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STATISTICAL ANALYSIS OF MULTICULTURALISM RESEARCH IN VOJVODINA*

Summary

The paper is based on the analysis of a survey conducted in 2006. A simple random sample was used, consisting of about 1,200 persons distributed over seven counties of Vojvodina.

The paper deals with the part of the study concerning the problem of sociocultural and economic aspects of multiculturalism in Vojvodina. The data consist of a multivariate matrix of categorical and numerical variables. Multigroup analysis is based on methods for the classification of variables and some nonparametric methods. Multicultural aspects are analyzed using correspondence analysis and contingency table analysis. Contingency tables in two and three dimensions are the basis for the estimation of the indicators of association and correlation between variables. Multigroup analysis supposes specific problems of comparisons over different variables representing different cultural, national, ethnic and other levels of the investigation. Hence, some comparisons of socio-economic, cultural, ethnic, national and other aspects are made on the Province of Vojvodina.

Key Words: statistical analysis, correspondence analysis, multiculturalism, Vojvodina

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Introduction

This paper relates to a part of a broad study that is concerned with socio-economic and cultural aspects of multiculturalism in Vojvodina. Sample results consist of a multivariate matrix of a great number of categorical and numerical variables. This paper uses only a part of the total number of variables.

Regarding socio-economic and cultural indicators of multiculturalism in Vojvodina, special attention is devoted to statistical analysis of attitudes of the respondents in respect to their estimation of their living standard, joining EU, the way of preserving the culture of one's nation/ethnic group (see Kokovic, Lazar, 2003, 2006), and comprehension of social categorization and identification of the members of the national minorities as well as the Serbian majority.

Methods

This research includes 21 selected variables. Some of them are defined as variables expressing grades of socio-economical situation, cultural views, ethnic aspects and the attitudes and opinions about a great number of other features of multiculturalism in Vojvodina. The second group, consisting of 15 variables, refers to age, sex, national and confessional affiliation, education, occupation, activity sector, migration characteristics, county, household income, household size and the number of the households with members without income.

The first group of variables refers to the following phenomena: Evaluation of the family life quality (5 modalities); Evaluation of the most important family aspects (7 modalities); Attitude towards joining EU and NATO (6 modalities); Evaluation of the culture preservation method (8 modalities); Attitude of the Serbian nationality members towards members of national minorities (7 modalities); Attitude of the national minority members towards national majority members (7 modalities).

The second group of variables refers to the following phenomena: Sex (2 modalities); Age (6 modalities); National affiliation (11 modalities); Confessional affiliation (15 modalities); Education (6 modalities); Employment status (4 modalities); Occupation (28 modalities); Activity sector (8 modalities); Sojourn (2 modalities); Sojourn Character (2 modalities); County (7 modalities); Previous sojourn vacancy (2 modalities); Household monthly income (20 modalities); Household size (10 modalities); Number of household members without income (10 modalities).

The survey was organised in December 2006 and was conducted on the territory of AP Vojvodina. The type of the survey was simple random sample related to 1204 respondents.

The survey was conducted in 23 localities of AP Vojvodina. The localities by counties are as follows: Stara Pazova, Beška, Pećinci, Srem-

ska Mitrovica and Šid (the County of Srem), Subotica and Mali Iđoš (the County of Northern Bačka), Sombor and Ruski Krstur (the County of Western Bačka), Novi Sad, Bačka Palanka, Temerin, Bački Petrovac and Đurđevo (the County of Southern Bačka), Kikinda, Mokrin and Novi Kneževac (the County of Northern Banat), Zrenjanin, Novi Bečej and Srpska Crnja (the County of Middle Banat), Pančevo, Vršac and Alibunar (the County of Southern Banat).

The relationship between categorical variables was established by means of the Pearson Chi-square. In order to give a deeper analysis of correspondence between rows and columns, correspondence analysis was applied. Correspondence analysis is an exploratory technique that consists of graphically displaying rows, columns and both the rows and columns of a two-way contingency table. It is analogous to principle component analysis of numerical data.

The columns of the contingency ($r \times c$) table may be considered as coordinates of r point in c -dimensional space. The distances between the points in the c -dimensional space summarize all information about the similarities between the rows in the table.

If the contingency table $X (x_{ij})$ is standardized by dividing each element of the original matrix by the total sum so that $\sum_{i=1}^r \sum_{j=1}^c x_{ij} = 1$, the χ^2 -distance between row p and row q in X is given by weighted Euclidean distance

$$d_{pq}^2 = \sum_{j=1}^c \frac{1}{C_j} \cdot \left(\frac{x_{pj}}{R_p} - \frac{x_{qj}}{R_q} \right)^2,$$

where R_p and R_q are p -th and q -th row totals, and C_j ($j=1, \dots, c$) is column total.

Similarly, if the rows are considered as coordinates of c points in r -dimensional space, the χ^2 -distance between column v and column w is defined as

$$d_{vw}^2 = \sum_{i=1}^r \frac{1}{R_i} \cdot \left(\frac{x_{iv}}{C_v} - \frac{x_{iw}}{C_w} \right)^2.$$

Distances between rows (columns) are defined on the row (column) profiles produced by dividing each cell frequency in a row (column) by row (column) total.

