IS THERE A SOCIODEMOGRAPHIC MODEL OF ACCEPTANCE OF POSTMATERIALIST VALUES?  
THE CASE OF SERBIA

Da li postoji sociodemografski model prihvatanja postmaterijalističkih vrednosti? Slučaj Srbije

ABSTRACT The paper offers an analysis of the factors of acceptance of postmaterialist values in Serbia. In accordance with the assumptions of Inglehart’s postmaterialist value theory, but also on the basis of empirical works of his critics, the correlation between postmaterialist values and four sociodemographic variables: age, level of education, level of family income and population size of settlement, was analyzed. The data, collected in a 2007 public opinion research including 1410 citizens of Serbia aged 15-89, indicate that all the analysed factors are important, but that age is the best predictor of these values. The conclusion discusses the adequacy of generation hypothesis as a mechanism of changing predominant values in a society and the explanatory power of the analysed sociodemographic model.

KEY WORDS values, postmaterialism, generation hypothesis, Serbia


KLJUČNE REČI vrednosti, postmaterijalizam, generacijska hipoteza, Srbija

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Introduction

During the past few decades, postmaterialist values, understood as assigning priority to self-expression and quality of life as opposed to physical and economic security, have been an inevitable element of any serious comparative analysis of political culture or change in predominant values of a certain society.

The postmaterialist value change thesis is based on two hypotheses (Inglehart, 1990). The first, scarcity hypothesis states that the priorities of an individual reflect their socioeconomic environment, whereby the largest subjective importance is assigned to the most important ungratified needs, in keeping with the principles described in Maslow’s theory (Maslow, 1954). Ungratified material needs, crucial for an individual’s survival, take primacy over all needs, including postmaterialist ones. In the opposite case, they are taken for granted and some other (postmaterialist) needs gain more importance. For that reason, in the conditions of scarcity, people value materialist goals more, while in the conditions of prosperity they are more likely to accept the postmaterialist ones.

However, the relationship between socioeconomic development and predominance of postmaterialist values is not one of immediate adjustment. According to Inglehart’s socialization hypothesis, individual’s values reflect the conditions from his/her formative years, that is, from the period of early socialization. This assumption attributes the crucial importance for the formation of values to the first years in life, until early adolescence. Although Inglehart accepts that change may take place in adult age, he still emphasizes that “the statistical likelihood of basic personality change declines sharply after one reaches adulthood” (Inglehart, 1990: 69).

When combined, these two hypotheses provide clear predictions regarding the change of values. The first hypothesis implies that prosperity is conducive to spreading of postmaterialist values; the second one argues that values of both individuals and societies do not change overnight. Instead, fundamental changes of values take place gradually, as younger generations replace older ones in the adult population of a community. In keeping with that, after a longer period of economic and physical security, one can expect significant differences between value priorities of younger and older cohorts, due to significantly different formative experiences. Thus, the shift towards postmaterialist values is not a global phenomenon, but is narrowly restricted to the countries that achieved long-term economic development. At the same time, it is an argument in favour of the thesis that we are not dealing with life-cycle effects here, that is, inherent tendencies of individuals to accept materialist goals more as they grow older, since the perceived changes in that case should be a characteristic of any society (Inglehart&Abramson, 1994; Abramson&Inglehart, 1992).

Starting from the 1970s onwards, Inglehart and his associates have collected an abundance of empirical data which indicate that younger age cohorts are more inclined to prefer postmaterialist over material goals of the society. This tendency
has been confirmed over and over again – in the beginning, on a limited number of
developed democracies (Inglehart, 1971), and more recently also on a larger portion
of the rest of the world (Abramson & Inglehart, 1992; Inglehart, 1997;
Inglehart & Welzel, 2005). It is therefore often considered as one of the best
empirically grounded generalizations in the social sciences.

