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The Relation of Human Factor of Values with Time Perspective

Romeo Zeno Cretu^{a*}^aUniversity of Bucharest, Psychology Department, Sos.Panduri 90, Bucharest 050657, Romania

Abstract

This research explored the relations between some human values and Time Perspective (TP) concept. Five human values were assessed using a Romanian inventory of values. A Romanian version of Zimbardo Time Perspective Inventory was applied to a sample of 1.260 Romanian ethnics. Significant correlations were found between values factors and TP. Then we tested the moderator effect of gender variable for each significant correlation between values and TP facets. The conclusion of the research is that for both genders, the values one person has acquired along his/her life seems to become a predictor of the preference in framing consecutive actions.

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1. Introduction

The human values are considered one of the most predictive variables regarding the attitudes and behavioural evolution of individuals. Many instruments for assessing the values were proposed over the time. Most of them were created using a rational approach. For example Rokeach (1973) has distinguished 18 terminal values, representing desirable end-states of existence, and 18 instrumental values representing desirable modes of conduct on the way to the terminal values. Another well-known taxonomy in the psychological literature was proposed by Schwartz (1992). He identified 10 factors of values: (1) Power, (2) Achievement, (3) Self-direction, (4) Hedonism, (5) Stimulation, (6) Benevolence, (7) Universalism, (8) Conformity, (9) Tradition, (10) Security.

A problem of all instruments derived through rational analysis was the fact that the lists of values on which the factorization procedures were applied are highly subjective. Thus, it is difficult to determine their content

* Corresponding author. Tel.: +40-31-425-3445; fax: +40-31-425-3452.

E-mail address: zenocretu@yahoo.com

validity. A subsequent problem is that some of the extracted factors are not replicated in similar researches (DeRaad & Van Oudenhoven, 2008).

The lexical approach was a successful alternative in finding the human values. This approach succeeded to replicate cross-culturally some factors of values. For example Aavik and Allik (2002) and Renner (2003) came to the same results uncovering 4 equivalent factors, namely: (1) Self-enhancement/ Profit, (2) Benevolence/ Balance, (3) Broadmindedness/ Salvation, (4) Conservatism. DeRaad and Van Oudenhoven (2008) identified eight factors that were named: (1) Benevolence, (2) Love and Happiness, (3) Organization and Achievement, (4) Competence, (5) Status and Comfort (6) Aesthetics and Erudition, (7) Spirituality (8) Family and Tradition. A part of these factors were replicated by us on a Romanian sample, using a similar approach (Cretu, Burcas & Negovan, 2012).

Irrespective of the constructive strategy, it has been discovered that human values have a robust predictive value for many behaviours. For example, Feather (1995) found that values predict choosing a university course and Schwartz (1996) has shown that values predict voting for political parties. Sagiv and Schwartz (2004) found that values predict whether counselees exhibit independent versus dependent behavior throughout a number of career counselling sessions. Bardi and Schwartz (2003) have shown that "tradition and stimulation values correlate highly with common behaviours that express them, and hedonism, self-direction, universalism, and power values show reasonable associations with such behaviours" (1216).

Time Perspective is another strong predictor for a variety of attitudes and behaviors. This concept was defined by Zimbardo and Boyd (1999) as "... a fundamental dimension in the construction of psychological time, that emerges from cognitive processes partitioning human experience into past, present, and future temporal frames" (1271). Since the beginning of the research, the authors of TP concept distinguished five dimensions. Past negative suggests trauma, pain and regret, the Past-positive factor reflects a warm, sentimental attitude toward the past. The Present-hedonistic reflects a hedonistic and risk-taking propensity, the person characterized by this dimension being oriented towards present pleasure, with little concern for future consequences. The Present-fatalistic reveals a fatalistic, helpless, and hopeless attitude towards life, while the Future dimension of TP includes mental representations of future consequences and concerns, responsibility, striving for future goals and rewards (Zimbardo & Boyd 1999, Strathman et al. 1994). TP was related both with normal and clinic personality characteristics. Karniol and Ross (1996) determined that future and past orientations of the person have impact on his/ her motivation. Nolen-Hoeksema (1995) found that the tendency of rumination about the past experience is correlated with depression. Holman and Zimbardo (2009) discovered that individuals high in Past Negative facet have a weak strategy for coping with stress, experience more conflicts and negative emotions in their life. Boyd and Zimbardo (2005) had discovered that facets of TP concept are predictive for overt behaviours (e.g. hours of study, grades received at exams, number of lies a person tell, how often the person steal) and also for happiness, shyness and temper. The authors found correlation between TP levels of depression, anxiety, impulse control, self-esteem, novelty seeking etc. Other researched discovered that TP facets are predictive for the level of satisfaction in organizational setting (Antoniak, 2011).

