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Social Axioms among Romanians: Structure and Demographic Differences

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Abstract

Social axioms are beliefs about the material, social and spiritual world, assessing what the person regards as true. Following a functionalist orientation, we propose that social axioms serve as a reflection of social reality and provide guidance for living to people in different demographic groups. This study investigated the dimensionality of a measure of such beliefs, the Social Axioms Survey (SAS), and demographic differences in the resulting factor scores for groups of Romanians. Results of exploratory factor analyses revealed a new five-factor structure, with four factors remarkably similar to those derived from a pan-cultural solution of 40 cultural groups (Leung & Bond, 2004). A distinctive factor named "Interpersonal Relations" replaced the "Social Complexity" factor found in previous research, and represented beliefs about the impact of interpersonal relations on life events and how to maintain good relations with others. Canonical correlation revealed that people of older age, lower education, and lower income endorsed stronger beliefs in "Social Cynicism" and "Religiosity". After controlling for the effects of age, education, and income, females reported stronger endorsement of the "Religiosity", "Interpersonal Relations", and "Fate Control" dimensions than males; widowed participants scored significantly higher than married, divorced and unmarried groups on both "Religiosity" and "Fate Control". By reflecting on the characteristics of Romanian society, we discussed these findings in terms of the life experience and social status of different social groups. Based on this analysis, questions were proposed for future research.

Social Axioms among Romanians: Structure and Demographic Differences

"There are truths on one side of the Pyrennes

that are falsehoods on the other."

Pascal, *Pensees*

In order to scientifically measure the concept of culture, scholars have identified

constructs that relate to behavior, like values, motivations, beliefs, time perception,

personality traits and so forth (Smith & Bond, 1998). In an effort to add to the cultural

dimensions available for scholars wishing to compare and understand cultures, a Social

Axioms Survey was recently developed to assess a comprehensive range of general beliefs

about the world in which people function (Leung et al., 2002).

Social Axioms are generalized beliefs about personhood, the social and physical

environment, and the spiritual world. These beliefs are deemed to be true as a result of

personal experiences and socialization through the institutions of society, like the family and

educational system. People use these beliefs to guide their behavior, as they are instrumental

in coping with problems of survival and effective functioning (see e.g., Bond, Leung, Au,

Tong, & Chemonges-Nielson, 2004).

Leung et al. (2002) suggest that social axioms serve the four major functions of

attitudes: "They facilitate the attainment of important goals (instrumental), help people

protect their self-worth (ego defensive), serve as a manifestation of people's value

(value-expressive), and help people understand the world (knowledge)" (p. 288). Based on

the data collected from participants of diverse cultures, Leung and Bond (2004) suggested

that five factors of social axioms appeared to be universal: Fate Control, Reward for

Application, Social Cynicism, Religiosity, and Social Complexity.

The validity of these dimensions of social axioms has been supported by their correlations with other well established measures of interpersonal trust, cognitive flexibility, locus of control, paranormal beliefs, and some relevant self-reported behaviors, such as praying, among a sample of female college students in the USA (Singelis, Hubbard, Her, & An, 2003). Social axioms add moderate predictive power over and above that provided by values to the prediction of personal and social behaviors, such as vocational choice, methods of conflict resolution, and coping styles (Bond et al., 2004). In addition, social axioms were significantly related to life satisfaction over and above its relationship to self-esteem and a comprehensive measure of personality among Chinese college students (Chen, Cheung, Bond, & Leung, 2006).

Neto (2006) found among college students from Portugal that social cynicism correlated positively with ageism and loneliness, and negatively with self-esteem; social complexity correlated positively with mastery and self-esteem, and negatively with ageism; reward for application correlated positively with mastery. Active coping and life satisfaction were also found to be related to reward for application, and social complexity, respectively, among Iran immigrants in Canada (Safdar, Lewis, & Daneshpour, 2006).

The Romanian Cultural Context

As a typical Eastern European country, Romania had a close, post-WW2 relationship with the Soviet Union. After the overthrow of the communist regime in 1989, Romania experienced a decade of economic instability and decline, led in part by an obsolete industrial base and a lack of structural reform (Berberoglu, 2003). From 2000 onwards, however, the

Romanian economy has been transformed into one of relative macroeconomic stability,

characterized by high growth and low unemployment. Romania is considered a booming

market by multinationals and was ranked the third most promising economy after Russia and

Turkey for 2006 (Domnisoru, 2006).

Moreover, research by social scientists has revealed that Romania has typical Eastern

European characteristics in terms of cultural constructs, such as individualism-collectivism

(Diener, Gohm, Suh, & Oishi, 2000) and values (Smith, Dugan, & Trompenaars, 1996).