The dispersion of the points representing the rows (columns) of the matrix X may be measured using *total inertia* (Λ^2) that is defined as the weighted sum of the χ^2 distances of the row (column) points to their centroid:

$$\Lambda^2 = \sum w_i \cdot d_i^2,$$

where w_i is weight for i -th point and d_i^2 is the distance of i -th point from centroid. As

$$\chi^2 = N \cdot \Lambda^2, (N = r \cdot c),$$

total inertia

$$\Lambda^2 = \frac{\chi^2}{N}$$

is similar to contingency coefficient.

It is possible to find a lower dimensional space in which the position of row (column) points contains almost all information about the difference between rows (columns).

Thus, the information about similarities between the rows (columns) of a table may be presented in 1, 2 or 3 dimensional graphs. Correspondence analysis may be also considered as the method for decomposition of the overall χ^2 statistic or total inertia by identifying a small number of dimensions in which the deviation from expected values of frequencies (under assumption of independence) can be represented.

As total inertia may be represented as

$$\Lambda^2 = \sum_{i=1}^q \lambda_i^2,$$

λ_i are singular values obtained by generalized singular value decomposition of matrix X , $q = \min\{r-1, c-1\}$. The dimension k necessary for adequately representation of the matrix X can be judged by the contribution of sum of eigen-values to the total inertia

$$\frac{\sum_{i=1}^k \lambda_i^2}{\Lambda^2}, l \leq k \leq q.$$

The tables here present the following: the singular values λ_i , eigen-values λ_i^2 , percent of total inertia (contribution of eigen-values to total inertia), cumulative percent and contribution of particular partitions to the overall χ^2 .

Results

Results of the survey concerning sex indicate the following: the overall sample consists of 47.7% of male and 52.3% of female respondents.

Age groups indicate the following: 16.7% of the respondents belong to the group between 15-24 years of age, 15.3% between 25-34, 17.2% between 35-44, 19.2% between 45-54, 13.4% between 55-64 and 18.2% of the surveyed population is older than 65 years old.

National structure of the respondents is as follows: 65.3% of the Serbs, 14.3% of the Hungarians, 3.4% of the Yugoslavs, 3.0% of the Slovaks, 2.9% of the Croatians, 2.0% of the Montenegrins, 1.5% of the Romanians, 1.5% of the Ruthenians, 0.3% of the Albanians and 4.8% of other nationalities.

Religious affiliation of the surveyed population: 68.4% belong to the Serbian Orthodox Church, 18.0 % are Catholics, less than 2% are Slovak Evangelists and Greek Orthodox, and less than 1% are Lutheran Reformists, Adventists, Nazarenes and Muslims. It is interesting to note that 5.9% are atheist, 1.8% non-believers and 0.6% others.

More than a half of the respondents have high school education (55.1%); 14.3% graduated from a university; 9.5% finished a college, 9.9% finished a primary school and 2.2% have no primary education. Finally, 8.9% of the surveyed population are craftsmen.

The data concerning the respondents' employment status indicate that 48.2% are employed, 15.8% are unemployed, 23.1% are retired and 12.9% are supported persons.

The value of Chi - square is statistically significant for the relation between the level of education and national identification (Table 1.). The diagram in two-way table shows high homogeneity of units concerning the educational level, except the first level (primary school not completed). Concerning national identity, the homogeneity of categories is also evident, except for the Albanians (point 9) and the Roma (point 8) nationalities (Figure 1.).

Table 1. National affiliation / Educational attainment

Eigenvalues and Inertia for all Dimensions					
Total Inertia = .11017 $\chi^2 = 132.64^{**}$ df = 50 p = 0.0000					
	Singular Values	Eigen-values	Perc. of Inertia	Cumulative percent	χ^2
1	0.268784	0.072245	65.57579	65.5758	86.98252
2	0.134436	0.018073	16.40462	81.9804	21.75979
3	0.110122	0.012127	11.00749	92.9879	14.60080
4	0.078280	0.006128	5.56209	98.5500	7.37780
5	0.039968	0.001597	1.45001	100.0000	1.92335

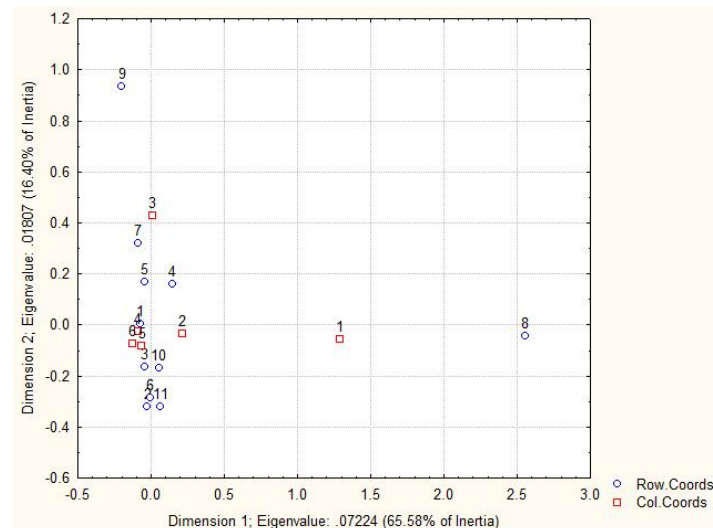


Figure 1. Two-dimensional diagram
of National affiliation¹ / Educational attainment²

Homogeneity of national affiliation groups in association with the state of employment is not so evident. The relationship between these two categories (national status and employed status) is statistically significant, except similarity between employed and retired persons (Table 2.).

