

1 Article

2 Security and Health as Individual Values in Western 3 Romanian Youth

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9 **Abstract:** The study of values at European and global level has gained momentum along with the
10 theory of values launched by Schwartz. Values are dormant, hidden, unobservable and impossible
11 to measure directly. They exist somewhere within the human being, manifested by different
12 attitudes, depending on their degree of generality. The paradigm of basic human values implies
13 shared universal values that are encountered in cultures all over the world. The theory of values
14 designed by Schwartz has refined the pool of 19 basic individual values representing principles in
15 individuals and group, further describing the dynamic relationships among them. This study
16 presents practical evidence of the dynamics between individual values, the dynamics theorized by
17 Schwartz in 2012. Following the development of an online questionnaire made up of 46 items with
18 online responses options on a Lickert scale from 1 to 6, where 1 represents less important and 6
19 represent very important, 220 young people from Western Romania voluntarily responded. By
20 testing the hypothesis assuming the dynamic relationship between the two values through multiple
21 regression analysis, the results demonstrate that in Model 1, which involves a linear relationship,
22 health explains 42% of the variance in security with a $F = 161,215$ significant at $p < .01$. In Model 2,
23 which involves a curvilinear relationship, health explains 50% of the variance in security version
24 with a $F = 35,336$ significant at $p < .01$. The incremental prediction optimization of 8% added by
25 including the squared security accounts for the curve in the regression line, indicating the existence
26 of a curvilinear relationship between security and health. The dynamic relationship demonstrates
27 that upper limit and lower limit aspects of security, significantly influence the health value in a
28 negative way. Normal levels of security trigger a high level of prioritization of health value. The
29 implications of this type of relationship are discussed in explaining the value phenomenon at
30 individual level. The study shows limits due to the selected sample, focusing exclusively on young
31 people with higher education from the Western region of Romania. This sample was the target
32 group of "The National Identity of Romanian Youth" project which designed this research.

33 **Keywords:** values theory, security, trust, dynamic relationship

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35 1. Introduction

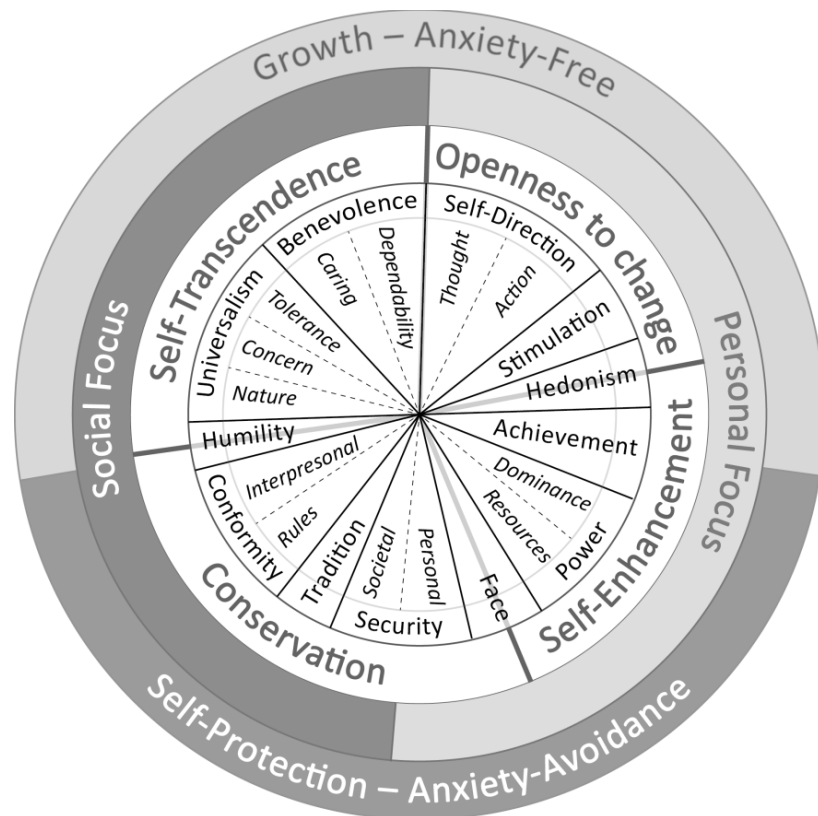
36 Although psychology as science has lately joined the paradigm on sustainable development, one
37 cannot underestimate the crucial role of the human behavior in changing the cognitive frames of
38 individuals and societies, by bringing into the scene attitudes and values that are part of the process
39 of human decision-making. The social integration of youth and vulnerable groups in general is an
40 important aspect of psycho-social sustainability [1].

