

THE RELATIONSHIP BETWEEN HEALTH AND TRUST AS INDIVIDUAL VALUES

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Abstract: *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. We have developed an online questionnaire 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. By testing the hypothesis assuming the dynamic relationship between the two values through multiple regression analysis, the results demonstrate that in Model 1, which involves a linear relationship, health explains 12% of the variance in trust with a $F = 161,215$ significant at $p < .01$. In Model 2, which involves a curvilinear relationship, health explains 13% of the variance in trust with a $F = 35,336$ significant at $p < .01$. The incremental prediction capacity of 1% added by including the squared trust variable accounts for the band in the regression line, indicating the existence of a curvilinear relationship between trust and health. This curvilinear relationship demonstrates that extreme aspects, extremely low and extremely high levels of trust, significantly influence the health value in a negative way. Normal levels of trust trigger a high level of prioritization of health value. The implications of this type of relationship are discussed in explaining the value phenomenon at individual level. The study shows limits due to the selected sample, focusing exclusively on young people with higher education from the Western region of Romania. This sample was the target group of "The National Identity of Romanian Youth" project which funded this research.*

Key words: *values theory; health; trust; dynamic relationship;*

1. Introduction

Values are latent, hidden, unobservable, and impossible to directly measure characteristics. They exist somewhere within the human being, manifested by different attitudes, depending on their degree of generality. The problem of values measurement becomes the problem of identification behaviors and attitudes, relevant to the sphere of influence of each value and thus measuring these attitudes and behaviors, complicated by the generality level of the inclusion of each value. 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.

Values have a strong individual dimension, meaning personal values, since people are very different in the way they perceive and define their personal priorities. Similarly, communities and the proximity social environment influence and contribute in a crucial way the individual's value system (Schwartz, 1992, 1994, 2006). Values are organized on several levels: general human values, values specific to a sociopolitical system, values that characterize a certain culture or ethnicity, values of large and average social groups, micro-

group values (family) and individual values (Iltut, 2004). Values also influence both the individual in the choices they make from a relational and professional perspective (Dughi, Bran & Ignat, 2016), and also morally according to them adhering to a certain social, professional and cultural level at different stages of development (Ignat, S., 2017).

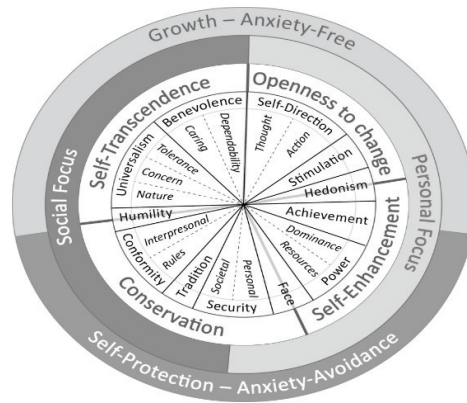


Figure 1 - Circular motivational continuum of 19 values in the refined value theory (from Ciciuch, et al., 2014)

As Schwartz states (Figure 1), openness to change and self-enhancement both focus on the personal side of life, while conservation and self-transcendence focus the interests of others and one's relation to society. Both conservation and self-enhancement express anxiety-driven motivations, to secure oneself against loss, gain power to overcome threats, maintain the current order, and so on. On the other hand, openness to change and self-transcendence both express anxiety-free motivations of growth and expansion.

1. Research methodology

The national project *Identitatea Nationala a Tinerilor Romani*, was developed by our research team with the purpose of deeper understanding the dynamics of national identity aspects and personal values among youth from the West side of Romania. One of the first research questions was the identification of the existent relationship between trust and health, the first being conceptualized as benevolence included in the self-transcendence set of values and the second as security, included in the conservation type values, the first being oriented towards social focus and the second towards personal focus, according to Schwartz (2011). In this regard, we have designed an online questionnaire aiming to gather descriptive data, general perceptions about national identity and values.

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

We have calculated the internal consistency of the 46 items scale of values, and we have obtained an alpha coefficient of .839, suggesting that the items have relatively high internal consistency, a reliability coefficient of .70 or higher is considered acceptable in most social science research situations.

We have then investigated the dimensionality of the scale, using the Principal Component Analysis. The Eigen value for the first factor is twice larger than the Eigen value for the next factor (10.278 versus 5.312). Additionally, the first factor accounts for 71% of the total variance, suggesting that the scale items are unidimensional.

Our hypothesis states that research variables trust and health are in a curvilinear relationship. In order to test our curvilinear hypothesis, we have used SPSS' multiple linear regression analysis, based on multiple regression analysis for curvilinear effects, where health was the dependent variable and the independent variable trust.

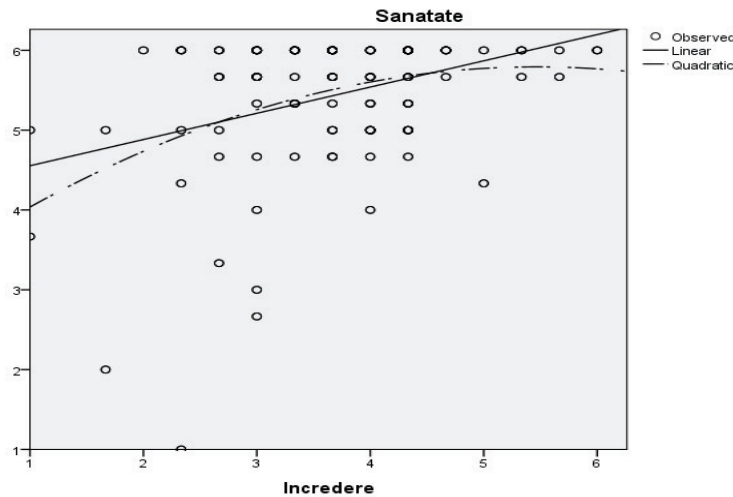
The study was conducted on a random sample of 220 students from the West side of Romania, of both sexes, 17.3% males and 82.74% females, from both rural 42.7% and urban 57.3% environments, with 50% of participants having high school level of education, 35.5% bachelor and 14.5% master degree.