Table 2. National affiliation / Employment status

Eigenvalues and Inertia for all Dimensions					
Total Inertia = .05023 $\chi^2 = 60.473^{**}$ df = 30 p = .00081					
	Singular values	Eigen-values	Perc. of Inertia	Cumulative percent	χ^2
1	0.164571	0.027084	53.92281	53.9228	32.60884
2	0.124221	0.015431	30.72228	84.6451	18.57874
3	0.087820	0.007712	15.35491	100.0000	9.28560

It is possible to recognize one sub-group of national minorities (Hungarian and Slovakia nation) together with Yugoslav nationality. Other homogenous groups are Serbian and Montenegro nationality. Other national groups are not so homogenous. The categories of employment (employed, unemployed, supported and retired persons) are very heterogeneous (Figure 2.).

¹ Variable: National affiliation has 11 modalities: 1. Serbs; 2. Montenegrins; 3. Croats; 4. Hungarians; 5. Slovaks; 6. Romanians; 7. Ruthenians; 8. Roma; 9. Albanians; 10. Yugoslavs; 11. other.

² Variable: Educational attainment has 6 modalities: 1. Primary school not completed; 2. Primary school education; 3. Handcraft; 4. Secondary education; 5. College degree; 6. University degree.

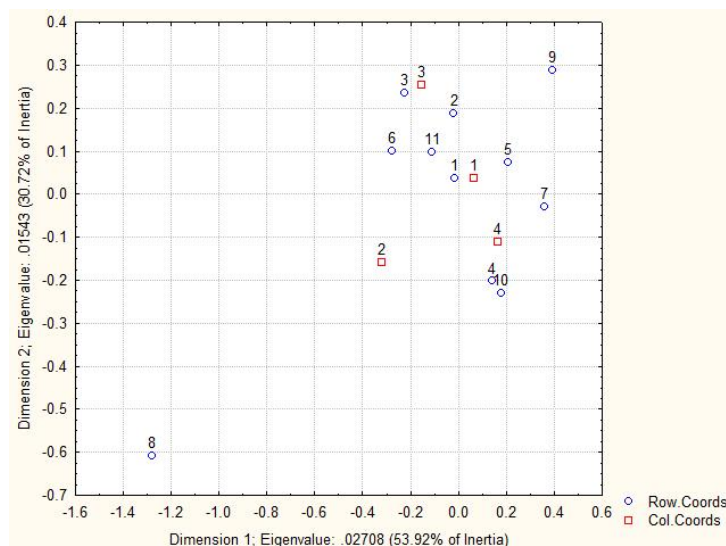


Figure 2. Two-dimensional diagram of National affiliation / Employment status³

The question determining occupation of the surveyed population provided various multiple modalities, so this paper will focus on only the characteristic cases. The most common are administrative employees (10.9%). The population working in agriculture account for 4.8%, qualified and highly qualified workers 7.7%, craftsmen 5.1%, economists, engineers and teachers account for 5.6%. It is interesting to note that the structure of the respondents contains 14.7% of students and 4.7% of housewives. Activity sector analysis showed that the most common branch is public economy (21.0%), trade/hosting and tourism (17.9%), services (16.7%), education and health institutions (11.4%), agriculture (10.7%). Lastly, 4.3% are employed in culture and information institutions and 0.8% in higher education/scientific institutions.

Concerning the question about sojourn and migration of the respondents, the results show that 61.5% of them have lived at the same place since birth. About 40% of them moved to the current settlement for various reasons; 13.5% due to job, 8.9% due to marriage, 4.1% due to education, and so on. Besides, 5.4% of the surveyed are refugees.

Regarding the settlement type, 11.5% of the surveyed live in the country and 88.5% in a city.

The structure of the County of Vojvodina with respect to the respondents is as follows: the County of Srem (10.8%), the County of Northern

³ Variable Employment status has 4 modalities: 1. employed; 2. unemployed; 3. supported people; i 4. retired.

Bačka (13.8%), the County of Western Bačka (7.3%), the County of Southern Bačka (32.7%), the County of Northern Banat (7.4%), the County of Middle Banat (12.9%) and the County of Southern Banat (15.1%).

The previous sojourn indicates that 49.9% of the respondents originate from rural, and 50.6% from urban areas.

Monthly income per household indicate that the respondents mostly earn between 30,000 and 39,999 RSD (23.9%), about 36% receive less than 30,000 RSD per month, and 16.1% receive between 40,000 and 49,999 RSD, while 20% receive between 50,000 and 100,000 RSD.

The structure of the surveyed population according to the number of family members is very interesting. Namely, 4-member households prevail (31.0%), followed by 3-member (22.0%), 2-member (21.7%) and 1-member households (11.0%). Only 9.1% of the households consist of 5 members and 3.6% of the households consist of 6 members. Only 0.2% have 8 members, 0.3% have 9, while 0.1% of the households have 11 members.