41 Social sciences dealing with the study of values have not arrived at a definition consensus. As
42 van Deth and Scarbrough [2] highlight, psychology sees value as a way of selectively guiding linked
43 to individual preferences, motives, needs and attitudes, while sociology links the value to norms,
44 habits, ideologies. The debate about the individual or social character of values remains in open
45 continuity between the two sciences. Different interpretations of values in lately psychological

46 literature have empowered consensus among psychologists regarding the individual attribute of
47 values [3], [4], [5], [6].

48 The ten distinct values identified by Schwartz are universal due to the fact that they are sources
49 one of the three overall solicitudes of human existence: biological needs, social interaction, and
50 survival and wellbeing needs of individual and groups [7]. The psycho-social dissonance and
51 congruity that individuals go through when pursuing specific values emerge in a particular system
52 of relations among values [5], [8].

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59 Figure 1. Circular motivational continuum of 19 values in the refined value theory [9]

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61 As depicted in Figure 1, values that come in conflict when individuals try to pursue them
62 simultaneously are in diametric opposition from the center; adjacent to one another, one can find
63 congruent values that are situated in the continuum; the lateral circular proximity gives values the
64 similarity of their latent motivations; the non-proximity of values evokes the more different their
65 motivations, altogether forming a continuum of related motivations [9].

66 Schwartz comprehends the ten values as universal and exhaustive [5], [7], [10], and in 2011 he
67 refines the theory adding to the paradigm the more obvious representation of the motivational
68 continuum of human values. The refined theory is based on the fact that the 10 values are grouped
69 on two polar axes, with the two extremes so called high-value guidelines. The first axis opposes
70 openness to change (stimulation, explaining self-direction, and hedonism) and conservation
71 (security, tradition, conformism). The second of the axis is contrasting self-realization (achievement,
72 power and portion of hedonism) and concern for others (universalism and benevolence).

73 As related to examinations of the correlation between environmental sustainability education of
74 youth and health outcomes, the authors [11] have come up with support of the fact that there were
75 statistically significant optimizations in general health-related quality of life scores after students
76 participated in the environmental education intervention.

77 2. Research methodology

78 The national project Identitatea Nationala a Tinerilor Romani, has been developed with the aim
79 of deeper understanding the dynamicity of national identity aspects and personal values among
80 youth from the West side of Romania. One of the first research questions was the depiction of the
81 relationship between health and security, both conceptualized as conservation values, the first being
82 oriented towards social focus and the second towards personal focus, according to Schwartz (2011).
83 There has been designed an online questionnaire with the purpose of gathering descriptive data, also
84 general perceptions about national identity and values.

85 Starting from Schwartz's three axes conservatism / autonomy, hierarchy / egalitarianism and
86 mastery / harmony, we have designed a 46 items questionnaire including the following values: self-
87 determination (items 1, 2, 3), stimulation (items 5, 6, 7), hedonism (8, 9, 10), achievement (12, 13, 14),
88 power (16, 17, 18), security (20, 21, 22), conformity (23, 24, 25), tradition (27, 28, 29), benevolence (30,
89 31,32), universalism (33, 34), humor (36, 37, 38), trust (40, 41, 42), health (44, 45, 46) and a dissimulation
90 scale (items 4, 11, 15, 19, 26, 35, 39, 43). We have asked respondents to score on a Likert scale (1 to 6)
91 the relative impact of that value, where 1 means less important and 6 very important. A total of 220
92 responses were gathered between November and December 2018, by sharing them on social media
93 groups of youth, for freely and voluntarily answering.

94 Regarding the internal consistency of the 46 items scale of values, we have obtained an alpha
95 coefficient of 0.839, showing that the scale owns high internal consistency, knowing the fact that a
96 reliability coefficient of 0.70 is accepted in social science research results.

97 Additionally we have investigated the dimensionality of the scale, using the Principal
98 Component Analysis. Results show that the Eigen value for the first factor is twice larger than the
99 Eigen value for the next factor (10.278 versus 5.312). Even more, the first factor accounts for 71% of
100 the total variance, suggesting that the items of the scale are unidimensional.