Research in ideology also revealed that even in the post-communist period, authoritarianism

is still high and strongly related to support for communism among Romanians (Krauss, 2002,

2006).

However, little research on social beliefs has been done in the cultures of Eastern

Europe. Further, to date there has been no adequate exploration of the structure of beliefs

about the world and the demographic distribution of those beliefs within a given, single

society. In this study, we intend to conduct such a close emic analysis of social axioms within

Romanian society.

Demographic Variables and Social Axioms

Demographic variables play important roles in predicting psychological variables,

although they are controlled in research most of the time. For participants within a culture,

the preliminary research on the difference among groups distinguished by demographic

variables can suggest socialization variables that may operate to shape beliefs (see e.g., Kohn,

Naoi, Schoenbach, Schooler, & Slomczynski, 1990; Singelis, 2004).

Some research has already shown the importance of demographic variables in

research among Romanians. For example, Firebaugh and Sandu (1998) found that in post-communist Romania support for reform in economy and politics was strongest among the young, the better educated, men, and those living in cities. Furthermore, support for reform was mediated by risk aversion, individualistic ideology, and personal economic expectations.

In addition, gender stereotype and discrimination is a long concern of Romanians (see Roman, 2001, for a review). Traditionally, women in Romania had subordinate status and were regarded as second class citizens. Although a feminist movement has emerged after 1989, females in Romania are still stereotypically portrayed in the mass media, face discrimination in diverse occupations, and suffer sexual violence without the adequate protection of law. Social contexts provide powerful influences on gender-related self-efficacy and beliefs (Bussey & Bandura, 1999), which in turn, may have an impact on the social beliefs held by males and females in Romania.

Marital status also has been proved to be an important predictor of emotional experiences across cultures, including Romania (Diener, Gohm, Suh, & Oishi, 2000). In both individualist and collectivist nations, married persons experience more positive emotions and fewer negative emotions than divorced or separated persons. Moreover, the relations between marital status, culture, and subjective well-being do not differ by gender. Widowhood, however, has been related to various negative outcomes, such as loss of significant relationships, social isolation, reduction in social activities, and lowered self esteem (e.g., Carr, House, Kessler, et al., 2000; Quandt, McDonald, Arcury, Bell, & Vitolis, 2000). Due to their experience with marriage or the loss of a spouse, therefore, people with different marital

status may have different social beliefs.

Other demographic variables, such as SES, have been established as predicting psychological outcomes. For example, Robila and Krishnakumar (2005) found that for Romanians, economic pressure was associated with higher levels of marital conflict.

The purpose of the current study was to explore the structure of social axioms within Romanian culture to verify the dimensionality of the Social Axioms Survey obtained in previous pan-cultural study (Leung & Bond, 2004), but using the largest sample to date, thereby ensuring the stability of the solution. In addition, we sought to depict the demographical variations in social beliefs among Romanians and use the results to give directions for further research on social axioms.

Method

Participants

Data were collected from 1178 Romanians (582 males and 596 females), with an average age of 37.95 (*SD* = 13.08). More specifically, with regard to age distribution, 3.7% (43) were in the "20 or below" group, 33.4% (393) in the "21 to 30" group, 26.4% (311) in the "31 to 40" group, 13.4% (158) in the "41 to 50" group, 16.3% (192) in the "51 to 60" group, and 6.6% (78) in the "60 or over" group. Three participants did not indicate their age.

Regarding their residence, 33.6% (395) participants were living in a rural area and 66.4% (779) were living in an urban area. Four participants did not answer this question.

As for education level, 2.2% (26) participants reported having received less than four years of education; 6.0% (71) participants, five to eight years of education; 62.3% (734) participants finished high school; and 29.5% (347) participants finished college.

As for marital status, 49.9% (588) participants were married; 7.6% (90) participants were divorced; 3.5% (41) participants were widowed; and 37.8% (445) participants were unmarried. Fourteen participants did not answer this question.

As for income per month, 9.5% (107) participants had a monthly income of less than 75 Euros; 20.4% (231) participants had a monthly income of 75 to 120 Euros; 17.0% (192) participants had a monthly income of 120 to 180 Euros; 15.6% (177) participants had a monthly income of 180 to 250 Euros; 12.3% (139) participants had a monthly income of 250 to 300 Euros; 25.3% (286) participants had a monthly income of above 300 Euros.

Instruments

Social Axioms Survey. The Social Axioms Survey (Leung et al., 2002) used in this study consisted 82 Likert-type items. Five-point response formats were anchored by "strongly disbelieve" and "strongly believe".

Demographic measures. The respondents were required to list their age, gender, income, years of education, marital status (married, divorced, widowed, and not married), and residential area (rural or urban).

