

THE IMPACT OF EMPLOYEES' PERSONAL VALUES ON THEIR ATTITUDES TOWARD SUSTAINABLE DEVELOPMENT: CASES OF SLOVENIA AND ROMANIA

Carmen Elena Cirnu*
Boštjan Kuralt**

Received: 22. 4. 2013
Accepted: 18. 11. 2013

Original scientific paper
UDC 331.5(497.4)(498)

The main purpose of this contribution is to examine the impact of employees' personal values on their attitudes toward economic, environmental, and social aspects of sustainable development. The proposed research agenda upgrades in the literature prevalent partial discussions about the influence of personal values on each dimension of the "triple bottom line," since it considers sustainability as one entity of the three underlying aspects. Furthermore, relations between aspects of sustainable development are empirically examined, not previously done in literature. These findings reveal that personal values play an important role in employees' perception of different aspects of sustainability. Slovenian employees understand sustainability as an entity of three aspects: economic, environmental, and societal, while results for the Romanian sample indicate that sustainability comprises primarily environmental and societal dimensions. Findings also suggest that the content of the sustainability concept in countries with different cultural backgrounds is understood differently. The results are reported for two culturally different EU member states—namely, Slovenia and Romania.

1. INTRODUCTION

The literature dealing with the three underlying aspects of sustainable development – economic, environmental, and social – is abundant (Elkington, 2004; Golja and Krstinić Nižić, 2010; Udo and Pawłowski, 2011; Metaxas and

* Carmen Elena Cirnu, Ph.D., Research Assistant, National Institute for Research & Development in Informatics ICI Bucharest, Digital Content Department, 8-10 Averescu Avenue, 011455 Bucharest, Romania, Tel. 040213160736/209, Fax. 40213161030, E-mail: carmen.cirnu@ici.ro

** Bostjan KURALT, M.Sc., Researcher, University of Maribor, Faculty of Economics and Business, Razlagova 14, 2000 Maribor, Slovenia, E-mail: bostjan.ku@gmail.com

Tsavdaridou, 2012), although most attention is directed to the environmental dimension, followed by the economic and finally societal dimension. Theoretical discussions about relations between those aspects prevail (Giddings et al., 2002; Redclift, 2005), while there is a paucity of empirical researches, confirming those relations in a more comprehensive way (Udo and Pawłowski, 2011). Enterprises and their employees face a trade-off between pursuing economical, environmental, and societal goals (Clayton and Radcliffe, 1996; Giddings et al., 2002). A plethora of factors drives peoples' behavior in pursuing different goals and its combinations (Megginson et al., 1992; Daft, 2007; Stojanovic Aleksic et al., 2013). Various experiences from Eastern and Western countries during the last two decades have emphasized personal values as a key factor in achieving the sustainable behavior of organizations and employees (Hemingway and Maclagan, 2004; Tuziak, 2010; Bernat, 2012).

In terms of researching the impact of personal values on attitudes toward sustainability, the studies about the impact of personal values on the environmental aspect are prevalent (Schultz and Zelezny, 1999; Stern, 2000; Hards, 2011), while economic and social aspects are rarely considered (Tuziak, 2010; Udo and Pawłowski, 2011; Radojicic et al., 2012). Several theoretical and empirical attempts have been made to examine the relationships between personal values and sustainable development (Stern, 2000; Udo and Jansson, 2009; Udo and Pawłowski, 2012); however, the whole picture about the impact of values on all sustainable development aspects is still blurry.

This paper clarifies the relations between underlying aspects of sustainable development and presents a new and comprehensive agenda to examine the impact of personal values on all three underlying dimensions of the sustainable development, previously not done. The paper builds on existing findings (Udo and Jansson, 2009; Tuziak, 2010; Udo and Pawłowski, 2012; Golušin et al., 2012) and upgrades them. The findings are presented for two East European countries with different cultural settings – Slovenia and Romania. Some conceptual and managerial implications like organization policy development, increasing sustainability level of organization or the implications for the organizations' hiring process aspects are outlined based on research findings.

2. PERSONAL VALUES AND SUSTAINABLE DEVELOPMENT

2.1. The three pillars of sustainable development

Sustainable development refers to the balance between economic, social, and environmental sustainability (Dunphy et al., 2000; Elkington, 2004; Golja

and Krstinić Nižić, 2010; Udo and Pawłowski, 2011; Metaxas and Tsavdaridou, 2012). It is a holistic concept, emphasizing that none of the development goals of economic growth, social well-being, and the wise use of natural resources can be reached without considering and affecting the other two (Clayton and Radcliffe, 1996; Giddings et al., 2002; Šarotar Žižek et al., 2011).

Theoretical and empirical investigations of sustainability aspects mainly focus on one or two aspects. Investigations focusing on one aspect primarily consider the environmental aspect (Schultz and Zelezny, 1999; Dietz et al., 2005), while researching solely the economic or social aspect is in this context rare. Considering the two-aspect studies, those dealing with both environmental and economic aspects of sustainability prevail (Munda, 1997; Prior, 1998; Golušin et al., 2012). Meanwhile, few studies research linkages between social and economic aspects of sustainability (Tuziak, 2010; Dempsey et al. 2011) or all aspects of sustainability (Udo and Jansson, 2009; Udo and Pawłowski, 2011; Radojicic et al., 2012). Thus, focusing on the single aspect of sustainability or linkages between two out of three aspects fails to acknowledge the holistic principle of sustainable development in general. In considering relations among sustainability aspects, no comprehensive empirical study of those relations exists (Munda, 1997). A holistic agenda for considering sustainability is put forth (Clayton and Radcliffe, 1996; Dunphy et al., 2000; Giddings et al., 2002; Redclift, 2005; Udo and Jansson, 2009), but rarely empirically examined (Udo and Pawłowski, 2011; Radojicic et al., 2012).