However, there is plenty of research that did not confirm numerous
Inglehart’s empirical and theoretical assumptions. A number of analyses do not
confirm the thesis about the gradual spreading of postmaterialist values. Inglehart
predicted that, despite the gradual effect of generational replacement, especially with
regard to the fall in birth rate in the late 1980s, the number of postmaterialists will
exceed the number of materialists in the ratio 5:3 until 2010 (Abramson & Inglehart,
1992). However, in some developed countries, this trend is either very weak or
absent, while in some countries the percentage of postmaterialists declines
(Boltken & Jagodzinski, 1985). In general, in the developed countries of Western
Europe, changes take place in the direction of enlargement of the mixed type group
(Arts & Halman, 2004).

For the most part, this is a consequence of certain global socioeconomic
developments. The changes in the functioning of world capitalism and market
economy system, especially after the oil crisis in the 1970s; crisis of the welfare
state; rising unemployment, social pathology, crime et al. in the developed Western
democracies; appearance of world terrorism et al. – all these led to an increase of
insecurity and even determined turning towards materialist goals and values.
“Simple” modernization that characterized industrial societies was replaced by
reflexive modernism of the post-industrial type (Beck, 1992; Giddens, 1990;
Inglehart & Welzel, 2005). The result of globalization process is an increase of
insecurity with respect to the way to deal with the new risks of potentially grave
consequences for humankind, such as overpopulation, natural disasters, armed
conflicts, unknown diseases et al. In other words, the progress on the road of
reflexive modernization solves the visible problems of fighting against poverty, that
is, creating welfare, but at the same time leads to facing the invisible problems of
risk and insecurity (Arts & Halman, 2004). Bearing this in mind, the decrease in the
number of postmaterialists is understandable.

Some empirical findings, contrary to Inglehart’s theory, indicate that there is a
significant negative correlation between the level of income and acceptance of
postmaterialist values – those who are richer are materialists in a larger degree, and
not vice versa (Davis & Davenport, 1999). The same study found no significant
correlation between age and acceptance of postmaterialist values. Both of these
findings call into question both Inglehart’s scarcity hypothesis and the socialization
hypothesis. Additionally, the preference of items in the battery is under strong
influence of economic context in the time period when the questions are asked, first
and foremost, of inflation and unemployment rate (Clarke et al., 1999). This creates
tremendous difficulties for Inglehart’s argumentation, since, if postmaterialist values
are the consequence of early socialization, then the contemporary economic
conditions should not exert a significant influence on the proportion of postmaterialists.

All the abovementioned critical remarks led to the formulation of an alternative model which explains value changes by rising levels of education. Inglehart viewed (the higher) levels of education exclusively as an indirect measure of the level of economic welfare of an individual in formative years, not assigning any important role to education in the formation and spreading of postmaterialist values (Abramson & Inglehart, 1992; Inglehart, 1971; 1990; Inglehart & Abramson, 1994; Inglehart & Welzel, 2005).

Starting from the surprisingly high levels of postmaterialism in the countries of the former USSR (surprising, considering the fairly poor economic achievements of communism), Duch and Taylor (1993; 1994) studied a completely specified cross-national multivariate model of postmaterialism which included both individual variables and macroeconomic indicators. The results of analysis of data from eight countries have suggested that early economic conditions do not influence the way in which the respondents rank postmaterialist items. Education and economic conditions in the moment of research proved out to be much better factors for explaining the variations in the analysis of these authors. In other words, it turned out that education, rather than early socialization, provided an explanation why younger cohorts are more postmaterialist oriented. Besides, the authors discovered a significant influence of variables which do not have any importance in Inglehart’s theory (such as, for instance, population size of settlement) and it is not clear in which way these could be related to the two key hypotheses.

These findings brought about a redefinition of the very conceptual status of postmaterialism, which is from this perspective viewed as a pro民主ocratic value orientation. This viewpoint does not argue that educational institutions encourage the development of postmaterialism, but that Inglehart’s index actually measures the pro-democratic orientation which is strongly influenced by education. Education is important because some items in the battery will be rather accepted by those who, during their years of schooling, learned to appreciate the values they stand for. An additional argument for such an attitude were also subsequent findings that indicated that Inglehart’s scale measures values connected with political liberalism (De Graaf & Evans, 1996). Finally, education exerts more influence on the classic postmaterialist index than on the postmaterialist index composed of other items that do not have political meaning and have a low correlation with the classic index (Warwick, 1998).