In this research we were interested to check the pattern of intercorrelation between five human values and the five factors of time perspective and for those significant correlations to discriminate the potential moderation effect of the gender variable. The five values were measured using a psycho-lexical derived inventory, validated previously on a Romanian sample, through an Exploratory Factor Analysis (Cretu, Burca & Negovan, 2011). The time perspective facets were assessed with a Romanian version of Zimbardo Time Perspective Inventory (ZTPI). This inventory was also validated by us previously on a Romanian sample, using Exploratory Factor Analysis (Cretu & Negovan, 2012 manuscript submitted).

2. Method

2.1. Participants and measures

The Romanian sample consisted of 1260 persons who accepted to participate freely in this research. It was a convenience sample. An overall of 794 (63%) respondents were females. The range of the respondents' age was between 15 and 79 and it was identical for women and men. The average age was 30.66 years (SD = 11.34). The study was conducted between January and March 2012. Participation was voluntary and anonymity was guaranteed.

Status and Wealth, Spirituality and Religiosity, Adventure, Organization and Family and Intimate relationships were the five values assessed using a Romanian inventory of human values (Cretu et al., 2011). In a previous research we conducted an Exploratory Factor Analysis (EFA) in order to validate these constructs. The variance after Varimax rotation explained by each factor (alpha Cronbach in parenthesis) was: 2.96 (.91) for Status & Wealth factor; 3.41 (.94) for Spirituality & Religiosity factor, 2.57 (.86) for Adventure factor, 2.48 (.85) for Organization factor and 2.42 (.77) for Family and Intimate relations factor. In the present research we asked the respondents to assess using a 7 points Likert scale "How important is for you each one of these values in the present?" They responded to a total of 30 items defining corresponding values. The Zimbardo Time Perspective Inventory (ZTPI), Romanian version, was applied to our respondents. The responses were collected using a 7-point Likert scale, ranging from very uncharacteristic (1) to very characteristic (7). Previously, for this version of ZTPI we used also EFA, confirming a five factor structure including facets of Past negative, Present hedonistic, Present fatalistic, Future and Past positive (Cretu & Negovan, 2012 manuscript submitted). The variance after Varimax rotation explained by each factor (alpha Cronbach in parenthesis) was: Past negative 8.56% (.83), Present hedonistic 6.97% (.80), Present fatalistic 6.79% (.79), Future 6.56% (.783) and Past positive 4.52% (.69). We computed for each individual the TP facets scores taking into account a total of 31 items from ZTPI Romanian version, those proven to be valid in EFA procedure.

2.2. Data analyses

The five factors of human values and the five facets of Time Perspective (TP) were intercorrelated using Pearson coefficient. For those correlations that proved sufficiently strong and statistically significant we conducted a Hierarchical Regression to test the expected moderation effect of the respondents' gender.

3. Results

We first computed all the correlations (Pearson correlation) between the five factors of human values and the five time perspective factors. The results of the correlation procedure are presented in the Table 1.

Table 1 The Pearson's correlation values between human values and time perspective facets

	Past Negative	Present Hedonistic	Present Fatalistic	Future	Past Positive
Status & Wealth	.12**	.17**	.15**	.15**	.15**
Spirituality & Religiosity	.08*	.03	.31**	.23**	.28**
Adventure	-.03	.48**	-.04	-.20**	.09**
Organization	-.01	.01	.08*	.63**	.22**
Family & Intimate relationships	-.11	.09	.05	.29**	.28**

Note. N=1260. *p<.05; **p<.01

As can be seen in Table 1, there is a multitude of correlations that have associated a highly significant level for p value, even if their magnitude is rather weak. This could be explained by the large sample we used, fact that increases the statistical power. For Status and Wealth factors there were not identified strong correlations. For Spirituality and Religiosity factor there is a weak correlation with the Present fatalistic ($r=.31$, $p<.01$) and with

Past positive facet of TP ($r=.28, p<.01$). This suggests that people with highly religious attitudes tend to be more focused on their Present fatalistic and/on their Past positive. As expected, the Adventure factor of value was discovered to correlate to a medium magnitude with the focus of the person on the Present hedonistic ($r=.48, p<.01$). A medium to strong correlation has been discovered between Organization factor of value and Future orientation of the person ($r=.63, p<.01$). A weak correlation was discovered between Family and Intimate relationships with Future ($r=.29, p<.05$) and Past positive ($r=.28, p<.01$).

