

DOI 10.17234/SocEkol.30.1.2  
UDK 502.131.1(497.4):316.644-053.6  
316.642.3-053.6(497.4)  
17.026

Original scientific paper  
Received: 14 May 2020  
Accepted: 1 July 2020

# FROM CONSCIOUSNESS TO BEHAVIOUR: INDIVIDUAL, SOCIAL, AND ENVIRONMENTAL RESPONSIBILITY AMONG SLOVENIAN YOUTH

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## Abstract

*Individualisation trends encouraging young people to focus on their achievements seem to contradict the needs for socially and environmentally sustainable behaviour, and this requires additional empirical testing. The purpose of this paper is to present and provide basic testing of an original model of responsible behaviour. The model is inspired by the theory of planned behaviour distinguishing between consciousness, intentions, and behaviour. The presented model applies these to individual as well as to social and environmental responsibility while taking into account the social, technological, and natural environments. The research is based on the presumption that it is crucial to connect the individual dimension of responsibility with the environmental and social dimensions to achieve environmental and social sustainability at the micro-level. Data for the preliminary testing of the model was collected from an online social survey among Slovenian youth and analysed through partial correlations and path analysis. The results show that individual responsibility is strongly connected to social and environmental responsibilities, but only in terms of behaviour, and not values and intentions. Responsibility is also strongly connected to the social and technological environment, especially to the ways how young people are using digital technology.*

**Keywords:** *responsibility, youth, technology, Slovenia, sustainable development, planned behaviour*

## 1. INTRODUCTION

This paper explores the dimensions of the responsible functioning of Slovenian youth. While the focus is on the national situation, the results can also be considered in a wider context of generational changes in the late-modern, globally-connected social reality (Howe and Strauss, 2008; Prensky, 2001).

The issue of responsible behaviour is tightly knit with the idea of sustainable development referring to “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987). It has at least three distinctive dimensions, i.e. economic, social, and environmental, which are closely intertwined and mutually interdependent (Purvis et al., 2019). The issue of sustainability also calls for stronger social integration and cooperation between human beings who have to take responsibility for their actions and pursue their sustainability

goals in the given eco-systems. Thus, human actors have the ability to transform the society for the better and co-create a more sustainable future (Archer and Donati, 2015). The ongoing degradation of natural and social environments is of great concern for scholars interested in the issue of sustainable development (Kirn, 2004; Špes, 2008). The recent coronavirus outbreak has emphasised even more the need for cooperation and solidarity among people and nations. The poorest and excluded groups are paying the highest cost. In addition, the pandemic also pointed tremendously to the global intertwinement of different societal levels. More than ever before, humanity has been facing severe social and ecological pressures causing tremendous concerns for the future.

In order to ensure sustainable development, there is a need for more intensive and holistically responsible functioning, which is an underlying framework of the present text. It focuses on youth being the pillars of our future society. What is concerning is that there is a persisting lack of sustainable and responsible social and environmental functioning among this population. This is a generation strongly affected by the transformations brought about by individualisation, technological development, and virtual communication. Due to precarious living conditions and new risks imposed by individualisation processes, young people are compelled to forge their own way and rely on their own recourses (Giddens, 1991; Ule, 2008). In contemporary social circumstances permeated with the challenges of individualisation processes, a person has to rely on their own self when seeking proper education, employment or even happiness, health, and social reproduction. The market economy compels individuals to form themselves as consumers, while common well-being and preservation of the natural environment do not seem to be priorities. Accordingly, one can notice an alarming effect of individualistic value shift to the behaviour patterns referring to responsible functioning in the last decades. The latter calls for the need to explore the linkage between values and actual practices, while taking individual, social, and environmental responsibility into account.

In sociological terms, the concept of responsible behaviour on the micro-level refers to a way of functioning that entails individuals' concerns and actions for achieving common collective goals, which provide long-term stability, well-being of society, and contribute to sustainable social and natural environments (Brandon and Lombardi, 2005; Musil and Lavrič, 2010; Kleindienst, 2019). A way of functioning that can be defined as responsible is seen as a reaction to the environment in which one is present. There is an initial personal orientation towards responsibility that conditions any kind of responsible behaviour, regardless of various environmental stimuli. The fragmentation of the meaning of responsibility might make sense when focusing on particular aspects of the environment, but they ensue from a common conceptual meaning and are tied to one's personality traits. For that purpose, the research draws on Ajzen's (1991) distinction between values, intentions and behaviour, while presenting an original research model referring also to the impact of different environments, i.e. the social, natural, and technological ones.