Based on the underlying idea of sustainability, it can be presupposed that the economic aspect is negatively associated with the other two aspects (i.e. environmental and societal) and vice versa (Friedman, 1962; Giddings et al., 2002; Daft 2007; Golušin et al., 2012). In turn, a positive association exists between environmental and societal aspects. Furthermore, the state of the country's level of economic development might also influence people's priorities and values. Hence, we can conclude that value systems in countries with different developmental levels and value priorities, are rather different (House et al., 2004; Alas and Edwards, 2011). In our study, the differences in value priorities among employees', which might exist due to the different level of countries' development, are not taken into consideration. We focus our research on examining the impact of different cultural patterns, which are a reflection of values, on the perception of sustainability. Thus, giving priority to the economic aspect (over other two) lowers the level of sustainability as perceived by employees, whereas giving more priority to environmental and societal (over economic) aspects increases the level of sustainability. Employees' perceived level of sustainability represents a foundation for their

behavior in enterprises in terms of sustainability aspects. In such a framework, the level of sustainability can be defined along a continuum, with anchors referring to the low and high level of sustainability (Clayton and Radcliffe, 1996; Giddings et al., 2002). In light of this understanding, we postulated following hypothesis:

Hypothesis 1: A greater concern for the environment and for the society is positively related to the level of sustainability, while concern for economics is negatively related to this level, as perceived by employees.

2.2 Personal values and their attitudes toward sustainability

Values are guides and determinants of social attitudes, ideologies, and behavior (Rokeach, 1973; Schwartz and Bilsky, 1987). A major reason for the focus on values is the pervasive and important influence of values on an individual's interpersonal, decision-making, ethical, environmental, and performance behaviors (Hemingway, 2005; Tuziak, 2010). As previously noted, the existing sustainability literature focuses on the environmental aspect and a combination of the environmental and economic aspects. Discussions about "sustainability drivers" reflect a similar state. Environmental surveys identifying important factors influencing pro-environmental behaviors are most common (Axelrod and Lehman, 1993; Kemmelmeier et al., 2002; Dietz et al., 2005). Such studies recognize personal values as an important source for defining relationships with the environment (Schultz and Zelezny, 1999; Stern, 2000; Hards, 2011). Evidence about the impact of personal values on employees' economic behavior can be also easily found (England, 1967; Hambrick and Mason, 1984; Megginson et al., 1992), while sustainability literature does not consider this relation in detail very frequently (Prior, 1998; Shafer et al., 2007).

People's personal values significantly influence their attitudes toward sustainable development and its underlying aspects (Schultz and Zelezny, 1999; Stern, 2000; Tuziak, 2010; Hards, 2011; Bernat, 2012). Hemingway (2005) proposed that the concern for social responsibility is not driven exclusively by economic motives; it may be championed as a result of personal morality, inspired by individual's own socially oriented personal values. Each employee has his/her own perception of the level of sustainability (Munda, 1997; Ketola, 2008; Potocan et al., 2008) based on his/her personal values. An examination of the impact of personal values on selected aspects of sustainability does not offer a holistic picture of the influence of personal values on sustainability attitudes

(Schultz and Zelezny, 1999; Kimmelmeier et al., 2002; Shafer et al., 2007). We developed a very general hypothesis enabling us to study the impact of an entire array of employees' personal values on their perceptions of all three sustainability dimensions:

Hypothesis 2: Employees' personal values significantly influence their attitudes toward sustainability aspects.

2.3. Personal values and attitudes toward sustainability in different cultural settings

Dealing with the interplay among the three interrelated pillars of sustainability and the impact of personal values on those pillars inevitably suggests the need to analyze those assumptions in different circumstances. The management literature offers a natural starting point for considering employees' behavior and their attitudes—namely, cultural differences, due to their importance for organizations (Ronen and Shenkar, 1985; Schwartz, 1992; WVS, 2010). Cultural differences are the foundation for our assumptions. Behavioral literature attributes an important role of values in enterprises (e.g. organizational culture) (Deal and Kennedy, 1982; Hambrick and Mason, 1984; Megginson et al., 1992). Differences in cultural backgrounds have a significant influence on leaders' behavior (House et al., 2002). This triggers a question as to whether the impact of employees' personal values on their attitudes toward sustainability aspects and the perceptions of sustainability are culturally bonded or universal across cultures. Consequently, we can argue that the differences in value orientation (in the frame of cultural settings) significantly impact issues related to sustainability.

We presuppose that different prevalent employees' value orientation will result in different prevalent attitudes toward sustainable development. The examples of Slovenia and Romania, both EU members, reveal that both countries have very similar institutional settlements, similar GDP (e.g. Romania has not accepted the Euro yet), and similar problems are at a very similar level of development. Despite the fact that they are all former transitional countries, their national cultures differ significantly based on the cultural dimensions proposed by Hofstede (1980) as well as other measures (Ronen and Shenkar, 1985; Schwartz, 1992; WVS, 2010). Adding a "cultural dimension" to the existing hypotheses results in the following hypotheses:

Hypothesis 3: Different cultural background of employee's reflects in differences in their attitudes toward sustainability.

Hypothesis 4: Different cultural background of employee's reflects in differences in their perception of the sustainability concept.

3. RESEARCH DESIGN

3.1 Data collection and sample characteristics

An online survey was conducted among employees in Slovenian and Romanian organizations. Sample characteristics are outlined in Table 1.