The number of the supported household members: nearly 60% of the overall number of households have 1 or 2 supported members with no income; 8.9% of the respondents have 3 supported members and 2.3% have 4 members without income. 28.8% of the respondents have no supported members (Figure 3).

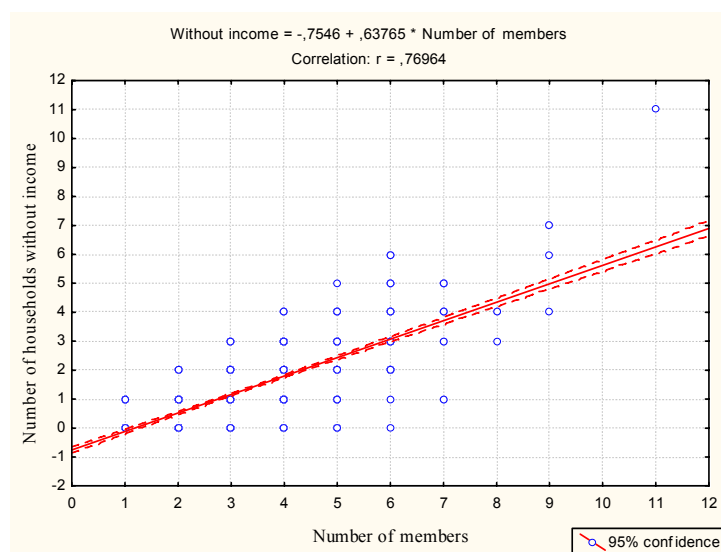


Figure 3. The regression of the households with members without income to the size of households in AP Vojvodina

Answering the question: “How do you perceive your and your family's current lifestyle?”, about half (50.2 %) of the total number of the respondents (1204) characterized it as bearable, while 33.8% answered it

is good. Only 3.0% answered their lifestyle is excellent, 11.8% stated they live poorly and 1.2% said their lifestyle is unbearable.

The respondents with high-school to College education and University educated population have more positive attitudes towards life (Table 3, Figure 4) as well as the younger categories of the population. If the type of settlement was also included in the analysis (apart from the attitude towards life and the state of the respondents), this would lead to the conclusion that employed respondents that live in cities are more satisfied with their lives, while unemployed respondents in rural settlements consider that their life is bad or unbearable (Table 4, 5, Figure 5, 6).

Table 3. Perception of current lifestyle / Educational attainment

Eigenvalues and Inertia for all Dimensions				
Inertia = .03663 $\chi^2 = 44.105^{**}$ df = 20 p = .00147				
	Singular values	Eigen-values	Perc. Of Inertia	Cumulativ percent
1	0.174227	0.030355	82.86558	82.8656
2	0.066408	0.004410	12.03876	94.9043
3	0.040948	0.001677	4.57727	99.4816
4	0.013780	0.000190	0.51840	100.0000

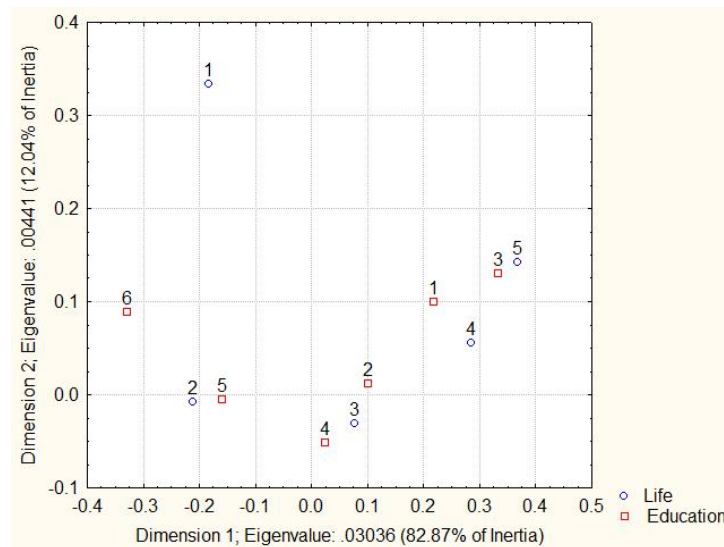


Figure 4. Two-dimensional diagram of Perception of current lifestyle⁴ / Educational attainment

⁴ The variable Perception of current lifestyle has 5 modalities: 1. Excellent; 2. Good; 3. Bearable; 4. Poor; and 5. Unbearable.