The main aim of this paper is to (1) explore the compatibility between one's responsibility for oneself (individual responsibility) and their responsibility towards the community and nature; (2) test the consistency between values, intentions, and behaviour

in this framework applied to the responsible functioning of Slovenian youth; and (3) ascertain how this is affected by the social, natural, and technological environments.

## **2. REVIEW OF PREVIOUS STUDIES**

The particular dimensions of responsible functioning, such as environmentally and socially responsible consciousness and behaviour, have been recognised as an important research topic in many different studies and scholarly discussions. Within sociology, environmental issues began to receive attention back in the 1970s. Since then, many efforts have been invested into clarifying the conceptual grounds and its operationalisation. Those endeavours have ranged from qualitative to more recent quantitative perspectives boosted by the International Social Survey Programme (ISSP) with an environmental module, and the World Values Survey. Sociological studies have been focusing on political behaviours (Rootes, 1999), rational choice theory, and the theory of planned behaviour (Haanpää, 2017), and more recently on individual-level environmental behaviours and environmental practices (Spaargaren, 2011; Telesiene and Gross, 2017). One can still draw from recent local, regional or national surveys (Hamilton and Saito, 2015), but, as it has been argued, the environmental indicators are often far from ideal and the national level of aggregation obscures the effect on the individuals' level (Hamilton and Saito, 2015).

There are also interesting studies concerning sustainable behaviour among youth. Haanpää (2017) emphasises the importance of risk perception, while Eilam and Trop (2012) show the importance of different educational strategies among adults, children and youth, who should be addressed separately. Similarly, while focusing exclusively on students, Levin and Strube (2012) show that knowledge about the environment and explicit attitudes influence behaviour through different pathways, which may have implications for interventions seeking to increase environmentally friendly behaviour. Similarly, social interventions influencing responsible behaviours have been emphasised for the Slovenian environment (Polajnar Horvat, 2015). The ecological consciousness and practices among the Slovenes, showing worrying results for the future, have been addressed by Špes (2008) and Kirn (2004).

Trends among the Slovenian youth who are strongly affected by the transformations brought by individualisation, technological development, and virtual communication have been highlighted through different studies. For instance, data has shown (Flere et al., 2014) that in the period between 2000 and 2010 the percentage of young people who believe that their happiness depends on other people has fallen from 84.2% to 79.8%. The collectivist orientation is highly correlated with supporting environment protection and stability in society, which has been decreasing as well. When focusing on environmental consciousness in particular, the results are even more disturbing. Longitudinal studies reveal a significant decline of environmental support and concern in the same age period, which occurred at the break of the millennium. At the beginning of the 1990s, 15% more of the youth population supported environmental sustainability

compared to the later decades (Musil and Lavrič, 2010). In addition, the share of the youth population perceiving environment protection as very important at that time was 55.2%, while in 2010 the percentage of that population decreased to 33%. While considering Inglehart's well-known postmodern value transformation, those studies yield surprising results calling for further scholarly exploration.

General structural conditions, such as the economic development of the country or the level of representative democracy, have already turned out to be insufficient for explaining the level of sustainable and pro-environmental consciousness of young people (Musil and Lavrič, 2010). There are general factors exhibiting a certain level of impact on sustainable functioning, such as maturity, interests in new things and authoritative uprising, but there is also a complex intertwinement of factors appearing through recent studies which call for more scholarly attention.

Taking into account the rapid pace of social transformations embracing changes in social, natural, and technological environments, one can see factors influencing responsible functioning at the macro and micro-societal levels to be very complex and exceeding demographic frames. For instance, more developed countries with prevailing post-material values can have more individuals supporting environmental sustainability (Haanpää, 2017), but this is not linked to their readiness and actual sustainable behaviour. On the other hand, some studies show that those who have a more stable life are also less interested in sustainability issues (Hadler and Kraemer, 2017). Studies concerned with demographical settings reveal unconvincing results as well. Such studies show women and the more educated population in general to be more concerned with eco-friendly behaviour (Polajnar Horvat, 2015). However, factors influencing the differences among them can be quite uncertain. For instance, age has a statistically significant influence on sustainable behaviour, and while young people are more environmentally conscious in China, it is just the opposite in Europe. Also, higher income positively correlates with eco-concerns, but living in degraded environments and having a lower income seems to be even more influential. Data on a macro comparative level emphasised the need for considering factors of influence beyond national characteristics, but simultaneously in the context of local and national specifics (Dolenec et al., 2014). It has been found that despite particular structural settings dividing Europe on the core, periphery, and semi-periphery and having a certain impact on sustainable behaviour, those factors go beyond national frames and seem to be much more complex. As Dolenec et al. (2014) observe, it is crucial to consider contextual sociodemographic characteristics.

