% of cases (sometimes referred to as the Percentage Accuracy in Classification - PAC). Specifically, it gives an indication of the degree to which the observed results are predicted by the model (Garson, 2014). The percentages in the first two rows of the table provide information on the specificity and sensitivity of the model in the context of predicting cases in both categories "Yes" and "No" of the dependent variable. Specificity, also known as the true negative rate, refers to the percentage of cases correctly predicted by the model that will not select the target category of the dependent variable (or the reference category) (Yes=1, plans to migrate). The specificity for this model is relatively high at 92.1%. Sensitivity, also known as the true positive rate, refers to

the percentage of cases correctly predicted by the model that will select the target category of the dependent variable (Yes=1, plans to migrate). The sensitivity of the model is 33.3%, which is relatively low.

Tab. 8 Classification table - with independent variables

Classification Table[a]					
Observed			Predicted		
			Do you intend to migrate?		Percentage Correct
			No	Yes	
Step 1	Do you intend to migrate?	No	349	30	92.1
		Yes	96	48	33.3
	Overall Percentage				75.9
a. The cut value is 0.500					

The last table (Table 9) illustrates the relationship between the independent variables (predictors) and the dependent variable – whether the respondent plans to migrate. Odds, or chances, represent the ratio of probabilities – P(0)/P(1). The beta coefficient indicates the predicted change in Log Odds for a 1-unit change in the independent variable. It can be positive or negative, with a corresponding t-value and significance. If the Beta coefficient is negative, for every 1-unit increase in the independent variable, the dependent variable decreases by the value of the Beta coefficient. S.E. represents the standard error in the table, and Wald is a statistical test for the significance of parameters following the chi-square distribution with degrees of freedom equal to 1. Exponential B represents the odds ratio, which is the likelihood of the event occurring or not (Garson, 2014).

Tab. 9 Variables in the equation

Variables in the Equation									
		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1	Do you live in a rural area?	0.462	0.301	2.36	1	0.124	1.588	0.88	2.864
	Gender	0.163	0.235	0.481	1	0.488	1.177	0.742	1.866
	Marital status	0.166	0.202	0.678	1	0.410	1.181	0.795	1.756
	Region	0.042	0.049	0.746	1	0.388	1.043	0.948	1.148
	Nationality	0.25	0.175	2.03	1	0.154	1.283	0.911	1.809
	Religion	-0.446	0.299	2.227	1	0.136	0.64	0.356	1.15
	Are you still in the education system?	-0.285	0.327	0.757	1	0.384	0.752	0.396	1.429
	What is your last completed level of education?	0.266	0.175	2.309	1	0.129	1.305	0.926	1.839
	Do you have children?	-0.765	0.376	4.138	1	0.042	0.466	0.223	0.972
	Number of members in the household?	0.15	0.078	3.72	1	0.054	1.161	0.998	1.352
	How do you evaluate the possibility of employment in your rural environment?	-0.181	0.082	4.904	1	0.027	0.835	0.711	0.979
	Are you employed?	0.114	0.151	0.567	1	0.451	1.121	0.833	1.508
	Does your household have a family agricultural holding/farm?	-0.392	0.255	2.371	1	0.124	0.676	0.410	1.113
	Do you prefer an urban or rural lifestyle?	-0.579	0.145	16.023	1	0.000	0.56	0.422	0.744
	How do you evaluate the overall quality of life in your rural environment?	-0.322	0.094	11.777	1	0.001	0.724	0.603	0.871
	Constant	-0.049	0.876	0.003	1	0.956	0.952		

Interpreting Odds Ratios:

- If Odds Ratio = 1, the probability (odds) of the model falling into the target group (Yes, plan to migrate) is equal to the probability of falling into the non-target group (No, does not plan to migrate).
- If Odds Ratio > 1, there is a greater likelihood of the case falling into the target than the non-target group.
- If Odds Ratio < 1, there is a greater likelihood of the case falling into the non-target than the target group.

Findings show that the following variables, "Gender," "Marital status," "Region," "Nationality," "Are you still in the education system?", "Are you employed?" and "Does your household have a family agricultural holding/farm?" have demonstrated no statistically significant impact on rural youth migration, as indicated by non-significant p-values ($p > 0.05$). These non-significant findings suggest that these factors may not play a substantial role in predicting the likelihood of rural youth migration in the context of this study. On the other hand, having children was associated with a significantly reduced likelihood of migration, with an Exp(B) value of 0.466 and a 95% confidence interval between 0.223 and 0.972, suggesting a protective effect against migration. The number of members in the household is marginally significant, showing a moderate increase in the likelihood of expressing a desire to migrate. Those who perceive greater employment opportunities in rural areas have approximately 18% lower odds of expressing a desire to migrate. This effect is statistically significant at the 0.05 level. Individuals preferring an urban lifestyle are less likely to migrate, with an odds ratio (Exp(B)) of 0.56 and a 95% confidence interval between 0.422 and 0.744. The coefficient is -0.579, and the variable is highly significant ($p = 0.000$), indicating a substantial impact. The participants who rate their overall quality of life higher have approximately 32% lower odds of expressing a desire to migrate. This result is statistically significant at the 0.05 level.