2. Results

In order to test our hypothesis that states that between health and trust, the first being conceptualized as benevolence included in the self-transcendence set of values and the second as security, included in the conservation type values, there is a curvilinear relationship, we have used a confirmatory factor analysis, based on multiple regression analysis for curvilinear effects. We describe a curvilinear relationship as a relationship between two or more variables which can be graphically depicted by anything other than a straight line. A particular case of curvilinear relationships is the situation where two variables grow together until they reach a certain point (positive relationship) and then one of them increases while the other decreases (negative relationship) or vice-versa, the graphically representation of the function being an U or an inverted U shape.

This relationship can be easily identified graphically by a Scatterplot, choosing additional two representations of the regression line: Linear and Quadratic model, for depicting curvilinear effects. The Scatterplot diagram presented in Figure 2 indicates the curvilinear relationship between trust on the horizontal axis and the health, represented on the vertical axis. The sample consists of 220 youth from Romania.

Figure 2 - Linear and quadratic curve estimation of health (sanatate) and trust (incredere)



There is a very high correlation between trust ($m=3.66$, $SD=0.93$) and health ($m=5.43$, $SD=0.874$) of $r=.353$ significant at a $p<.01$, which methodologically allows us to proceed with multiple linear regression analysis (Balas-Timar, 2014).

In order to test the curvilinear relationship, the present study proposes a hierarchical multiple regression analysis, the dependent variable being health, and the independent variable in step 1 trust, and in step 2 trust and squared trust.

Table 1 presents the fitting of the two models, linear – Model 1 and curvilinear/quadratic – Model 2. As we can see in Model 1 the model that supposes linear relationship, health accounts for 12% of the variance in health with an $F=30.976$ significant at a $p<.01$. In Model 2, the model that supposes curvilinear relationship, health accounts for 13% of the variance in health with an $F=5.010$ significant at a $p<.01$.

Table 1. *The relationship between health and trust as personal values, model summary, ANOVA and coefficients*

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	.353 ^a	.124	.120	.819	.124	30.976	1	218	.000
2	.380 ^b	.144	.136	.812	.020	5.010	1	217	.026
a. Predictors: (Constant), Incredere									
b. Predictors: (Constant), Incredere, sqrt_incredere									

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.798	1	20.798	30.976	.000 ^b
	Residual	146.371	218	.671		
	Total	167.170	219			
2	Regression	24.101	2	12.051	18.278	.000 ^c
	Residual	143.068	217	.659		
	Total	167.170	219			
a. Dependent Variable: Sanatate						
b. Predictors: (Constant), Incredere						
c. Predictors: (Constant), Incredere, sqrt_incredere						

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	4.225	.223		18.958	.000
	Incredere	.329	.059	.353	5.566	.000
2	(Constant)	3.162	.524		6.038	.000
	Incredere	.962	.289	1.033	3.329	.001
	sqrt_incredere	-.088	.039	-.694	-2.238	.026
a. Dependent Variable: Sanatate						

All standardized coefficients of Beta ($\beta= .353$; $\beta= 1.033$ and $\beta=-.694$) are significant at $p<.05$ which gives a high consistency to our both models. Changing Beta coefficient's sign from + to - means that the effect is growing in the opposite direction, which demonstrates that the relationship between the two variables: health and trust is curvilinear. The additional

incremental predictive capacity of 1 percent, added by including the squared trust variable which is accounting for the band in the regression line, indicates that there is a curvilinear relationship between health and trust.

This curvilinear relationship demonstrates that extreme aspects, extremely reduced and extremely high levels of trust, significantly influences the health, in a negative way. Normal levels of trust triggers a high level of health value prioritization. Thus a too trustfulness oriented person and a low trustfulness oriented person will envisage a low level of health value prioritization, compared to a person with normal trust value prioritization that is associated with a high level of health value prioritization.

3. Conclusions and implications

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.

This study practically shows that two of Schwartz's ten basic values are in a dynamical relationship. Basic values that are adjacent in the circle have overlapping motivational goals and are mutually supporting, whereas basic values on opposite sides of the circle have competing goals and are mutually opposed. The circle has a 2-dimensional opponent structure. One dimension contrasts basic values of self-enhancement (achievement and power) with basic values of self-transcendence (universalism and benevolence). The other contrasts basic values of openness to change (self-direction and stimulation) with basic values of conservation (conformity, tradition, and security), with hedonism being positively associated with both self-enhancement and openness to change.

The present curvilinear relationship demonstrates that extreme aspects, extremely low and extremely high levels of trust, significantly influence the health value in a negative way. Normal levels of trust trigger a high level of prioritization of health value.

The implication of this finding brings evidence for values interclass dynamic relations. As the present study shows, between health and trust, the first being conceptualized as benevolence included in the self-transcendence set of values and the second as security, included in the conservation type values, there is a dynamic relationship.

The study shows limits due to the selected sample, focusing exclusively on young people with higher education from the Western region of Romania. This sample was the target group of "The National Identity of Romanian Youth" project which funded this research.

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