Table 4. Perception of current lifestyle / Employment Status

Eigenvalues and Inertia for all Dimensions Inertia = .05273 $\chi^2 = 63.491^{**}$ df = 12 p = 0.0000					
	Singular values	Eigen-values	Perc. of Inertia	Cumulative percent	χ^2
1	0.211563	0.044759	84.87788	84.8779	53.88983
2	0.088949	0.007912	15.00368	99.8816	9.52599
3	0.007903	0.000062	0.11844	100.0000	0.07520

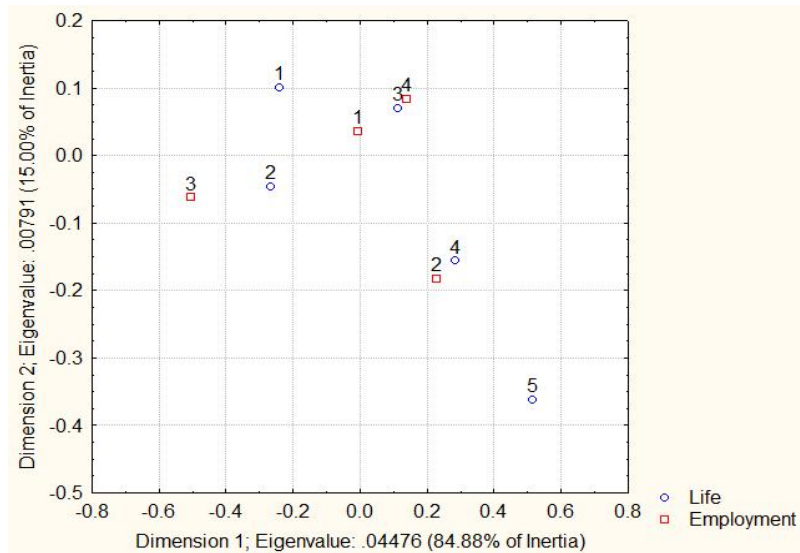


Figure 5. Two-dimensional diagram of Perception of current lifestyle / Employment Status

Table 5. Perception of current lifestyle / Settlement type

	Chi-square	df	p
Pearson Chi-square	1.721693	df = 4	p = .78677

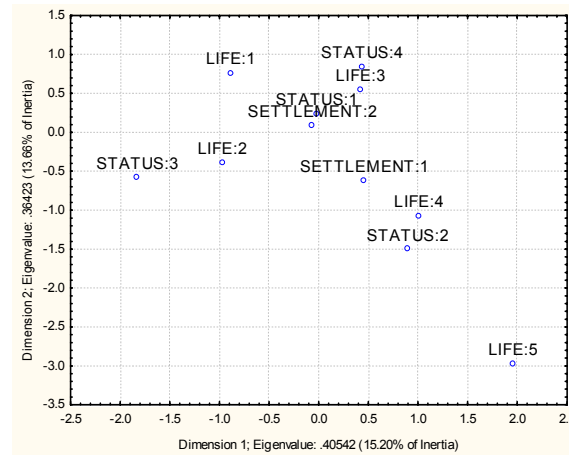


Figure 6. Three-dimensional diagram of Perception of current lifestyle / Settlement type⁵ / Employment status

Answering the question: “If you were in position to choose, what of the following would you prefer?”, one third of the respondents (33.2%) were in favour of joining the EU only, approximately one third (31.6%) stated they would opt for a free flow of people, goods and services without joining the EU, 22.4% of the respondents opted for joining the EU and NATO Pact, only 0.3% voted for joining the NATO, 6.4% have no attitude towards the issue while 6.0% feel indifferent regarding the issue.

The relation between the decision to join EU, NATO and other groups and the category of education level is statistically significant (Table 6). It is evident that in the same category the extreme modalities are very far from each other. In other words, the educational groups with the college and university degrees are close and both are too far compared to the group with the lowest educational level (with no primary school completed). Educational points 3 and 4 are very close to each other and they are homogenous (Figure 7).

Table 6.

Eigenvalues and Inertia for all Dimensions				
Total Inertia = .04188 $\chi^2 = 50.427^{**}$ df = 25 p = .00190				
	Singular values	Eigen-values	Perc. of Inertia	Cumulative percent
1	0.133082	0.017711	42.28653	42.2865
2	0.123410	0.015230	36.36313	78.6497
3	0.085966	0.007390	17.64462	96.2943
4	0.038624	0.001492	3.56192	99.8562
5	0.007761	0.000060	0.14380	100.0000

⁵ Variable: Settlement type have 2 modalities: 1. Village; 2. Town.

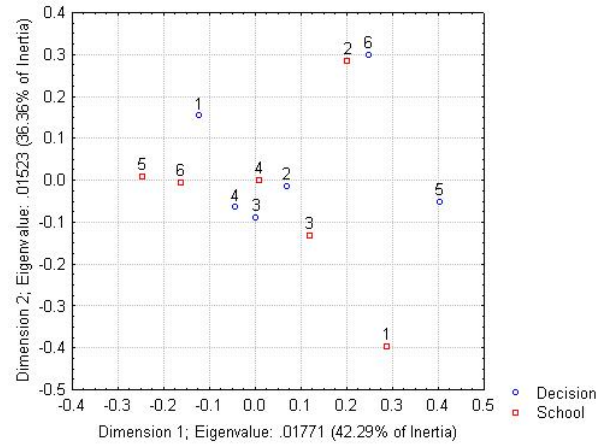


Figure 7. Two-dimensional diagram of Decision to join EU⁶ / Educational attainment

The relation between the decision to join EU and NATO and the respondents' nationality is statistically significant (Table 7). Groups of nationality categories are homogenous, except for the Roma and Albanians. Groups of the opinions category about the European integrations are homogenous (Figure 8).