This paper analyses the acceptance of postmaterialist values in the population of Serbia and its main determinants. More precisely, it offers an analysis of the influence that certain sociodemographic variables exert on the acceptance of postmaterialist values, as well as their relative contribution to these values. Analysis includes both the factors that have decisive importance in Inglehart’s theory (age, family income) and the factors to which the critics of Inglehart’s theory assign an important role (education, population size of settlement).
Independent variables include the following:

- **Age** – the obtained age range (from 15 to 89 years) is divided into five age categories: from 15-29, from 30-39, from 40-49, from 50-59 and 60 and more.

- **Level of family income** – total income of the household earned in the month prior to research, which includes salaries, pensions, maternity and child allowances, part-time job incomes, agricultural income et al. was classified into five categories: up to 20000 dinars, from 20001-40000, from 40001-60000, from 60001-80000 and more than 80000 dinars.

- **Level of education** – the respondents are classified into three groups: primary education (no school, primary school, and incomplete secondary school), secondary education (vocational school, secondary school, incomplete college) and university education (college degree, faculty or academy degree, specialization, master or doctoral studies).

- **Population size of settlement** – this variable comprises five categories: up to 1999 residents, from 2000-4999, from 5000-19999, from 20000-99999, from 100000-499999 and over 500000 residents.

The basic dependent variable is (post)materialist value index in the form of a three-level variable (materialist values, mixed type, postmaterialist values).

The starting hypothesis for this research is that sociodemographic variables will present an important source of variation in the acceptance of postmaterialist values. The abovementioned results of previous analyses can give rise to the hypothesis that postmaterialist values will be more characteristic for the respondents with higher level of education and higher income. Similar goes both for younger respondents and the respondents from urban areas.

**Method**

Empirical basis of the paper is the public opinion research conducted in 2007 on the random, multi-stage stratified sample of the citizens of Serbia (without Kosovo and Metohija) which included 1410 respondents aged 15-89. The research was conducted by the Centre for Political Studies and Public Opinion Research of the Institute of Social Sciences from Belgrade. The procedure of standardized face-to-face interviews was applied.

Sample structure does not deviate significantly from the data obtained in the last census with respect to the type of settlement, gender, age and education of respondents. As far as gender is concerned, 47% of respondents are male and 53% female. Majority of respondents belong to the category of the youngest, from 15 to 29 (24%), that is, the oldest respondents, over 60 (24%). Age categories of 30-39 (17%), 40-49 (16%) and 50-59 (18%) comprise approximately the same number of respondents. The largest number of respondents has primary education (46%), and then secondary (41%), that is, university education (13%). More than half of respondents (55%) live in urban settlements (with over 20000 residents).
The questionnaire consisted of a section used for gathering data about the sociodemographic characteristics of the respondents, and questions belonging to standard Inglehart’s battery. Respondents were offered four social goals towards which, in their opinion, Serbia should strive in the following ten years. Out of four offered goals – fighting rising prices, maintaining order (materialist values), giving people more say in important government decisions, protecting freedom of speech (postmaterialist values) – the respondents were asked to choose the two which they considered most important.

Index was constructed in accordance with Inglehart’s procedure, and it is a three-level variable\(^2\). The respondents who chose two materialist goals obtained the score of 1 (materialist values); those who chose both postmaterialist goals obtained the score of 3 (postmaterialist values), while the respondents of mixed priorities obtained the score of 2 (mixed type).

**Results**

The results obtained on the level of the entire sample (Mean=1.59; SD=.608) show that materialist values (47%) are dominant in the Serbian population. Only 6% of respondents are characterized by postmaterialist values. The remaining respondents belong to the mixed type (47%). These findings are in accordance with previous analyses conducted on the data collected in the fourth wave of World Values Survey (1999-2004), which provided a similar distribution of three types of values among the Serbian population (Pavlović, 2006). This finding is, in general, in keeping with Inglehart’s assumption that in the absence of socioeconomic development, postmaterialist values are not widespread and that significant changes in the acceptance of postmaterialist values are not likely to occur.