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In the next step we explored a possible moderation effect of gender variable. More exactly, we explored if the strongest correlations (correlations above .30 magnitudes), discovered in the previous step between the factor of values and TP facets are different when we take into account the sex of respondents. We used a hierarchical regression approach to test for these expected differences. Each factor of value (one at a time) was considered predictor for the corresponding TP facet. An interaction term for gender variable with each of the corresponding factor of value was created, after we centred each factors of values around its mean. Each time two models were compared. In the first step of hierarchical regression we entered the gender and one factor measuring one human value as predictor (1st model). In the second step we entered the interaction variable between gender and that factor of a human value (2nd model). The general hypothesis was: *The slopes of regressed TP facets on human factors of values are moderated by the gender of the respondents.*

The gender of respondents was not a significant mediator for the relation between Spirituality and Religiosity factor and Present fatalistic facet of TP. For this relation the change in R^2 was insignificant: $R^2=.00, F(1, 1234)=.73, p>.05$. The standardized coefficient beta for Spirituality and Religiosity ($\beta=.31, p<.01$) had a significant slope ($t=8.71, p<.001$), meanwhile the coefficient beta for the interaction term of gender with Spirituality and Religiosity ($\beta=-.012, p>.05$) had an insignificant slope ($t=-.32, p>.05$).

For the Adventure factor, the gender of respondents was not a significant mediator in the relation with Present hedonistic facet of TP. For this relation the change in R^2 was insignificant: $R^2=.001, F(1, 1231)=2.20, p>.05$. The standardized coefficient beta for Adventure ($\beta=.45, p<.001$) had a very significant slope ($t=14.68, p<.001$), meanwhile the coefficient beta for the interaction term of gender with Adventure ($\beta=.046, p>.05$) had an insignificant slope ($t=1.48, p>.05$).

Finally, in the case of Organization factor, the gender of respondents was not a significant mediator in the relation with Future facet of TP. For this relation the change in R^2 was insignificant: $R^2=.00, F(1, 1232)=.45, p>.05$. The standardized coefficient beta for Organization ($\beta=.62, p<.001$) had a very significant slope ($t=22.36, p<.001$), meanwhile the coefficient beta for the interaction term of gender with Organization ($\beta=.019, p>.05$) had an insignificant slope ($t=.67, p>.05$).

4. Discussions and conclusions

Generally, the five factors of values were discovered to be correlated with the five frames of time that people live in. The magnitudes of the most indexes of correlation were modest, but statically significant.

The research revealed some insightful correlations between some of the assessed human values factors and the TP facets. The strongest correlation was found between the values of organization and Future perspective of time. Thus, those people characterized by high level for the value of organization tend to live more in the future frame of time. It was not discovered any differences in this relation between women and men. The gender of respondent is not a moderator variable in this relation. In order of magnitude, a second correlation was discovered between value of adventure and the orientation of the person towards the present hedonistic frame of time. The results confirmed that Adventure is a predictive factor in relation with the Present Hedonistic. Those person high in adventure tend to live in a hedonistic fashion their present moments. Nor for this factor a moderator effect of gender variable could not be confirmed.

Our research discovered that people that declare to conduct their behaviours taking into account the spiritual and religious values are more oriented towards the fatalistic present. This relation had the same magnitude irrespective of the respondent's gender. For both genders, the values one person has acquired along his/her life seems to become a predictor of the preference in framing his/ her thoughts and consecutive actions. This could suggest that our frames of time are deeply anchored in some central points of our axiological network. For the surveyed Romanian sample the need for an organized life, for a religious one, or for an adventure one, are the most salient dimensions in the time frames that regulates many of the person's cognitions and actions.

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