Table 7. Decision to join EU / Nationality

Eigenvalues and Inertia for all Dimensions					
Total Inertia = .09743 $\chi^2 = 117.30^{**}$ df = 50 p = 0.0000					
	Singular values	Eigen-values	Perc. of Inertia	Cumulative percent	χ^2
1	0.204172	0.041686	42.78761	42.7876	50.19031
2	0.194459	0.037814	38.81349	81.6011	45.52862
3	0.100718	0.010144	10.41216	92.0133	12.21357
4	0.085344	0.007284	7.47594	99.4892	8.76936
5	0.022308	0.000498	0.51080	100.0000	0.59918

⁶ Variable: The decision whether to join the EU has 6 modalities: 1. for joining the EU and NATO; 2. for joining the NATO; 3. for joining the EU only; 4. for a free flow of people, goods and services without joining the EU; 5. indifferent; 6. no attitude about the issue

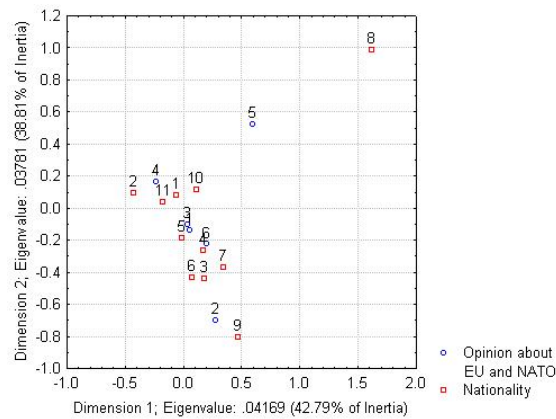


Figure 8. Two-dimensional diagram of Decision to join EU / Nationality

The relation between the opinion about integration to EU and NATO and the employment state is statistically significant (Table 8). Concerning the opinion about integration the most distant is the group joining to NATO (point 2). Concerning the employment category the most distant is the group of the economically dependant persons (point 3) (Figure 9).

Table 8. Decision to join EU / Employment status

Eigenvalues and Inertia for all Dimensions					
Inertia = .02165 $\chi^2 = 26.061^*$ df = 15 p = .03744					
	Singular values	Eigen-values	Perc. of Inertia	Cumulative percent	χ^2
1	0.122857	0.015094	69.73262	69.7326	18.17297
2	0.078579	0.006175	28.52674	98.2594	7.43434
3	0.019410	0.000377	1.74064	100.0000	0.45363

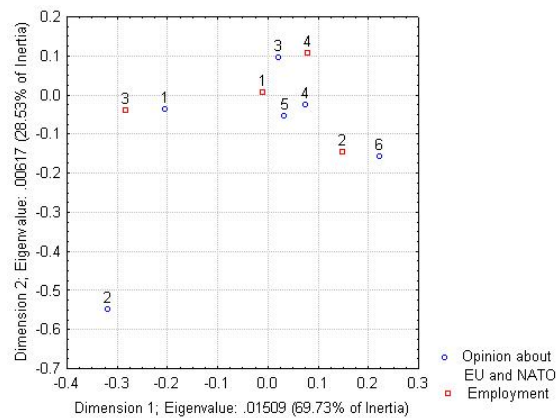


Figure 9. Two-dimensional diagram of Decision to join EU / Employment status

Answers to the question “In your opinion, what is the right way of preserving the culture of one’s people or ethnic group?” were very interesting. Namely, 34.7% of the surveyed population responded that it is done through education, 32.3% stated that it is done through appropriate family upbringing, 15.9 % consider economical stability and improving the living standard to be crucial factors concerning the issue, 6.6% attributes it to administrative and legislative measures, 5.4% to voluntary engagement, donations and concern of the very people in question, while 4.6% state as the most important factors constant expansion of individual and collective rights.

The relation between category of preserving the culture of one’s nation and the age category is statistically significant (Table 9). Age groups and preserving the culture are relatively homogenous (Figure 10).

Table 9. Preserving the culture / Age status

Eigenvalues and Inertia for all Dimensions Inertia = .05158 $\chi^2 = 62.098^{**}$ df = 35 p = .00322				
	Singular values	Eigen-values	Perc. of Inertia	Cumulative percent
1	0.157882	0.024927	48.33006	48.3301
2	0.132060	0.017440	33.81377	82.1438
3	0.077872	0.006064	11.75757	93.9014
4	0.053033	0.002813	5.45317	99.3546
5	0.018245	0.000333	0.64543	100.0000

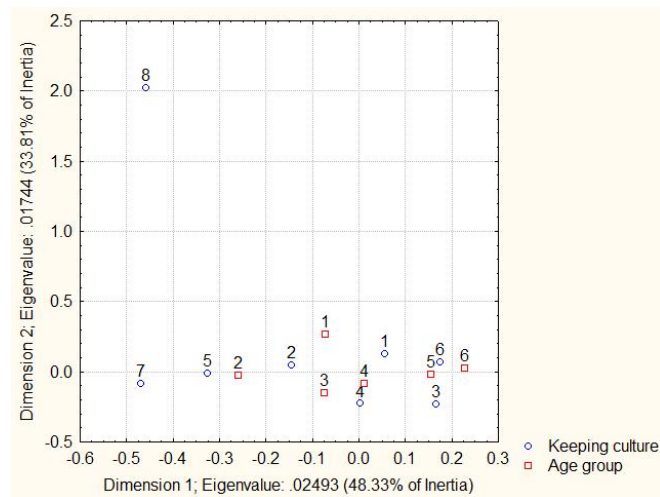


Figure 10. Two-dimensional diagram of Preserving the culture⁷ / Age status⁸

⁷ The variable of Preserving the culture has 8 modalities: 1. through administrative and legislative measures; 2. education; 3. constant expansion of individual and collec-

The relation between the category of preserving the culture of one's nation and the category of confessional affiliation is statistically significant (Table 10). It is evident that the groups of both categories are homogenous (Figure 11).