Table 1. Demographic data for Slovenian and Romanian sample

Variable	Slovenia	Romania
<i>Age</i>	41.90 years	32.22 years
<i>Gender</i>		
Male	33.9%	45.3%
Female	66.1%	54.7%
<i>Education</i>		
Did not finish primary school	7.0%	1.2%
Primary school	14.8 %	0
High school	36.5%	12.8%
Bachelor's degree	40.0%	59.3%
Master's degree	0.9%	26.7%
Doctorate degree	0.9%	0
<i>Position in the organization</i>		
Non-supervisory staff	65.2%	58.1%
First-level manager	12.2%	18.6%
Mid-level manager	18.3%	16.3%
Upper-level manager	4.3%	7.0%
<i>Working experiences</i>	19.04 years	10.17 years
<i>Organization size</i>		
Fewer than 100 employees	60.0%	51.2%
100 to 1000 employees	27.0%	23.3%
More than 1000 employees	13.0%	25.6%
<i>Industry of organization</i>		
Agriculture, mining, forestry	3.5%	2.3%
Construction	7.0%	5.8%
Manufacturing	19.1%	15.8%
Transportation, communication	7.8%	2.3%
Wholesale and retail trade	14.8%	5.8%
Finance, insurance, real estate	13.0%	4.7%
Services	7.0%	23.5%
Public administration	13.9%	9.3%
Healthcare	7.8%	8.1%
Other	6.1%	22.3%

Sampling was done based on GVIN, which lists Slovenian organizations, and Trade Romania which lists the Romanian ones. The survey link was sent to 500 employees in both countries, who had direct e-mail addresses available on their organizational web pages. We received 115 usable responses from Slovenian and 86 from Romanian employees.

3.2. Measurement of variables

The importance of personal values was measured using the Schwartz Value Survey (SVS) (Schwartz, 1992). SVS is a 56-item instrument that measures 10 types of personal values. The importance of each personal value was measured with a 9-point Likert-type scale, ranging from "opposed to my values" (-1) to "of supreme importance" (7). This instrument has been confirmed as a reliable measurement of personal values on Slovenian samples (Potocan and Mulej, 2007; Jerman and Završnik, 2012; Potocan et al., 2012) as well as on the Romanian population (Frost and Frost, 2000). The SVS questionnaire was previously translated into both Slovenian and Romanian languages. We checked for the consistency of available translations.

A 25-item questionnaire aimed to measure economic, social, and environmental attitudes was used (as aspects of sustainable development) (Ralston et al., 1997; Reynaud et al., 2007). Responses to the items were measured with a 9-point scale, ranging from 1 (strongly disagree) to 9 (strongly agree). The questionnaire items were translated into Slovenian and Romanian and then back-translated in order to ensure the correct translation.

After conducting a factor analysis (KMO = 0.844; sig. = 0.000), three factors were defined reflecting three sustainability aspects. The environment aspect encompasses the following items: prevent environmental degradation caused by the pollution and depletion of natural resources (EN 1); adopt formal programs to minimize harmful impact of organizational activities on the environment (EN 2); and minimize the environmental impact of all organizational activities (EN3). The economic aspect encompasses the following: worry first and foremost about maximizing profits (EC 1); bring down labor costs to a strict minimum (EC 2); ignore the environment when jobs are at stake (EC 3); and always be concerned first about economic performance (EC 4). Finally, we propose measurements that express the society aspect: contribute actively to the welfare of the community (SO 1); help solve social problems (SO 2); and play a role in the society that goes beyond the mere generation of profits (SO 3). The Cronbach's α values for the environment

aspect was $\alpha = 0.766$, for the economic aspect was $\alpha = 0.600$, and for the society aspect was $\alpha = 0.742$.

3.3. Research model

Researching the linkages between sustainability aspects and the level of sustainability as perceived by employees was done in AMOS, following Byrne's (2010) suggestions. The impact of personal values on sustainability aspects was examined with regression analysis, following the suggestions of Ho (2006). The research model is outlined in Figure 1.

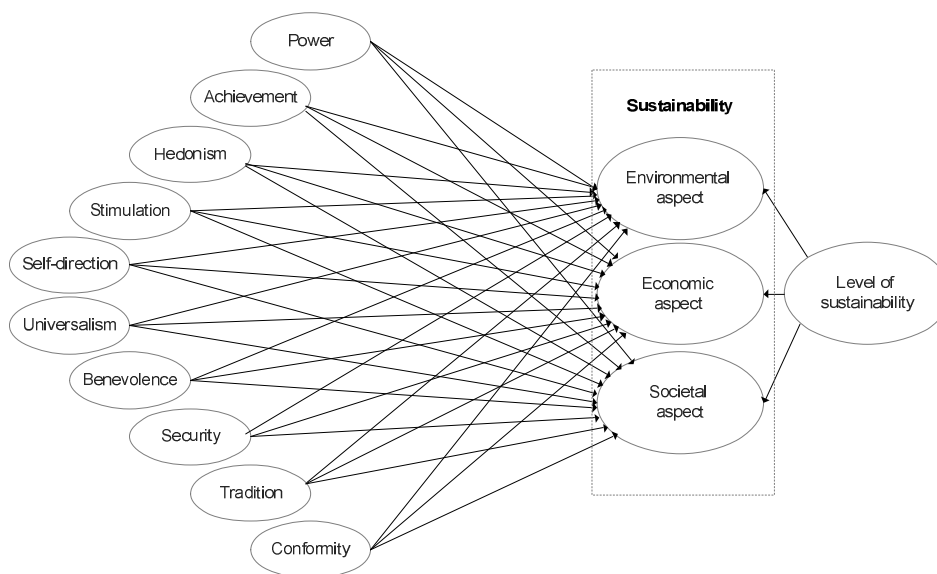


Figure 1. Research model

4. RESEARCH RESULTS

First, the results regarding linkages among sustainability aspects and the level of sustainability are outlined. Having two samples, Slovenian and Romanian, the question was whether the linkages followed the same dynamics for both samples. The AIC measure for testing the fit of the two models (Byrne, 2010) shows that the AIC value for the group variant model (2597.705) is slightly lower than for the group invariant model (2598.301), indicating that the group variant model is both more parsimonious and better fitting than the group invariant model.

In terms of fit statistics for proposed relations between sustainability aspects and the level of sustainability, a common measure – GFI, is in accepted range in research practice (Slovenia GFI = 0.889; Romania GFI = 0.887) (Byrne, 2010). The results for the Slovenian sample are presented in Figure 2 and for the Romanian sample in Figure 3.