In the analysis of importance of certain sociodemographic characteristics for the acceptance of postmaterialist values, multiple regression analysis was used (ordinary least squares method), since by means of presentation and analysis of simple bivariate correlations, the key objections to Inglehart’s theory cannot be either disputed or confirmed. Multiple regression analysis provides the possibility to analyze the assessment of relative contribution of sociodemographic variables to fluctuations in scores on postmaterialist index. In the opinion of some of Inglehart’s fiercest critics (Duch&Taylor, 1993; 1994), this procedure is the only adequate way to analyze the correlation between sociodemographic variables and postmaterialist scores. In accordance with this, results of analysis of multivariate model based on the data obtained in Serbia will follow.

The obtained multiple correlation coefficient of 0.30 is significant (F(4)=33.36; p<.001), which means that only 9% of variance can be explained by

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\(^2\) Inglehart's hypothesis that postmaterialism is one value dimension that lies at the basis of index construction, has been supported by this research. Factor analysis shows that the two types of goals are grouped at the opposed poles of one factor.
the combination of variables analyzed here (table 1). This finding is, to a certain degree, expected. In a previous analysis which served as the basis for this paper, the combination of factors which involved some of the macroeconomic indicators (apart from the sociodemographic variables analyzed here) explained only 14% of variance in individual differences in postmaterialist value index scores (Duch&Taylor, 1993).

All analyzed factors maintain a statistically significant influence on the variability of postmaterialist scores and probable interpretations of these correlations will be provided in further text.

Table 1: Results of multivariate analysis of postmaterialist value index scores

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Dependent variable: Postmaterialist value index</th>
<th>Zero-order correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income level</td>
<td>.055* (2.07)</td>
<td>.099*</td>
</tr>
<tr>
<td>Age</td>
<td>-.197** (-7.43)</td>
<td>-.226**</td>
</tr>
<tr>
<td>Education level</td>
<td>.090** (3.32)</td>
<td>.157**</td>
</tr>
<tr>
<td>Population size of settlement</td>
<td>.141** (5.20)</td>
<td>.182**</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.087</td>
<td></td>
</tr>
<tr>
<td>Number of cases</td>
<td>1358</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Entries are standardized regression coefficients; T-values in parentheses.

*p<.05; **p<.01.

Income. Although significant relative contribution of income is in keeping with Inglehart’s scarcity hypothesis, this variable is by far the weakest predictor out of all analyzed factors. It is a convincing piece of evidence speaking in favour of the thesis that the level of economic security is not among the most important factors of postmaterialist values, which is contrary to the main theses of Inglehart’s theory. This finding does not support this theory in one more way: it shows the importance of economic variables at the moment of research, which is in keeping with the view that emphasizes the importance of current economic context. At least in the case of Serbia, some other factors are far more important for acceptance of postmaterialist values.

Age. One of such factors is age, which is in accordance with Inglehart’s socialization hypothesis, since the standardized regression coefficients show that it is exactly this variable which makes the largest relative contribution in explaining individual differences in postmaterialist scores. The assumption that age is the most important factor of postmaterialist values, which implies the adequacy of generation hypothesis, was confirmed by this research. However, age differences can hardly be explained by Inglehart’s thesis about the crucial importance of security in formative period. The youngest respondents in this particular research were born in 1992, and so they spent a large part of their formative period in the 1990s, during which one can hardly speak of physical or economic security which, according to theory, plays
a decisive role in the formation of postmaterialist values. Although the theory does not define what formative period really is, Inglehart mentions that it is the age period from 8 to 12 (Inglehart, 1990). Therefore, formative years of a number of generations born between the end of 1980s and the beginning of 1990s can hardly be explained in terms of physical-economic security, which, at least in the case of Serbia, diminishes the explanatory power of this factor.