Table 10. Preserving the culture / Confessional affiliation

Eigenvalues and Inertia for all Dimensions					
Total Inertia = .19252 $\chi^2 = 231.80^{**}$ df = 70 p = 0.0000					
	Singular values	Eigen-values	Perc. of Inertia	Cumulative percent	χ^2
1	0.380814	0.145019	75.32608	75.3261	174.6033
2	0.169354	0.028681	14.89731	90.2234	34.5315
3	0.098226	0.009648	5.01159	95.2350	11.6167
4	0.084892	0.007207	3.74327	98.9783	8.6768
5	0.037040	0.001372	0.71264	99.6909	1.6519
6	0.023952	0.000574	0.29799	99.9889	0.6907
7	0.004626	0.000021	0.01112	100.0000	0.0258

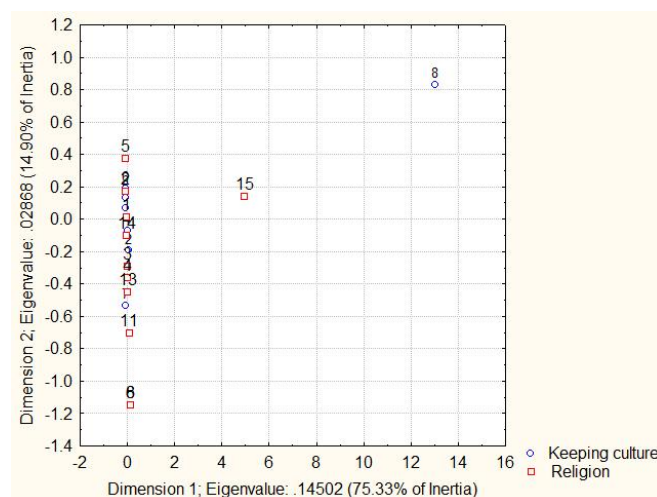


Figure 11. Two-dimensional diagram of Preserving the culture / Confessional affiliation⁹

tive rights; 4. economical stability and improving the living standard; 5. voluntary engagement, donations and concern of the people in question; 6. appropriate family upbringing; 7. some other means; 8. cherishing diversity.

⁸ The variable Age status has 6 modalities: 1. 15-24; 2. 25-34; 3. 35-44; 4. 45-54; 5. 55-64; 6. 65 and older.

⁹ The variable Confessional affiliation has 15 modalities: 1. Orthodox; 2. Catholics; 3. Lutheran Reformists; 4. Slovak-Evangelists; 5. Greek Orthodox; 6. Adventists;

The relation between the category of preserving the culture of one's nation and the category of education level is statistically significant (Table 11). Both categories prove to be relatively homogenous groups (Figure 12).

Table 11. Preserving the culture / Educational attainment

Eigenvalues and Inertia for all Dimensions Inertia = .05150 Chi ² = 62.001 df = 35 p = .00330				
	Singular values	Eigen-values	Perc. of Inertia	Cumulative percent
1	0.157562	0.024826	48.20917	48.2092
2	0.119670	0.014321	27.80991	76.0191
3	0.091777	0.008423	16.35669	92.3758
4	0.055007	0.003026	5.87578	98.2515
5	0.030006	0.000900	1.74845	100.0000

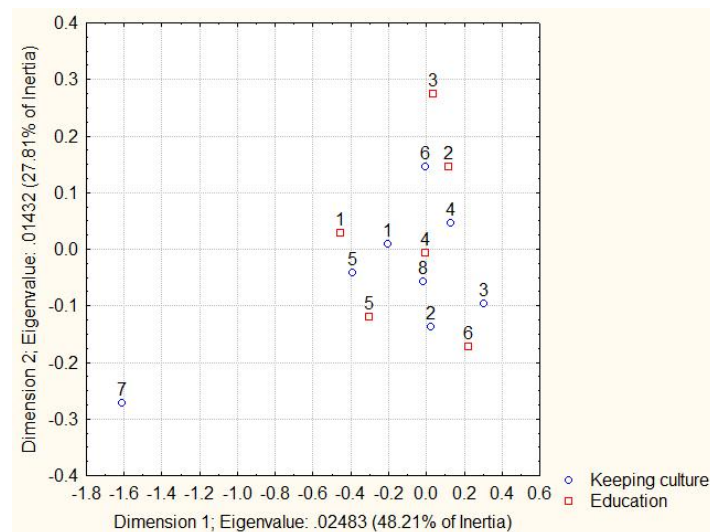


Figure 12. Two-dimensional diagram of Preserving the culture / Educational attainment

Concerning the question “If you are a member of ethnic majority, when you interact with a member of other ethnic group, do you feel”, 80.0% responded they feel equal, 8.7% that they feel adjusted, while 1.5% responded they have no contact with the members of ethnic minori-

7. Baptists; 8. Nazarenes; 9. Pentecostals; 10. Jehovah's witness; 11. Islamic; 12. Judaists; 13. Atheist; 14. Non-believers; 15. Other.

ties. Less than 1% of the respondents feel “superior”, “repressed” or “rejected”, while 7.6% do not consider these relations.