In addition, unprecedented access to information, knowledge, storage capacity, mobile and online communication and new ways of interaction have all become multiplied due to the developments in artificial intelligence, robotics, biotechnology, and energy storage (Schwab, 2017). Based on existing studies and the data from the World Values Survey, individualisation does not seem compatible with socially and environmentally sustainable ways of living, especially among young people (World Values Survey, 2009, according to Lavrič, 2010). The central issue of this study is to determine whether this is indeed the case.

### 3. HYPOTHESES, MATERIALS AND METHODS

In order to provide a better understanding of responsible behaviour, we distinguish between three conceptual components of responsible functioning complying with the theory of planned behaviour (Ajzen, 1991): attitudes, intentions, and behaviour. Studies dependent on such theoretical prepositions (Eliam and Trop, 2012; Haanpää, 2017) have shown that there is an indirect influence of attitudes on behaviour through pro-behavioural intentions, but the factors influencing such attitudes and behaviour remain insufficiently explained.

There is also a strong need to explore direct factors influencing sustainable behaviour, which subsequently influences consciousness, and not merely vice versa. In addition, it is crucial to deepen the understanding of factors influencing sustainable and responsible social functioning, referring to a more holistic and systematic exploration of wider socially responsible functioning and inter-relatedness of different elements of such behaviour. For the purposes of the empirical research, a theoretical model has been developed differentiating between the influences of three different environments and three conceptual components of planned behaviour (Ajzen, 1991) leading to an explanatory model of each dimension of responsible behaviour and also potential relations between them (Figure 1).

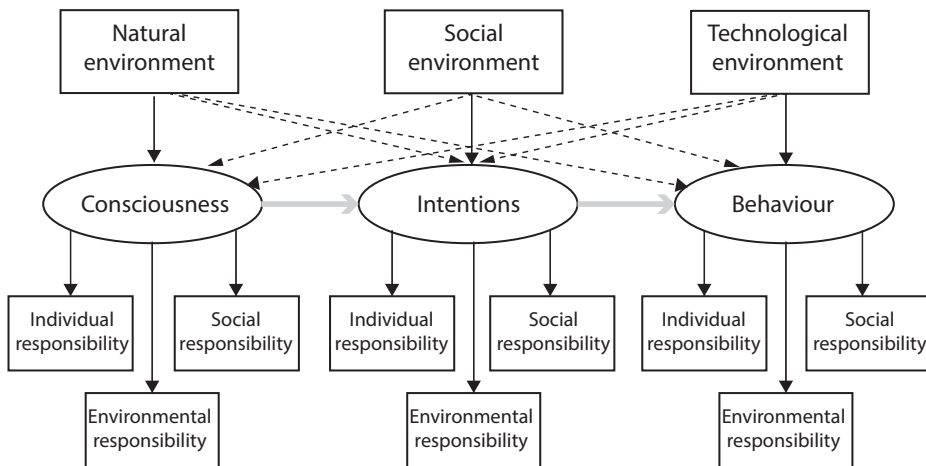


Figure 1. *Theoretical model of responsible behaviour*

Firstly, this research hypothesises that the three dimensions of responsibility, namely for oneself (individual), for other people (social), and for the natural environment (environmental), are all interconnected or at least compatible.

This does not necessarily imply that all of them can be subsumed into a single concept of responsibility in general. What should be tested, however, is whether a single concept or socio-environmental responsible behaviour can be constructed that combines social

and environmental responsibility at the level of behaviour. The relationship of this concept to individual responsible behaviour can then be tested. The methods applied to test this set of hypotheses in this paper are:

- partial correlations to test the relations between the three types of responsibility for each of the three components, namely consciousness, intentions and behaviour;
- Cronbach alpha and principal component analysis (PCA) to test the (uni)dimensionality of socio-environmental responsible behaviour as a concept consisting of socially and environmentally responsible behavioural practices;
- and construction of a latent variable of socio-environmental responsible behaviour as an aspect of structural equation modelling, and testing how it can be related to other individual responsible behaviour and other variables in our model.

Secondly, it hypothesises that there is an influence of consciousness to intentions and intentions to behaviour. Therefore, the linkage between consciousness and behaviour is indirect. While in line with Ajzen's theory of planned behaviour we assume a distinction between consciousness (values), intentions, and behaviour, we hypothesise this indirect causal relationship from responsible consciousness to responsible behaviour. The method used to test this is path analysis, but with an element of structural equation modelling as socio-environmental responsible behaviour included in the model as a latent variable.