101 Our hypothesis states that research variables security and health are in a curvilinear relationship.
102 With the purpose of testing our hypothesis, our team has used multiple linear regression analysis,
103 based on multiple regression analysis for curvilinear effects, where health was the dependent variable
104 and the independent variables security.

105 Present research was conducted on a random sample of 220 students from the West side of
106 Romania, of both sexes, 17.3% males and 82.74% females, from both rural 42.7% and urban 57.3%
107 environments, with 50% of participants having high school level of education, 35.5% bachelor and
108 14.5% master degree.

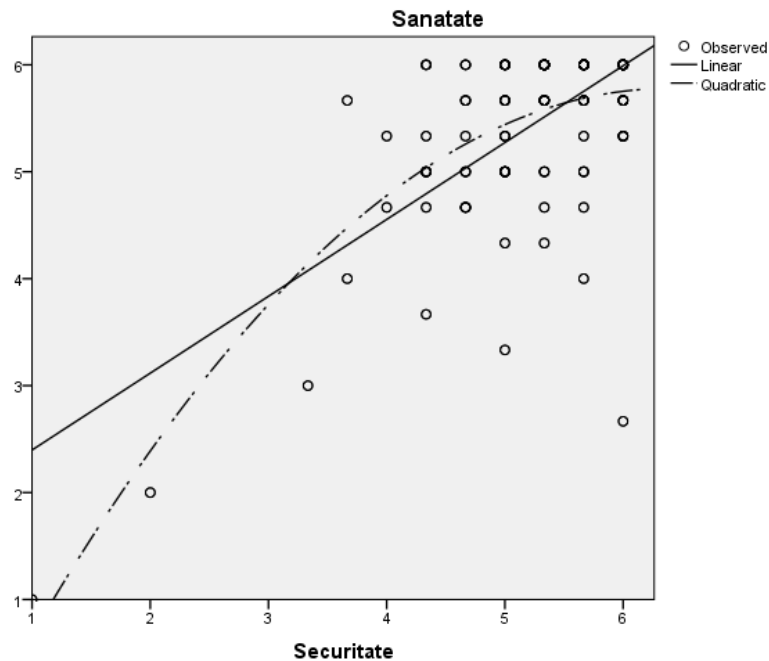
109 3. Results

110 In order to test our hypothesis that states that between health and security both conceptualized
111 as conservation values the first being oriented towards social and the second towards self, one can
112 depict a curvilinear relationship, our team has used a confirmatory factor analysis, based on multiple
113 regression analysis for curvilinear effects. We describe a curvilinear relationship similar to a
114 relationship between two variables that can be graphically seen by anything other than a line. One of
115 particular cases of typical curvilinear relationships is represented by the situation where two
116 variables rise together until a certain point is reached (positive correlation) after this one of the
117 variables increases while the other decreases (negative correlation) or the other way, thus a
118 graphically depiction of the function shows a U or an inverted U.

119 The curvilinear relationship can be graphically identified by a Scatterplot, adding 2 ways of
120 representing the regression line: Linear and Quadratic model, in order to depict nonlinear effects.
121 Figure 2 indicates the non-linear relationship between security and.

122 Figure 2 - Linear and quadratic curve estimation of health (sanatate) and security (securitate)

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127 There is a very high correlation between security ($m=5.22$, $SD=0.79$) and health ($m=5.43$,
128 $SD=0.874$) of $r=.652$ significant at a $p<.01$, which allows us in proceeding with multiple linear
129 regression analysis [12].

130 With the purpose of testing the curvilinear relationship, the present study proposes a
131 hierarchical multiple regression analysis model, having health as dependent variable, and the
132 independent variable in step 1 security, and in step 2 security and squared security.

133 We have comprised in Table 1 the fitting of the 2 models, the first is the linear Model 1 and the
134 second is the curvilinear/ quadratic Model 2. As resulted from Model 1 that supposes linear
135 relationship, health value accounts for 42% of the variance in security value $F=161.215$ significant at
136 a $p<.01$. In Model 2 that supposes curvilinear relationship, health accounts for 50% of the variance in
137 security with an $F=35.336$ significant at a $p<.01$.