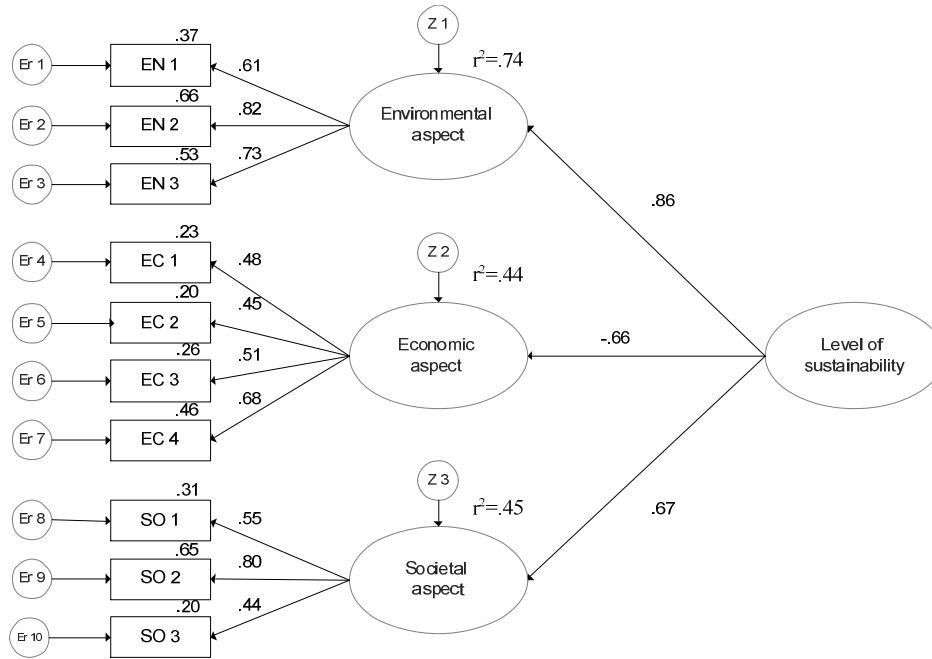


Figure 2. The pattern of structural relationships among sustainability aspects for Slovenia

According to Hypothesis 1, a greater concern for the environment and for society is positively related to the level of sustainability, as perceived by employees, while concern for the economics is negatively related to the level.

In the Slovenian sample, concern for the environment and for the society were positively and significantly related to the level of sustainability ($\beta = 0.86$, $p < .001$; $\beta = 0.67$, $p < .001$, respectively). The concern solely for the economic results was negatively and significantly related to the level of sustainability ($\beta = -0.66$, $p < .001$). Thus, Hypothesis 1 is supported for the Slovenian sample.

In the Romanian sample, it was evident that the concern for the environment and for the society were positively and significantly related to the level of sustainability ($\beta = 0.90$, $p < .001$; $\beta = 0.78$, $p < .05$, respectively). No

significant relationship existed between concern solely for the economic results and the level of sustainability ($\beta = -0.17, p > .05$). Thus, Hypothesis 1 is partly supported for the Romanian sample.

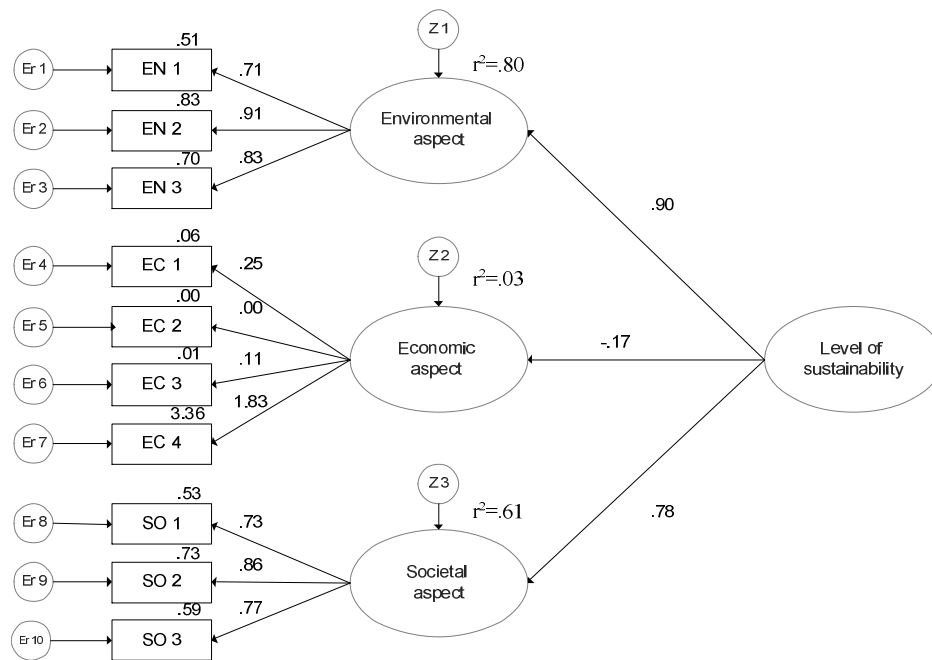


Figure 3. The pattern of structural relationships among sustainability aspects for Romania

According to Hypothesis 2, employees' personal values significantly influence their attitudes toward sustainability aspects. The results from the regression analysis for both countries are outlined in Table 2.

Personal values group was measured using a 9-point Likert-type scale, ranging from "opposed to my values" (-1) to "of supreme importance" (7), while sustainability aspects were measured using a 9-point scale, ranging from 1 (strongly agree) to 9 (strongly disagree). We inverted values for sustainability aspects; thus, a positive relationship means heightened importance of the personal value group and heightened perceived level of sustainability among employees while the opposite was true for the negative relationship.

Table 2. Regression analysis of personal values on sustainability aspects in Slovenia and Romania.