Table 1. *Aspects of responsibility and corresponding survey question*

	To what extent do you agree with the following statements? *		In the last year, how often have you... **
	Consciousness	Intentions	Behaviour
<b>Individual responsibility</b>	I rarely wonder what they have taught me about the world around me (inverted scale)	I'm willing to invest my time in further education, even if it means less free time for me	Worked hard to gain the knowledge and experience necessary to take care of yourself in your future life?
<b>Social responsibility</b>	In my life, I consider concern for the common good as essential	I'm willing to volunteer to help people in the local area, even if it means less free time for me.	Participated in activities that contribute to social justice or help people in need?
<b>Environmental responsibility</b>	Plants and animals have the same right to life as humans.	I'm willing to use my free time and savings to save the planet, save forests and seas.	Participated in activities that contribute to environmental protection?

\* Answers on a scale of 0 to 5, with 0 indicating respondents not agreeing at all and 5 being in full agreement

\*\* Answers on a scale of 0 to 5, with 0 representing "Never" and 5 "Very often"

And finally, it also hypothesises that individual responsibility is influenced by natural, the social, and technological environments. The social environment refers to general demographic information related to one's gender, education, parents' education, and material status. In addition, it also refers to whether the respondents study and / or work and whether they have the experience of longer mobility abroad. The research tests the technological environment in terms of digital skills and the use of technology for communication, entertainment, formal learning, and search for employment, as well as the informal acquisition of knowledge and information. Again, the path analysis mentioned above is applied to test this set of hypotheses.

The survey was conducted online between October 2018 and April 2019 based on the *IKA Oneclick Survey*. The questionnaire was constructed by drawing on previous studies (Braskamp and Engberg, 2014; Dunlap et al., 2000). Each aspect of responsibility corresponded to an appropriate survey question, as can be seen in Table 1<sup>1</sup>. The national sample of respondents comprised 650 individuals between the ages of 19 and 29 with the sampling based on a combination of convenience sampling and snowballing. Statistical analysis presented in this article has been conducted using the *Stata 14.2* statistical software.

Table 2. *Features of the sample*

<b>Gender</b>	Men	35%
	Women	65%
<b>Education</b>	Primary or less	2%
	Vocational	10%
	High school	48%
	College / university	40%
<b>Age</b>	Mean, median	23.6; 24
	Standard deviation	3.15
<b>Status</b>	Study	33%
	Work & study	26%
	Work	38%
	None	3%
<b>Living</b>	With parents	27

1 As each aspect of responsibility for each level (i.e. consciousness, intentions, behaviour) is only measured by a single survey question, the convergence validity for each of these nine combinations cannot be tested. On the other hand, one can confirm the discriminant validity of the distinction between consciousness, intentions and behaviour which makes the model consistent with the assumptions of Ajzen's theory of planned behaviour. Comparing the correlations within a certain level (i.e. within consciousness and within intentions regarding different types of responsibility) with the correlations between consciousness and behaviour (while considering the attenuation in the correlation to take the error of measurement into account) produces the coefficient of 0.78 for discriminant validity, which is sufficiently low to indicate an acceptable distinction between behaviour and intentions. The corresponding result regarding the distinction between intentions and behaviour is 0.63.



The demographic structure of the sample is presented in Table 2. Although the sampling was not random, and therefore its size and internal diversity are not fully representative of the entire population, the survey can offer relevant insights into the relationship between individual dimensions of responsibility and the individual factors that influence them. Since the sample is not representative, the frequency distributions and arithmetic means of individual variables are not specifically presented, because they cannot be explicitly generalized to the population. However, the focus is on the connections that are relevant specifically from the perspective of the theoretical model presented above.

## 4. RESULTS

### 4.1. *The connection between different dimensions of responsibility*

The partial correlation coefficients indicate that environmental and social consciousness do not correlate with the individual one, while they are moderately correlated between themselves, which is consistent with the existing research mentioned above. However, while moving to intentions and behaviour, these correlations become stronger, as can be seen in Figure 2. This speaks in favour of the first set of hypotheses claiming that different dimensions of responsibility are at least compatible (i.e. there are no negative correlations), and we can even detect positive correlations especially within the behavioural component and between social and environmental responsibility.