Similar answers were provided to the question “If you are the member of ethnic minority, when you interact with a member of the ethnic majority, do you feel?”. 73.9% responded “equal” and 15.6% “adjusted”. Less than 1% of the respondents feel “superior”, “rejected” or “do not interact with the members of ethnic majority”, while 1.5% responded they feel “repressed” and 7.1% of the surveyed do not consider these relations.

The relation between the aspect of Serbian nationality related to national minorities and employment status is statistically significant (Table 12.). However, the groups of employed and retired persons provided similar answers (Figure 13).

Table 12. Contact of Serbian nationality related to national minorities/ employment status

Eigenvalues and Inertia for all Dimensions				
Total Inertia = .02462 $\chi^2 = 29.645^*$ df = 18 p = .04112				
	Singular values	Eigen-values	Perc. of Inertia	Cumulative percent
1	0.112031	0.012551	50.97520	50.9752
2	0.096678	0.009347	37.96100	88.9362
3	0.052193	0.002724	11.06379	100.0000

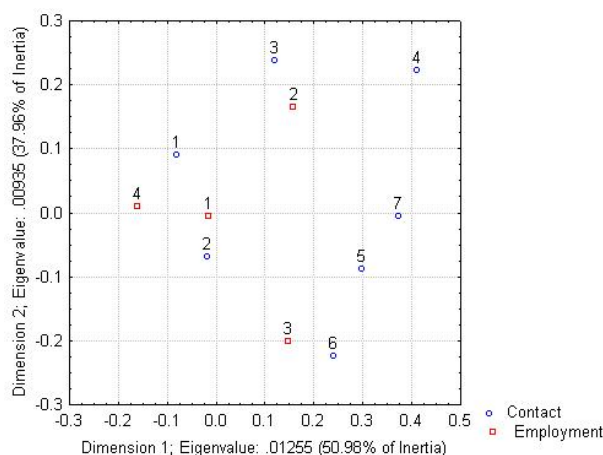


Figure 13. Two-dimensional diagram of Contact of Serbian nationality related to national minorities¹⁰ / employment status

¹⁰ Variable Contact of Serbian nationality related to national minorities has 7 modalities: 1. superior; 2. equal; 3. adjusted; 4. repressed; 5. rejected; 6. do not interact with the members of ethnic minority; 7. do not consider these relations.

Conclusion

This paper presents the analysis of the survey results conducted in 2006. The paper consists of a part of the study which is concerned with the problem of socio-economic and cultural aspects of multiculturalism in Vojvodina. The categorical variables included in the analysis are: grades of socio-economic profile, cultural views, ethnic aspects and some other aspects of living conditions. Each variable has a number modalities. The relationship between variables was examined using the correspondence analysis and using Chi-square values. Statistically significant Chi-square values were found in the majority of cases, such as in the relations: between the level of education and national identification; national status and employed status; current lifestyle and education status; current lifestyle and age groups; current lifestyle and nationality; current lifestyle and employment status; decision to join EU and education attainment, decision to join EU and nationality; decision to join EU and employment status; preserving the culture and age status; preserving the culture and confessional affiliation; preserving the culture and educational attainment; contact of Serbian nationality related to national minorities and employment status. The relation between a current lifestyle and a settlement type upon Chi-square value was not statistically significant. The analyzed relations of variables are illustrated by two-dimensional diagrams. In almost all of the cases, the explanation of total variability in contingency matrix of inertia is greater than 80%.

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СТАТИСТИЧКА АНАЛИЗА ИСТРАЖИВАЊА МУЛТИКУЛТУРАЛНОСТИ У ВОЈВОДИНИ

Резиме

Овај рад темељи се на анализи анкетног истраживања спроведеног 2006. године. Коришћен је насумични узорак, који се састојао од око 1200 испитаника са територија седам округа Војводине.

Рад се бави једним делом овог истраживања који се базира на проблему социокултурних и економских аспеката мултикултурализма у Војводини. Подаци се састоје од мултивариационог матрикса категоричких и нумеричких варијабли. Вишедимензионална анализа темељи се на методама за класификацију варијабли и неким непараметријским методама. Мултикултурални аспекти анализирају се помоћу кореспондентне анализе и табеле контингенције. Табеле контингенције у две и три димензије су основ за процену индикатора асоцијације и корелације између варијабли. Вишедимензионална анализа претпоставља специфичне проблеме поређења по различитим варијаблама представљајући различите културне, националне, етничке и друге нивое истраживања. Стога су спроведена нека поређења социоекономских, културних, етничких, националних и других аспеката на територији АП Војводине.

Кључне речи: статистичка анализа, кореспондентна анализа, мултикултурализам, Војводина