Variables ^a	Economy		Environment		Society	
	Slovenia	Romania	Slovenia	Romania	Slovenia	Romania
Achievement	0.199	0.322*	-0.222	0.066	-0.163	-0.007
Power	0.365*	0.240	-0.074	-0.040	-0.037	0.120
Hedonism	-0.047	-0.260	0.184	-0.091	0.070	-0.286
Stimulation	0.254*	0.116	0.008	-0.236*	-0.083	-0.255*
Self-direction	-0.418*	-0.148	0.033	-0.068	0.154	0.008
Universalism	-0.102	-0.276	0.102	-0.049	0.243	0.131
Benevolence	-0.156	0.188	0.269*	0.561**	0.050	0.438**
Security	0.254	-0.318	-0.043	0.342	-0.243	0.295
Tradition	0.083	0.178	-0.261	-0.094	-0.140	0.059
Conformity	-0.067	0.072	0.233	-0.378*	0.149	-0.239

Note: * $p < 0.05$; ** $p < 0.001$; all values in Table 2 are β values.

Hypothesis 2 allows us to examine the relations between personal values and sustainability aspects. Hypothesis 2 was supported for the Slovenian sample as power, stimulation and self-direction values were significantly related to the employees attitudes toward economic aspect (power: $\beta = 0.365$, $t = 2.974$, $p < 0.05$; stimulation: $\beta = 0.254$, $t = 2.122$, $p < 0.05$), self-direction: $\beta = -0.418$, $t = -3.549$, $p < 0.05$) and benevolence values were significantly related to the environment aspect ($\beta = 0.269$, $t = 2.647$, $p < 0.05$).

For the Romanian sample, Hypothesis 2 was supported as achievement values were significantly related to employees' attitudes toward economic aspect ($\beta = 0.322$, $t = 2.025$, $p < 0.05$), benevolence, conformity and stimulation values were significantly related to environmental concerns (benevolence: $\beta = 0.561$, $t = 4.449$, $p < 0.001$; conformity: $\beta = -0.378$, $t = 3.002$, $p < 0.05$, stimulation: $\beta = -0.236$, $t = -2.444$, $p < 0.05$) and benevolence and stimulation values were significantly related to the societal concern (benevolence: $\beta = 0.438$, $t = 4.615$, $p < 0.001$, stimulation: $\beta = -0.255$, $t = -2.681$, $p < 0.05$).

In terms of explanation power of personal values in variance of sustainable development aspects the following is evident. Values explained 20.5% of the variance in the employees' concern for economic results for the Slovenian, and 20.2% for the Romanian sample. For environmental aspect, personal values explain 7.2% of the variance in employees' attitudes toward environmental aspect in the Slovenian sample and 23.6% in the Romanian sample. For the societal aspect, the values explained 8.2% of the variance in the Slovenian and 25.2% in the Romanian sample.

Based on demographic data, there are at first glance apparent differences in the level of education among Slovenian and Romanian employees' participants. Due to that, hierarchical regression analysis was used, where the above mentioned demographic variables (especially education) influence on the relationship between employees personal values and their perception of different aspects of sustainability were tested. The results revealed that there was no significant impact of different level of education on considered relations. Furthermore, other control variables did not have a considerable impact.

5. DISCUSSION

The main purpose of this paper was to examine the linkages between employees' personal values and their attitudes toward three sustainability aspects. The study also reported on the relations between sustainability aspects and the level of sustainability, as perceived by employees.

Employee's personal values have a relatively good explanation power in the variance in sustainability aspects, as perceived by the employees, since there is a plethora of drivers that influence employee's behavior in organizations (Hemingway, 2005; Baumgartner, 2009; Potocan et al., 2012; Dabic et al., 2013). This confirms that values are an important driver of people's perception of sustainability (Munda, 1997; Hemingway, 2005; Shafer et al., 2007; Tuziak, 2010). Thus, personal values play an important role among different institutional, organizational, and personal factors (e.g. EU policies, national laws regarding environmentalism, corporate strategy and goals, people's behavior) that influence behavior related to sustainability.

The psychological literature and empirical examinations of personal values offer different predispositions regarding the impact of values on peoples' behavior (Rokeach, 1973; Schwartz, 1992). Considering actions that are triggered by values, our results are both expected and unexpected. In terms of expected impact of personal values on sustainability aspects, the following is evident. First, achievement values emphasize personal success by demonstrating competence in line with valid social standards of system or organization in which the individual is located (Schwartz, 1992). The results for Romanian employees confirm that their heightened need for achievements increased their attitudes toward striving solely for economic results. Second, a goal of power values is a desire for better social status, prestige, and influence on humans, events, and resources (Schwartz, 1992). Our results for Slovenian sample confirm that a higher importance of power for employees is realized

through their higher concern solely for economic results. Third, stimulation values reflect people's need for excitement, novelty, and challenge in life (Schwartz, 1992). Our results for Slovenian sample confirm that higher employees' needs for stimulation are realized through higher concern solely for economic results. Inversely, the results for Romania confirm that employees' lower need for stimulation is reflected in higher concern for the environment and society. Fourth, benevolence values trigger efforts to ensure the welfare of others or society (Schwartz, 1992). Our results for the Romanian sample confirm that high importance of benevolence for employees is reflected in their higher concern for environmental and social aspects. Similarly, high importance of benevolence for Slovenian employees is realized through higher concern for the environment. Those findings are in line with studies reporting, that benevolence values are positively related to concern for the environmental and societal issues (Hemingway and Maclagan, 2004; Shafer et al., 2007).