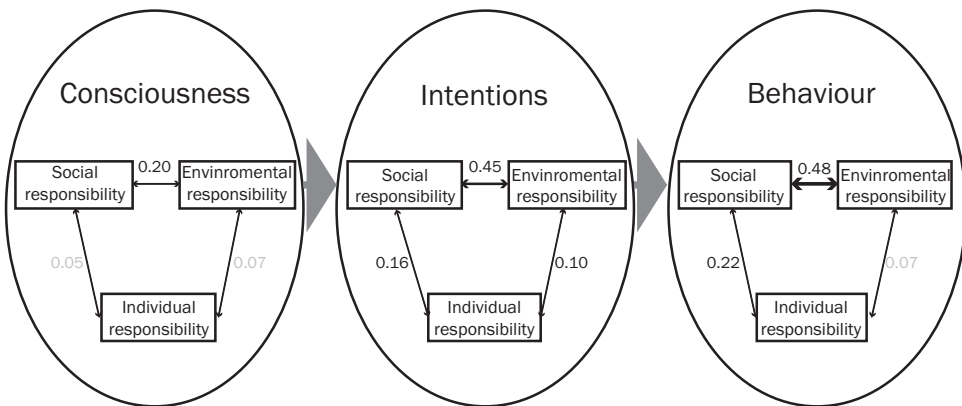


Figure 2. *Partial correlations between different types of responsibility*

Does this positive correlation imply that a unified concept of socio-environmental responsible behaviour can be constructed? The Cronbach alpha for the combination of social and environmental responsible behaviour of 0.7 is still within the limits of the acceptable. Within the PCA, a single principal component explains 75 per cent of the variance (with the eigenvalue of the second possible principal component lower than



0.5). Obviously, one cannot claim that social and environmental responsible behaviour are the same thing (and no theory claims they are), but they can be combined in a creation of the dependent (endogenous) latent variable in terms of structural equation modelling.

Furthermore, path analysis is applied to test the theoretical model from Figure 1. Combining social and environmental responsibility into a single latent variable (based on the theoretical and empirical correlation between social and environmental responsibility) adds an aspect of structural equation modelling to this analysis. This thus confirms that consciousness has a direct impact on the intentions and that intentions impact behaviours. As seen in Figure 3, the new latent variable depends on both social and environmental intentions, while the latter is influenced by environmental and social consciousness. What is crucial here is the correlation between social and individual responsibility, and indirectly also with the environmental one. The latter somehow reinforces the assumption that the different dimensions of responsible action can be considered together as one.

Figure 3 also indicates that individual responsibility plays an important role in socially and environmentally responsible behaviour, as well as in intentions. Regarding behaviour, the relationship is even more pronounced. Considering the first set of hypotheses, the research thus confirms the relationship between individual responsibility and the latent variable of socio-environmentally responsible behaviour. This is consistent with the second set of hypotheses specified above claiming the relationship between consciousness and intentions as well as between intentions and behaviour.

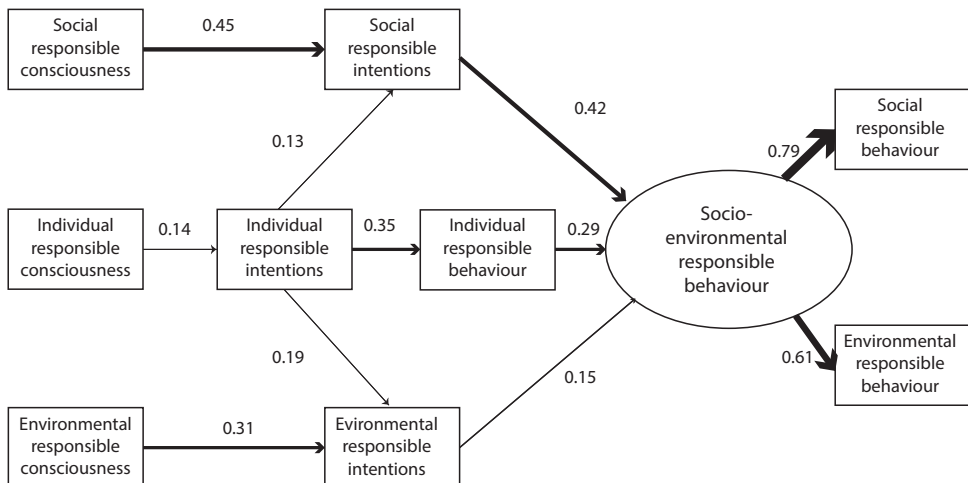


Figure 3. Linear path analysis model showing the impact of individual responsibility and environmental and social consciousness and intentions on socio-environmentally responsible behaviour (with statistically significant standardised coefficients indicated)