High absolute levels of wealth of a certain nation at a certain moment imply a high proportion of postmaterialist responses in cohorts socialized in these conditions, while a high rate of economic growth, according to theory, implies a relatively fast spreading of such choices, i.e. large inter-age differences within a society (Inglehart&Welzel, 2005). This practically means that Inglehart's theory does not at all predict the possibility of existence of age differences in Serbia. However, the obtained data suggest that generational differences are also possible in the absence of longer socioeconomic development, that is, some other factors are responsible for bigger inclination of the young towards postmaterialist values, at least in the case of Serbia.

Inter-age differences point out to the effect of some other factors. One possibility is that these are life-cycle effects, that is, not generational differences in the sense of different existential conditions in formative period, but differences related to age (Kuzmanović, 1995a). Postmaterialism can be a consequence of youthful idealism. Younger respondents have fewer family and social obligations, numerous idealized notions about life and the world that surrounds them, expectations that are often a consequence of an insufficiently critical attitude etc., which results in lesser concern for economic problems. As people grow older, get employed, get married, become parents etc. they have to adjust to reality and start perceiving the importance of material goals, even for the accomplishment of personal or social goals of a non-material character. One should not exclude the possibility that, as they grow older, respondents consider the value of basic democratic principles as something that goes without saying, whereby their enthusiasm related to these decreases (Duch&Taylor, 1993).

On the other hand, research shows that democratization diminishes the importance of conservative values (Schwartz&Sagie, 2000) and that the mere fact of having lived in a democratic regime influences value priorities (Warwick, 1998). Institutional changes and altered circumstances in Serbia after the year 2000 placed some (pro-system) values in the privileged position, by which the probability of their acceptance was increased (Kuzmanović, 1995b). Sudden introduction of democratic institutions in a society where a majority of citizens were socialized for non-democratic norms (as in the case of Serbia), creates a cognitive dissonance in individuals and sets demands for adaptation to current conditions of living to which people are exposed. The new norms and the behaviour which suits the democratic system is first expressed „among younger generations in whom it was not necessary to break the resistance of early and inconsistent learning” (Vasović, 1998, p. 88). In other words, the fact that the young are more inclined to accept postmaterialist
values can be a consequence of bigger effects of resocialization in the group of younger respondents (Pantić&Pavlović, 2007).

Finally, there is the possibility that the perceived differences are a consequence of rising levels of education in the new generations. Two indisputable pieces of data speak in favour of this – younger generations are more and more educated, and education is linked with the inclination towards acceptance of postmaterialist values, which, among other things, has been confirmed by the findings of this research.

**Education.** However, relative contribution of variable of education is much smaller than in the case of the age variable. This might mean that education is not the most important predictor of postmaterialist values, but also that generational differences are not exclusively the consequence of growing levels of education. Since both factors maintain a significant influence on postmaterialist values, it is obvious that both factors are important, but in a different degree.

Education of respondents subsumes a large number of different factors: formal or non-formal indoctrination, current socioeconomic status of respondents, but also socioeconomic status of the family in the formative period, degree of acquisition of different skills, level of information etc. This makes it difficult to draw precise conclusions about the nature of linkage between the level of education of individuals and the values analyzed here because any of the enumerated factors (or any combination of them) could have a decisive role. In this context, Inglehart’s treatment of education as an indirect measure of family welfare seems an unjustified simplification. Either through non-imposed indoctrination by the predominant political norms (in democratic countries), or through the more direct process of instilling the belief in equality and individual freedom, formal education creates commitment to democratic values. Education contributes to propagation of human rights as an ideal (McFarland&Mathews, 2005), that is, to reduction of authoritarianism due to the exposure to anti-authoritarian values (Jacobsen, 2001). Consequently, the registered correlation between education and postmaterialism should probably be observed in the context of prodemocratic character of the analyzed concept which is under prominent influence of education. However, the finding obtained in previous research (Duch&Taylor, 1993; 1994) that education is the most important predictor of postmaterialist values, that is, that differences between cohorts become trivial when the influence of education is controlled in a proper way, was not confirmed by the findings of this research.