The impact of several groups of values is unexpected based on previous psychological literature and empirical evidence from studies in the sustainability context. First, conformity values had a significant negative effect on the environmental aspect in the Romanian sample, which is contrary to the findings in the psychological literature that claim that conformity values are related to preventing actions that could harm others or go against valid social norms (Schwartz, 1992). Shafer et al. (2007) also confirmed the significant positive impact of conformity values on a combination of environmental and societal concerns. These unexpected findings could have some roots in the level of a country's economic development. Thus, it can be speculated for Romania that due to the relatively lower economic development of the country in comparison to Slovenia, the primary concern is for economic results, instead of favoring actions that could prevent harm to the society or natural environment. This could be a reflection of the typical hierarchy of values (Schafer et al., 2007; Ralston et al., 2011). Second, self-direction values show a negative effect on economic concerns in the Slovenian sample, which is opposite the cognitions from literature about innovativeness that emphasize that creativity, independent thinking, and research are important building blocks of economic development (Collins and Porras, 2002; Nedelko and Potocan, 2013). In addition, the psychological literature suggests that self-direction values trigger actions related to accepting changes and searching for new ideas (Schwartz, 1992). But these findings reflect some recent findings about the state of society in Slovenia, emphasizing especially lower concern for creativeness, innovativeness and collaboration (Dabic et al., 2013; Stojanovic Aleksic et al., 2013).

Benevolence values are the most influential group of values in the Romanian sample, reflecting Shafer's et al. (2007) findings about the crucial role of benevolence. In the Slovenian sample, the impact of personal values was not markedly dominated by any group of values. In Slovenia, the values that influence people's priority toward economic results (power, stimulation, self-direction) reflecting a more individualist orientation (Hofstede, 1980; Potocan and Mulej, 2007) are in the forefront, while in Romania the values influencing mainly environmental and social aspects (stimulation, benevolence, conformity), reflecting a more collectivistic orientation that in Slovenia (Hofstede, 1980) are in forefront. The current study indicates that 6 groups of personal values, altogether in both samples, significantly influence sustainability aspects, although Shafer et al. (2007) reported on the influence of four groups of values.

Findings about the differences in employee's attitudes in Slovenian and Romanian samples support Hypothesis 3. Generally, our results support the findings about the positive association between the environmental concern and sustainability level as well as between societal concern and the sustainability level (Dunphy et al., 2000; Reynaud et al., 2007). Despite quite similar association between environmental aspects and sustainability in both samples, Udo and Pawłowski (2011) report about a significantly lower importance of environmental sustainability indicators for Romanian than Slovenian sample. A stronger association of personal values with environmental concern in Romania reflects a high importance of ecological indicators in sustainability development, in economically weakly developed countries from Eastern Europe compared to Western European countries, as suggested by Golušin et al. (2012).

Further, the similarity of associations between social aspect and level of sustainability for both countries, are in line with Udo and Pawłowski's (2011) findings about a similar level of social sustainable index in both countries. Looking overall, our findings about relations between sustainability aspects and level of sustainability are in line with Udo and Pawłowski's (2011) findings reporting high sustainability index in Slovenia and medium in Romania.

Significant differences between the two samples were evident regarding the impact of concern solely for the economic results on the level of sustainability. Heightened concern for solely economic issues resulted in a substantial lowering of the level of sustainability for Slovenian sample, is consistent with cognitions about negative association between economic concern and sustainability (Friedman, 1962; Munda, 1997; Prior, 1998; Daft, 2007; Udo and Jansson, 2009; Golušin et al., 2012). In the Romanian sample,

the association between economic concern and the level of sustainability was also negative, but statistically insignificant. This reflects the findings of Golušin et al. (2012) that economic indicators are an important part of sustainable development in Slovenia, while in Romania they play a side role.

Building on the results of the previous three hypotheses we can conclude that among Slovenian employees sustainability is understood as an entity of three aspects: economic, environmental, and societal. The results for the Romanian sample strongly support the conclusion that sustainability comprises primarily environmental and societal dimensions. Economic concerns are not perceived to have a relation to the other two aspects of sustainability, suggesting a different perception of sustainability concepts in both countries. Romanian employees consider striving for economic results, without relation to the other two sustainable goals. We assume that there is a different understanding of sustainability content in Slovenia and Romania, using mediation variable personal values. Based on those cognitions, Hypothesis 4 is supported.

6. PRACTICAL IMPLICATIONS AND CONCLUSIONS

In terms of conceptual implications this study introduces a comprehensive and new research agenda for researching the relations between sustainability aspects, previously not done in the literature. Furthermore, the research confirms the important role of employees' personal values in their perception of sustainability. This research is an important contribution, since on the one hand it clarifies the relations between economic, social, and environmental aspects of sustainable development and the influence of employees' personal values on their attitudes towards sustainability, and on the other, upgrades the existing literature (Udo and Pawłowski, 2011; Radojicic et al., 2012). Conceptually, the study also reveals differences in understanding sustainability in two different cultural backgrounds, previously not dealt with in the literature.

In terms of managerial implications, there are several that are important. First, in terms of organizational policy development, cognitions from the survey can guide the re-defining of organizational values (or culture) towards those emphasizing a more sustainable behavior (Baumgartner, 2009; Wikström, 2010). Core organizational values should be aligned with those reflecting a high level of sustainability. Second, based on research findings the role of underlying aspects for increasing the sustainability level of organization could be clarified to employees and policy makers. On the other hand, the management in an organization sees the contribution of different aspects of sustainable development, and can act accordingly to the organizational orientation, in terms

of often mutually exclusive sustainable development goals. Third, the findings have an important implication for the organization-person fit and organizations' hiring process. Knowing the relations between personal values and attitudes towards sustainability could be useful in the selection process. In that way, an organization could reduce resistance to later change towards a more sustainable behavior. Fourth, cognitions warn that sustainability could be differently understood in different cultural settings. Thus, the management must take this into consideration when doing business outside his/her cultural settings.