#### 4.2. *The influence of a particular environment on responsible behaviour*

Finally, to test the third set of hypotheses, the path analysis model also includes the potential impact of social, technological and environmental factors to all aspects of responsible consciousness, intentions and behaviour.<sup>2</sup>

Table 3 shows the impact of particular environments on responsible performance. The consciousness ends up being related to one's mother's education and one's self-assessment of their material living standard. In terms of consciousness, women feel more responsible for themselves and the environment. They are also more responsible for themselves in terms of intentions. A greater commitment to individual responsibility might be linked to their awareness of the relatively more challenging circumstances that young women are facing, while they seek to plan a successful career as well as family life. A tertiary-educated mother may have greater influence in encouraging young people to appreciate the values of individual responsibility. Due to the breakdown of the traditional social order, women are no longer forced to take care of others and to maintain a certain social cohesiveness. Or conversely, they are forced to take care of themselves and consolidate their position in the individualised social order to adapt to the competitive market economy, which rewards individual success primarily in economic terms.

Stronger responsible intentions are also more significant for those who are more satisfied with their material living standards and have a tertiary education. At the level of individual responsibility, this would mean that those who have already achieved certain successes in terms of education and material standard still retain such intentions for further success. It is encouraging that education also brings more socially responsible intentions. Higher satisfaction with income comes with stronger environmental intentions, which is consistent with Inglehart's thesis on the transition to post-materialism once a certain level of material needs is met.

As young people age, individual and environmental responsibility decreases at the level of intentions. On the one hand, this can be worrying, signifying the decreasing positive effects of formal education and family values as youth become older. On the other, it could be encouraging if it alludes to positive trends within the youngest generation, such as those that have been recently expressed through the initiatives of Greta Thunberg. One should therefore investigate the relationship between individual and social cycles of transformations (Golob and Makarovič, 2019) which would call for further longitudinal research. A higher dependence on others, typical for those young people still living with their parents, however, does not favour the development of socially responsible intentions, meaning the intentions to care for others.

The impact of the physical, natural environment is more challenging in terms of in-

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2 The model fit is within the reasonably acceptable limits – with the root mean squared error of approximation (RMSEA) at 0.05, and with the standardised root mean squared residual (SRMR) at 0.05. Some departure from a perfect fit can be observed in the comparative fit index (CFI) value of 0.83. Clearly, the model does not cover all of the factors potentially affecting responsible behaviour.

terpretation. Living near a forest has a positive impact on environmental awareness, while living in an individual home is negatively correlated to environmental intentions. Living near a park is similarly negative with socio-environmental responsible behaviour. Further in-depth and possibly qualitative research would be needed to explore what is at this moment just a speculative assumption that more direct contact with the natural environment in terms of responsibility to nature may be more important than “artificially” regulated connection contacts with natural environments typical for living near gardens or city parks.

Regarding the technological environment, the frequent use of information and communications technology (ICT) for formal education and work is linked to individual responsibility at the level of intentions and behaviour. Those who make greater use of these technologies for additional, non-formal education and news seeking exhibit more socio-environmentally responsible behaviour. The latter is also associated with the more frequent use of online public services. In contrast, the frequent use of ICT for communication is associated with a lower level of individually responsible values and behaviour, while the use for entertainment and leisure is associated with a lower level of social responsibility at the level of intentions and a lower individual responsibility at the level of behaviour. A strong focus on digital communication and entertainment has unfavourable effects for individual and social responsibility, while the effects are positive when using ICT for work, education, and informal browsing for information.

## **5. CONCLUSIONS, PRACTICAL IMPLICATIONS AND LIMITATIONS**

In conclusion, it can be summarised how the results reflect the three sets of hypotheses regarding responsible behaviour and what practical implications can be derived from that.

First, the research results confirm that individual, social, and environmental responsibility are connected or at least compatible with each other. Individual responsibility can be compatible with both social and environmental responsibility and becomes correlated with them when moving from consciousness and intentions to actual behaviour. Distinguishing the dimensions of responsibility from one another is thus especially important at the level of values or consciousness. The empirical findings indicate that taking care of oneself, which is encouraged by the current global competitive social order, is not incompatible with the concern for other people and for the natural environment. On the contrary, being engaged in providing one's own flourishing can also imply taking care of others at the level of behaviour, which is essential. In terms of intentions and behaviour, we can see the connection of all three dimensions of responsibility.