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139 Table 1. The relationship between health and security as personal values, model summary,
140 ANOVA and coefficients

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Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.652 ^a	.425	.422	.664	.425	161.215	1	218	.000
2	.711 ^b	.506	.501	.617	.081	35.336	1	217	.000

a. Predictors: Security

b. Predictors: Security, sqrt_security

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ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	71.069	1	71.069	161.215	.000 ^b

	Residual	96.101	218	.441		
	Total	167.170	219			
	Regression	84.526	2	42.263	110.971	.000 ^c
2	Residual	82.644	217	.381		
	Total	167.170	219			

a. Dependent Variable: Health

b. Predictors: Security

c. Predictors: Security, sqrt_security

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Coefficients^a

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	1.679	.299		5.624	.000
	Security	.719	.057	.652	12.697	.000
2	(Constant)	-1.412	.589		-2.395	.017
	Security	2.253	.263	2.044	8.553	.000
	sqrt_security	-.177	.030	-1.421	-5.944	.000

a. Dependent Variable: Health

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As resulted, the totality of standardized coefficients of Beta ($\beta = .652$; $\beta = 2.044$ and $\beta = -1.421$) show significance at $p < .01$ that offer high consistency to Model 1 and Model 2. Along with changing Beta coefficient's sign from - to + signifies that the effect is growing in the other direction, fact that demonstrates the curvilinear relationship between health and security. Further, the incremental predictive capacity of 8 percent that was added in step 2 by including the squared security variable which is accounting for the curve in the regression line, demonstrates the curvilinear relationship between health and security.

The computed curvilinear relationship shows that marginal aspects of the continuum, extremely low and extremely increased levels of security, significantly influences the health, in a negative way. Normal levels of security triggers a high level of health value prioritization. Thus a too security oriented person and a low security oriented person will envisage a low level of health value prioritization, compared to a person with normal security value prioritization that is associated with a high level of health value prioritization.

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4. Discussion

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The theory of basic human values measures universal values that are recognized throughout all major cultures. Schwartz's theory has refined the set of 19 basic individual values that serve as guiding principles in the life of a person or group, further describing the dynamic relationships among them. The present study presents practical evidence of the dynamics between individual values, the dynamics theorized by Schwartz in 2012. Following the development of an online questionnaire made up of 46 items with response options on a Lickert scale from 1 to 6, where 1 represents less important and 6 represent very important, 220 young people from Western Romania voluntarily responded.

173 The questionnaire targets the following set of values: self-determination, stimulation, hedonism,
 174 achievement, power, security, conformity, tradition, benevolence, universalism, trust, health and a
 175 scale of dissimulation. Regarding the internal fidelity of the 46-item value scale, we obtained a
 176 Cronbach alpha of 0.839, proving that items have a high internal consistency. By testing the
 177 hypothesis assuming the dynamic relationship between the two values through multiple regression
 178 analysis, the results demonstrate that in Model 1, which involves a linear relationship, health explains
 179 42% of the variance in security with a $F = 161,215$ significant at $p < .01$. In Model 2, which involves a
 180 curvilinear relationship, health explains 50% of the variance in security version with a $F = 35,336$
 181 significant at $p < .01$. The incremental prediction capacity of 8% added by including the squared
 182 security variable accounts for the curve in the regression line, indicating the existence of a curvilinear
 183 relationship between security and health.

184 5. Conclusions

185 The calculated curvilinear relationship demonstrates that upper and lower marginal aspects,
 186 extremely low and extremely high levels of security, significantly influence the health value in a
 187 negative way. Normal levels of security trigger a high level of prioritization of health value. The
 188 implications of this type of relationship are discussed in explaining the value phenomenon at
 189 individual level. The study shows limits due to the selected sample, focusing exclusively on young
 190 people with higher education from the Western region of Romania. This sample was the target group
 191 of "The National Identity of Romanian Youth" project which designed this research.

192 The implication of this finding brings evidence for values intraclass dynamic relations. As the
 193 present study shows, inside the conservation value dimension, including the tradition, conformity
 194 and security value types, there are dynamic relationship between values such security, oriented
 195 towards social and health, the same type of value oriented towards self.

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 199 original draft preparation, D.R.; writing—review and editing, D.R. and V.E.B.; visualization, D.R. and V.E.B.;
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