**Population size of settlement.** Finally, an equally important finding is that relative contribution of population size of settlement is not only significant, but also bigger than the contribution of the variable of education. There is no reason to assume that the respondents from rural areas spend their formative years in bigger physical-economic insecurity than their peers from urban areas. However, there is reason to assume that the respondents from urban areas can be socialized for democratic forms of behaviour sooner. Growing urbanization, regardless of other factors, can have an influence on the preference of postmaterialist goals, because the
respondents from urban areas will come across confronted ideas, customs and attitudes earlier and be sooner socialized for democratic norms of tolerance and protection of the freedom of speech. That has nothing to do with Inglehart’s scarcity or socialization hypotheses.

Still, because of the small percentage of variance explained, these are just probable assumptions and not definite conclusions, and therefore further research is necessary in order to clarify the findings presented in this paper.

Discussion

The research conducted on 1410 citizens of Serbia aged 15-89 showed that postmaterialist values are quite rare in Serbia, since they characterize only 6% of respondents. The initial hypotheses were confirmed by the results of this research, since all analyzed factors are significantly correlated with postmaterialist values. The acceptance of these values increases with the degree of education, level of family income or population size of settlement, that is, declines with age.

The results of this analysis confirm some of Inglehart’s main assumptions. It showed that in a society characterized by a low level of socioeconomic development, postmaterialist values are poorly spread and the materialist values are predominant. Also, when compared to previous research (Pavlović, 2006), it seems that significant changes in the acceptance of postmaterialist values in Serbia from 2001 to 2007 are absent. In accordance with the socialization and scarcity hypotheses, age and income are important predictors of postmaterialist values.

On the other hand, results showed that some other factors which are put aside in Inglehart’s theory (like education and population size of settlement) influence acceptance of postmaterialist values as well. Furthermore, although significant correlation between age and income and postmaterialist values is expected, it is not expected in Serbia. In other words, Inglehart’s explanation of the linkage between age and postmaterialist values (different experiences during the early socialization due to socioeconomic development) cannot be taken for granted for a country which did not experience long-term socioeconomic development. Age of respondents is the best predictor of postmaterialist values, but probably for other reasons – growing levels of education among the young citizens of Serbia, life-cycle effects, resocialization as a consequence of democratization etc. Generation replacement could still be the main mechanism in spreading postmaterialist values. The young, who are more postmaterialist oriented, replace the older in adult population, which, in the long run, causes postmaterialist values to be more widespread on the national level. But the assumption that the main factor which causes intergenerational differences is socioeconomic development cannot be unconditionally applied in the case of Serbia. The results of this analysis confirm the validity of generation hypothesis, but call into question Inglehart’s interpretation of it.

Although the presented findings provide important insights into the nature of postmaterialism in Serbia and its factors, it is still necessary to take them with
caution. The combination of analysed sociodemographic variables explains only 9% of variance in postmaterialist value index scores, which means that it can hardly be argued there is a sociodemographic model of acceptance of postmaterialist values\(^3\). This is understandable because we are talking about social, not individual goals, so it could be expected that some social factors (like socioeconomic development) are the main determinants of analysed values. Besides, the small percentage of variance explained is, probably, a consequence of high homogeneity of postmaterialist value index scores (i.e. poorly spread postmaterialist values in Serbia) and significant correlations stem from the large sample of respondents.

This questions the usefulness of analysing postmaterialist values at the individual level, especially in those societies where these values are not very widespread (as in Serbia). At the aggregate level, greater cross-national differences in the acceptance of postmaterialist values justify its usage in comparing different societies and in the analysis of determinants and consequences of postmaterialist values.

References


\(^3\) There is a possibility that some other factors not analyzed here (gender, ethnicity, employment status, marital status etc.) are also very important for acceptance of postmaterialist values, but four sociodemographic values analyzed here are considered to be the most important.