The key practical implication of this finding is how important it is to promote an active role and empowerment of individuals. The challenges that young people face today in finding employment, their own autonomy, and education can also be linked to the promotion of environmental and community concerns. Actual concern for one's own

Table 3. The effects of environments on social responsibility: statistically significant standardised regression coefficients in the path analysis model

Environment	Factor-exogenous variable	Responsibility at the level of consciousness			Responsibility at the level of intention			Responsibility at the level of behaviour	
		Individual	Social	Environmental	Individual	Social	Environmental	Individual	Socio-Environmental
Environment	Female	0.10		0.24	0.08				
	Material standard (self-assessment)		0.10		0.08		0.12		
	Age				-0.20		-0.11		
	Tertiary education				0.16	0.10			
	Mother with tertiary education	0.10							
	Living with parents					-0.10			
	Staying abroad continuously for three months				0.09				
Social embeddedness	Not working not studying		-0.11		-0.14			-0.11	
	Living near forest			0.10					-
	Living in an individual house						-0.09		
Natural	Living near park								-0.12
	Frequency of using digital technology for work and / or formal education				0.12			0.11	
Technological	Frequency of using digital technology for informal learning and information							0.10	0.11
	Frequency of using on-line public services	0.13							0.17
	Frequency of using digital technology for communication	-0.15			-0.14				
	Frequency of using digital technology for entertainment					-0.08			-0.12

well-being can lead to a greater concern for the community and the natural environment. Someone who is active in one field is also more active in other ones. This implies that some changes towards greater social solidarity and concern for the natural environment are at least potentially possible without the radical transformation of the existing global social order, at least not to start with that. Considering the pace of the estimated rate of global warming and other aspects of the degradation of the natural environment, there would not even be enough time to wait for very radical social transformations.

However, the practical challenge still seems to be greater for environmental responsibility than for social responsibility. The model shows that this correlation is stronger for social responsibility than for environmental responsibility. This may be because the connections of Slovenian youth with the social environment are significantly more intense than their links with the natural environment. More direct experience of social relations can also encourage individuals to establish clearer perceptions of their personal commitment to certain intentions, and also to fulfil those intentions at the level of behaviour.

Concern for the natural environment seems to be a more abstract concept, thus, a shift from consciousness to intentions remains a greater challenge. People perceive themselves as part of society, depending on others, but they are not sufficiently aware of how they depend on the natural environment.

Secondly, based on the empirical study, one can observe a connection of consciousness with intentions and intentions with behaviour. The correlation of all three types of responsibility at the behavioural level does not mean that social and environmental values as such do not matter. Our data also comply with previous findings (Levin and Strube, 2012) showing that values and attitudes are a strong predictor of intentions and consequent behaviour.

The practical implication is that investing in consciousness and values remain important. Therefore, more work needs to be done to support these values, as they potentially influence more intensive behaviour. All levels of formal education, media policies, as well as non-governmental organizations (NGOs) could further play a crucial role in this regard.

Finally, referring to the third set of hypotheses, all components and dimensions of responsible behaviour are conditioned by certain aspects of social, natural, and technological environments. The social environment seems to generate stronger effects in that regard when compared to the natural environment, which is hardly surprising due to contemporary embeddedness in the social world and the distance perceived in relation to the natural world. The direct contact of individuals with the technological environment, which is particularly evident among young people, is also not surprising.

Again, the practical implications are significant. Survey results show that excessive use of technology for communication and entertainment is detrimental to both individual and social responsibility. Increased use of technology for education and work, however, has a beneficial effect on individual responsibility in terms of intentions and behaviour. The use of technology for non-formal education and information-seeking even has a

positive impact on socio-environmentally responsible behaviour. As the crucial role is thus played by the actual use of the technology, and not the technology itself, much depends on the policies in this field. Encouraging digital literacy and responsible use of digital technologies is therefore crucial.

Technological development can stimulate the individual's awareness of social and ecological problems around the globe. New modes of communication promote new modes of solidarity including, for example, through novel opportunities for collaboration and co-creation of relational goods (Archer and Donati, 2015). Nevertheless, technology can also contribute to narrow-minded and ideologically polarised thinking among individuals and groups, for instance, through echo chambers (Reed, 2019).

A final note should be added regarding the limitations of this research. As mentioned already, they are linked to sampling limitations. Further research will need to draw on more representative national samples, move beyond youth and possibly include a comparative cross-national perspective. Secondly, a more extensive questionnaire to measure different aspects of responsibility should be considered – including the option of measuring the same concept through multiple questions. This would be the basis to apply additional tests of validity and reliability and build an even more comprehensive structural equation model. While the results of this study can be seen as preliminary, they can also become a basis for much needed further systematic research on how to encourage behaviour for responsibility towards the community and nature. Engaging in future research in terms of longitudinal aspects of youth's behaviour explaining the differences within this particular generation and thus explaining in more detail the impact of growing up with responsible behaviour would also be interesting to explore further.