7. LIMITATIONS AND FUTURE RESEARCH

The main limitation of this research is that it focuses on two countries, both of which belong to Central and East European countries that have recently finished their transition. A minor limitation is the sample size. Furthermore, there are some differences in the level of education of both groups involved. Regarding future work using the proposed framework, it would be interesting to extend this research to more countries having different cultural backgrounds, along more coherent samples as in this study. Furthermore, why the employees understand the concept of sustainability in different ways should be examined as well as why the differences occur in understanding and perceiving the relations between sustainability aspects and the level of sustainability, as perceived by employees, in different countries. In terms of possible future research direction there could be an investigation of the association to the different sustainability measures and indexes.

REFERENCES

1. Alas, R., Edwards, V. (2011): Work-related attitudes in Asia and Europe: Institutional approach, *Inzinerine Ekonomika-Engineering Economics*, vol. 22, no. 1, pp. 24-31.
2. Axelrod, L, Lehman, D. (1993): Responding to environmental concerns: What factors guide individual action, *Journal of Environmental Psychology*, vol. 13, no. 2, pp. 149-159.
3. Baumgartner, R. J. (2009): Organizational Culture and Leadership: Preconditions for the Development of a Sustainable Corporation, *Sustainable Development*, 17 (2), pp. 102-113.
4. Bernat, P. (2012): Sustainable Development and the Values we Share – Sustainability as the Confluence of Islamic and Western Frameworks, *Problemy ekorozwoju*, 7 (1), pp. 33-41.
5. Byrne, B. M. (2010): *Structural Equation Modeling with AMOS*, Routledge, New York.

6. Clayton, T., Radcliffe, N. (1996): *Sustainability: A Systems Approach*, Routledge, London.
7. Collins, J., Porras, J. I. (2002): *Built to last: Successful Habits of Visionary Companies*, HarperCollins Publishers, New York.
8. Dabic, M., Potocan, V., Nedelko, Z., Morgan, T. R. (2013): Exploring the use of 25 leading business practices in transitioning market supply chains, *International Journal of Physical Distribution & Logistics Management*, vol. 43, no. 10, pp. 833-851.
9. Daft, R. L. (2007): *Understanding the Theory and Design of Organizations*, South-Western, Mason.
10. Deal, T., Kennedy, A. (1982): *Corporate Cultures*, Addison-Wesley Publishing, Reading.
11. Dempsey, N., Bramley, G., Power, S., Brown, K. (2011): The Social Dimension of Sustainable Development: Defining Urban Social Sustainability, *Sustainable Development*, 19 (5), pp. 289-300.
12. Dietz, T., Fitzgerald, A., Shwom, R. (2005): Environmental values, *Annual Review of Environment & Resources*, 30 (1), pp. 335-372.
13. Dunphy, D., Benveniste, J., Griffiths, A., Sutton, P. (2000): *Sustainability: The Corporate Challenge of the 21st Century*, Allen & Unwin, Crows Nest
14. Elkington, J. (2004): Enter the Triple Bottom Line, in: *The Triple Bottom Line: Does it all add up*, ed. Henriques, A., Richardson, J., Earthscan, London. pp. 1-16.
15. Friedman, M. (1962): *Capitalism and Freedom*, University of Chicago Press, Chicago.
16. Frost, K., Frost, C. (2000): Romanian and American Life Aspirations in Relation to Psychological Well-Being, *Journal of Cross-Cultural Psychology*, 31 (6), pp. 726-751.
17. Giddings, B., Hopwood, B., O'Brien, G. (2002): Environment, Economy, and Society: Fitting them together into Sustainable Development, *Sustainable Development*, 10 (4), pp. 187-196.
18. Golja, T., Krstinić Nižić, M. (2010): Corporate social responsibility in tourism – the most popular tourism destinations in Croatia: Comparative analysis, *Management*, 15 (2), pp. 107-121.
19. Golušin, M., Munitlak Ivanović, O., Jovanović, L., Domazet, S. (2012). Determination of the Ecological-Economic Degree of Development in Countries of SE Europe – Weight Coefficients Technique, *Problemy ekorozwoju*, vol. 7, no. 1, pp. 87-93.
20. Hambrick, D. C., Mason, P. A. (1984): Upper echelons: The organization as a reflection of its top managers, *Academy of Management Review*, 9 (2), pp. 193-206.

21. Hards, S. (2011): Social Practice and the Evolution of Personal Environmental Values, *Environmental values*, 20 (1), pp. 23-42.
22. Hemingway, C. A. (2005): Personal Values as a Catalyst for Corporate Social Entrepreneurship, *Journal of Business Ethics*, 60 (3), pp. 233–249.
23. Hemingway, C. A., MacLagan, P. W. (2004): Manager's Personal Values as Drivers of Corporate Social Responsibility, *Journal of Business Ethics*, 50 (1), pp. 33-44.
24. Ho R. (2006). *Handbook of Univariate and Multivariate Data Analysis and Interpretation with SPSS*, Chapman & Hall/CRC, Boca Raton.
25. Hofstede, G. (1980). *Cultures Consequences: International/Differences of Work-Related Values*, Sage, Beverly Hills.
26. House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., Gupta, V. (2004): *Culture, leadership, and organizations: The globe study of 62 societies*, Sage, Thousand Oaks.
27. House, R. J., Javidan, M., Hanges, P. J., Dorfman, P.W. (2002). Understanding cultures and implicit leadership theories across the globe, *Journal of World Business*, 37 (1), pp. 3-10.
28. Jerman, D., Završnik, B. (2012): The model of marketing communications effectiveness: empirical evidence from Slovenian business-to-business practice, *Journal of business economics and management*, 13 (4), pp. 705-723.
29. Kimmelmeier, M., Krol, G., Hun Kim, Y. (2002): Values, Economics, and Pro-environmental attitudes in 22 societies, *Cross-Cultural Research*, 36, (3), pp. 256-285.
30. Ketola, T. (2008): A Holistic Corporate Responsibility Model: Integrating Values, Discourses and Actions, *Journal of Business Ethics*, 80 (3), pp. 419-435.
31. Megginson, L. C., Mosley, D. C., Pietri, P. H. Jr (1992): *Management: Concepts and Applications*, HarperCollins Publishers, New York.
32. Metaxas, T., Tsavdaridou, M. (2012): Corporate social responsibility in Greece: A comparative analysis of the three major energy companies (case study), *Management*, 17 (2), pp. 119-140.
33. Munda, G. (1997): Environmental economics, ecological economics, and the concept of sustainable development, *Environmental values*, 6 (2), pp. 213-233.
34. Nedelko, Z., Potocan, V. (2013): The role of management innovativeness in modern organizations, *Journal of enterprising communities*, 7 (1), pp. 36-49.
35. Potocan, V., Mulej, M. (2007): Ethics of a sustainable enterprise - and the need for it, *Systemic practice and action research*, 20 (2), pp. 127-140.