Conclusion

Young people are often mentioned in the context of change, improvement, and the introduction of new perspectives, in a social and economic sense. The outflow of youth from rural areas leads to changes in the socioeconomic function of villages in the country, particularly in the realm of agricultural production. The study results on migration indicate that 72% of young respondents do not plan to migrate from their rural environment, a surprisingly high proportion given the overall conditions and dissatisfaction with living conditions in rural areas, out of which, 71% intend to move abroad (external migration), 26% plan to move to urban areas within the country, and only 3% to another rural setting.

This study addresses the complexities of rural youth migration in Macedonia, emphasizing the urgent need to improve the overall living conditions in rural areas

through targeted interventions. The findings underscore the significance of factors such as family structure, perceived employment opportunities, lifestyle preferences, and subjective well-being in shaping migration decisions among the youth population. In summary, the research highlights the utility of the logistic regression model as a valuable tool for identifying key factors influencing rural youth migration. By leveraging the insights provided by the logistic regression analysis, policymakers can develop effective strategies to retain and support the rural youth, laying the groundwork for sustainable development in both urban and rural areas of Macedonia.

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References

Black, R. (2004). *Migration and Pro-Poor Policy in Africa*. Working Paper, C6, Sussex Centre for Migration Research, 17-18. https://assets.publishing.service.gov.uk/media/57a08cbe40f0b649740013f0/WP-C6.pdf

Bock, B. B., Kovacs, K., & Shucksmith, M. (2015). *Changing social characteristics, patterns of inequality and exlusion.* In A. K. Copus, & P. De Lima (Eds.), Territorial cohesion in rural europe : The relational turn on development (pp. 193-211). Routledge. http://www.regscience.hu:8080/jspui/bitstream/11155/709/1/kovacs_changing_2015.pdf

David, W.H., Lemeshow, S., Sturdivant, R. X. (2013). *Applied logistic regression*, (3rd ed.) (pp. 35-77), John Wiley & Sons, Inc., Hoboken, New Jersey.

European Economic and Social Committee - EESC (2011). *Rural development and employment in the Western Balkans*. REX/322 - CESE 1393/2011 European Economic and Social Committee, Brussels, (pp. 4-6). https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/rural-development-and-employment-western-balkans

Garson, D.G, (2014). *Logistic regression: binary and multinomial*. Statistical Publishing Associates, Asheboro, USA, 2014 Edition, (pp. 15-24).

Jakimovski, J. (2002). *Rural Development: Does Macedonia Need a New Approach?* Institute for Sociological, Political and Juridical Research, Skopje, Macedonia. Paper prepared for presentation at the Xth EAAE Congress 'Exploring Diversity in the European Agri -Food System', Zaragoza (Spain), 28-31 August 2002. https://doi.org/10.22004/ag.econ.24964

Menard, S. (2010). *Logistic regression: From introductory to advanced concepts and applications, second edition.* Sam Houston State University, Sage Publications, SAGE, Thousand Oaks, Calif. https://doi.org/10.4135/9781483348964

Rusliyadi, M., Ardi, Y. W. Y., Winarno, K. (2022). *Binary Logistics Regression Model to Analyze Factors Influencing Technology Adoption Process Vegetable Farmers Case in Central Java Indonesia*, International Symposium Southeast Asia Vegetable, Proceedings of the International Symposium Southeast Asia Vegetable 2021 (SEAVEG 2021) Volume 23, December 2022, Indonesia, https://doi.org/10.2991/978-94-6463-028-2_48

State Statistical Office – SSO (2005). *Census of population, households and dwellings in the Republic of Macedonia, 2002.* State Statistical Office, Skopje.

State Statistical Office – SSO (2022). *Census of population, households and dwellings in the Republic of North Macedonia, 2021.* State Statistical Office, Skopje.

Фактори који утичу на миграцију младих из руралних средина у Сјеверној Македонији

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Сажетак

Миграција младих из руралних у урбана подручја представља значајан изазов за одрживи развој руралних заједница у Северној Македонији, што доводи до старења становништва и смањења природног прираштаја. Овај тренд погоршава социо-економске неједнакости, подстичући социјалну несигурност и искљученост руралне омладине. Далекосежне последице ове миграције утичу и на урбана и на рурална подручја у различитим развојним доменима. Стога, ово истраживање има за циљ да истражи утицај главних социо-економских фактора на миграцију младих са села. Истраживање је спроведено на 550 руралних становника старости 18-40 година коришћењем прилагођеног упитника. Приступ прикупљању података обезбедио је покривеност различитости широм земље у свим планским регионима, националностима, половима и типовима села у Македонији. Обрада података подразумевала је примену стандардне дескриптивне анализе и приступ бинарне логистичке регресије. Кључни налази показују да фактори као што су пол, брачни статус, регион, националност, образовање, запослење и породична пољопривреда не утичу значајно на миграцију младих са села. Међутим, имати децу, величина домаћинства, перцепција могућности запошљавања, преференције урбаног или руралног начина живота и оцена општи квалитет живота у руралним подручјима показују значајна сигнификантност. Ови налази доприносе бољем разумевању сложености око миграције младих са села. У закључку, можемо рећи да модел логистичке регресије служи као моћно средство за прецизирање кључних фактора који утичу на миграцију младих са села. Ови увиди пружају солидну основу за обликовање циљаних политика од суштинског значаја за задржавање и подршку руралне омладине и подстицање одрживог развоја у урбаним и руралним подручјима Северне Македоније.

Кључне ријечи: бинарна логистичка регресија, однос шансе, рурално-урбане миграције, руралне политике

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