**Funding and other acknowledgements:** This research was funded by the Javna agencija za raziskovalno dejavnost Republike Slovenije (Slovenian Research Agency), grant number J5-788. Support in terms of patronage for the data collection was given by the Slovenian National Committee of the Management of Social Transformations Programme (MOST) at the Slovenian National Commission for UNESCO.

**Conflicts of interest:** The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

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## OD SVIJESTI DO PONAŠANJA: INDIVIDUALNA, SOCIJALNA I EKOLOŠKA ODGOVORNOST SLOVENSKE MLADEŽI

Tea Golob i Matej Makarovič

### Sažetak

*Trendovi individualizacije koji potiču mlade da se usredotoče na svoje postignuća su naizgled nesumjerljivi s potrebom za društvenim i ekološkim održivim ponašanjem, te je nužno provesti empirijska istraživanja kojima bi se ova teza provjerila. Surba ovog rada je provesti osnovno testiranje originalno oblikovanog modela odgovornog ponašanja i predstaviti rezultate. Model je nadahnut teorijom planiranog ponašanja koja razlikuje svijest, namjeru i ponašanje. Model koji predstavljamo primjenjuje navedene koncepte na pojedinačnu i društvenu ekološku odgovornost, uzimajući u obzir socijalni, tehnološki i prirodni kontekst. Istraživanje se temelji na pretpostavci da je važno povezati individualnu dimenziju odgovornosti s ekološkom i socijalnom dimenzijom kako bi se postigla ekološka i socijalna održivost na mikro razini. Podaci za preliminarno testiranje modela prikupljeni su online anketnim istraživanjem među slovenskom omladinom, a rezultati su analizirani pomoću parcijalnih korelacija i tehnike analize puta. Rezultati pokazuju da je individualna odgovornost snažno povezana s društvenom i ekološkom odgovornosti, ali samo kod ponašanja, ne i vrijednosti i namjera. Odgovornost je također čvrsto povezana sa socijalnim i tehnološkim kontekstom, posebno s načinima na koji mladi koriste digitalnu tehnologiju.*

**Ključne riječi:** odgovornost, mladi, tehnologija, Slovenija, održivi razvoj, planirano ponašanje

## VOM BEWUßTSEIN ZUM BENEHMEN: INDIVIDUELLE, SOZIALE UND ÖKOLOGISCHE VERANTWORTUNG DER SLOWENISCHEN JUGEND

Tea Golob und Matej Makarovič

### Zusammenfassung

*Die Individualisierungstrends, die junge Leute dazu anregen, sich auf die eigenen Errungenschaften zu fokussieren, scheinen mit dem Bedürfnis nach einem sozial und ökologisch nachhaltigen Benehmen inkompatibel zu sein, es ist also notwendig, empirische Forschung durchzuführen, die diese These überprüfen sollte. Der Zweck dieser Arbeit ist es, eine grundlegende Prüfung des originell gebildeten Modells des verantwortlichen Benehmens durchzuführen und die Ergebnisse zu präsentieren. Das Modell ist von der Theorie des geplanten Benehmens inspiriert, die das Bewußtsein, die Absicht und das Benehmen unterscheidet. Das hier vorgestellte Modell wendet die genannten Konzepte an individuelle und sozialökologische Verantwortung an und zieht dabei den sozialen, technologischen und natürlichen Kontext in Betracht. Die Forschung beruht auf der Annahme, dass es wichtig ist, die individuelle Dimension der Verantwortung mit der ökologischen und sozialen zu verbinden, um eine ökologische und soziale Nachhaltigkeit auf der Mikroebene zu behalten. Die Daten für eine vorübergehende Prüfung des Modells wurden durch eine online-Umfrage der slowenischen Jugend gesammelt und die Resultate mit Hilfe der partiellen Korrelationen und Techniken der Weganalyse analysiert. Die Ergebnisse zeigen, dass die individuelle Verantwortung stark mit der sozialen und ökologischen Verantwortung verbunden ist, aber nur beim Benehmen und nicht bei Werten und Absichten. Die Verantwortung ist auch fest mit dem sozialen und technologischen Kontext verbunden, insbesondere mit der Art und Weise, wie junge Leute mit der digitalen Technologie umgehen.*

**Schlüsselwörter:** Verantwortung, junge Leute, Technologie, Slowenien, nachhaltige Entwicklung, geplantes Benehmen