36. Potocan, V., Nedelko, Z., Mulej, M. (2012): Influence of organizational factors on management tools usage in Slovenian organizations, *Inzinerine Ekonomika-Engineering Economics*, vol. 23, no. 3, pp. 291-300.
37. Prior, M. (1998). Economic valuation and environmental values. *Environmental values*, vol. 7, pp. 423-441.
38. Ralston, D. A., Egri, C. P., Reynaud, E., Srinivasan, N., Furrer, O., Brock, D., et al. (2011): A twenty-first century assessment of values across the global workforce, *Journal of Business Ethics*, 104 (1), pp. 1-31.
39. Ralston, D. A., Holt, D. H., Terpstra, R. H., Kai-Cheng, Y. (1997). The impact of national culture and economic ideology on managerial work values: a study of the United States, Russia, Japan, and China, *Journal of International Business Studies*, 28 (1), pp. 177-207.
40. Redclift, M. (2005): Sustainable Development (1987-2005): An Oxymoron Comes of Age, *Sustainable Development*, 13 (4), pp. 212-227.
41. Reynaud, E., Egri, C. P., Ralston, D. A., Danis, W., Starkus, A., Dabic, M. (2007). The Differences in Values between Managers of the European Founding Countries, the New Members and the Applicant Countries: Societal Orientation or Financial Orientation?, *European Management Journal*, (25) 2, pp. 132-145.
42. Rokeach, M. (1973). *The Nature of Human Values*, Free Press, New York.
43. Ronen, S., Shenkar, O. (1985): Clustering countries on attitudinal dimensions: A review and synthesis, *Academy of Management Review*, 10 (3), pp. 435-454.
44. Schultz, W., Zelezny, L. (1999): Values as predictors of environmental attitudes: evidence for consistency across 14 countries, *Journal of Environmental Psychology*, 19 (3), pp. 255-265.
45. Schwartz, S. (1992): Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries, in: *Advances in experimental social psychology*, ed. Zanna, M., Academic Press, New York, pp. 1-65.
46. Schwartz, S., Bilsky, W. (1987): Toward A Universal Psychological Structure of Human Values, *Journal of Personality and Social Psychology*, 53 (3), pp. 550-562.
47. Shafer, W. E., Fukukawa, K., Lee, G. M. (2007). Values and the Perceived Importance of Ethics and Social Responsibility: The U.S. versus China, *Journal of Business Ethics*, 70 (3), pp. 265-284.
48. Stern, P. (2000). New Environmental Theories: Toward a Coherent Theory of Environmentally Significant Behavior, *Journal of Social Issues*, 56 (3), pp. 407-424.

49. Stojanovic Aleksic, V., Nedelko, Z., Domanovic, V. (2013): Is it necessary to change organizational culture? Slovenia-Serbian experience, *Actual problems of economics*, 140 (2), pp. 354-362.
50. Tuziak, A. (2010). Socio-Economic Aspects of Sustainable Development on Global and Local Level, *Problemy ekorozwoju*, vol. 5, no. 2, pp. 39-49.
51. Udo, V., Pawłowski, A. (2011): Human Progress Towards Equitable Sustainable Development – part II: Empirical Exploration, *Problemy ekorozwoju*, 6 (2), pp. 33-62.
52. Udo, V. E., Jansson, P. M. (2009): Bridging the gaps for global sustainable development: A quantitative analysis, *Journal of Environmental Management*, 90 (12), pp. 3700-3707.
53. Wikström, P.A. (2010): Sustainability and Organizational Activities – Three Approaches, *Sustainable Development*, 18 (2), pp. 99-107.
54. World Values Survey (WVS) (2010): *World Values Survey*. <http://www.worldvaluessurvey.org> [16 May 2011].

UTJECAJ OSOBNIH VRIJEDNOSTI ZAPOSLENIKA NA STAVOVE PREMA ODRŽIVOM RAZVOJU: SLUČAJ SLOVENIJE I RUMUNJSKE

Sažetak

Temeljni je cilj ovog rada analiza utjecaja osobnih vrijednosti zaposlenika na njihove stavove prema ekonomskom, okolišnom i društvenom aspektu održivog razvoja. Predloženi istraživački pristup nadopunjuje do sada prevladavajući pristup analize djelovanja osobnih vrijednosti na svaku od dimenzija "trostruke bilance", s obzirom da se održivost smatra jedinstvenim konstruktom. Nadalje, empirijski se analiziraju odnosi između različitih aspekata održivog razvoja, što do sada u literaturi nije bio slučaj. Rezultati istraživanja govore da osobne vrijednosti imaju važnu ulogu u percepciji različitih aspekata održivosti od strane zaposlenika. Zaposlenici u Sloveniji razumiju održivost kao jedinstveni konstrukt s tri dimenzije: ekonomskom, okolišnom i društvenom, dok se u Rumunjskoj podrazumijevaju primarno okolišne i društvene dimenzije. Rezultati također ukazuju da se sadržaj koncepta održivosti drugačije tumači u zemljama s različitom kulturom, što se prikazuje na slučaju dvije različite članice EU – Slovenije i Rumunjske.