<div align="center">Results</div>

Exploratory Factor Analysis

In order to determine the structure of the Social Axioms Survey (SAS) among Romanians, the 82 social axioms items were subjected to a principal components analysis with a varimax rotation. Based on the scree plot and after exploring various other solutions, we judged that five factors were best to describe the correlation matrix.

By using a criterion of .30 for the minimum loading of items to their factors and the

absence of sizable secondary loadings, a five-factor structure with 46 items was obtained (see

Table 1), explaining 30.19% of the total matrix variance.

Insert Table 1 here

The item composition and meaning of factors 1, 2, 3 and 5 showed close resemblance

to those found in previous multi-national samples (Leung & Bond, 2004). Factor 1 was thus

labeled "religiosity", as the items refer to the existence of supernatural forces and the

functions of religious belief. Factor 2 was labeled "social cynicism", because the items

represent a negative view of human nature, a biased view against some groups of people, a

mistrust of social institutions, and a view that others disregard ethical means for achieving

their ends. Factor 3 was labeled "reward for application", because the items represent a

general belief that effort, knowledge, and careful planning will lead to positive results. Factor

5 was labeled "Fate Control", as the items represent a belief that life events are predetermined

and that there are some certain ways for people to influence these outcomes.

However, the fourth factor was not similar to the "social complexity" factor found in

previous research. It consists of eight items, viz., "people may have opposite behaviors on

different occasions", "a pleasant interpersonal environment and a sense of well-being lead to

better performance", "there are phenomena in the world that cannot be explained by science",

"a good relationship requires compromises from both sides", "powerful people tend to exploit

others", "life without love is flat and insipid", "a person's talents are inborn", and "mutual

tolerance can lead to satisfactory human relationships". As these items represent a belief

about the impact of interpersonal relations on life events and how to maintain good relations with others, this new factor was labeled, "interpersonal relations".

After recoding the items with negative loadings, the α coefficients and average item-whole correlations were calculated for each factor as a test of internal consistency, with the following results: religiosity, $\alpha = .79$ and $r(1178) = .635$, $p < .001$; social cynicism, $\alpha = .69$ and $r(1178) = .639$, $p < .001$; reward for application, $\alpha = .68$ and $r(1178) = .552$, $p < .001$; interpersonal relations, $\alpha = .54$ and $r(1178) = .479$, $p < .001$; and fate control, $\alpha = .55$ and $r(1178) = .475$, $p < .001$.

Items on each factor were averaged to give scores for each of the five factors and the correlations between the five dimensions were calculated (see Table 2). Although some of these correlations were statistically significant, they are weak and do not compromise the essential independence of the five dimensions.

Insert Table 2 here

Differences on Demographic Variables

Table 3 shows the correlations between age, income, education level and the five dimensions of social axioms. Since these demographic variables had correlations with each other and given the low correlations among the five dimensions of social axioms, a canonical correlation seemed appropriate, in order to find out which combinations of age, income, and education had the closest relations with which combinations of social beliefs.

Insert Tables 3 here

Canonical correlation was performed between this set of demographic variables and the five dimensions of social axioms. The demographic variables set included age, income and education.

The first canonical correlation was .386 (14.9% overlapping variance); the second was .105 (1.1% overlapping variance). With all three canonical correlations included, χ^2 (20) = 201.26, $p < .001$, and with the first canonical correlations removed, χ^2 (8) = 19.76, $p < .05$. Subsequent χ^2 tests were not statistically significant. The first two pairs of canonical variates, therefore, accounted for the significant relationships between the two sets of variables. However, the value of the second pair of canonical variates (.105) was too small to give a strong support for these relationships, and was thus excluded from further analysis and discussion.

With a cutoff correlation of .3, the variables in the demographic set that were correlated with the first canonical variate were age, income and education; and the variables in the social beliefs set that were correlated with the first canonical variate were social cynicism and religiosity. The first pair of canonical variates indicated that those with younger age (-.809), higher education (.670), and higher income (.492) showed lower scores on both social cynicism (-.772) and religiosity (-.746).

Due to the relations between these two sets of variables, they will be controlled when conducting comparisons among groups of different gender, living areas, and marital status.

Gender Differences in Social Axioms

A MANOVA was used for this and all of the following analyses due to the small but statistically significant correlations among the social axioms dimensions (see Table 2). After controlling the covariates of age, education and income, a significant Wilks' Lambda for sex was found, $F (5, 1120) = 7.34$, $p < .001$. Women ($M = 3.78$) reported higher beliefs on religiosity than men ($M = 3.55$), $F (1, 1124) = 20.01$, $p < .001$, and Women ($M = 4.07$) reported higher beliefs on interpersonal relations than men ($M = 3.97$), $F (1, 1124) = 11.77$, $p < .001$. Women ($M = 2.96$) also reported higher beliefs in fate control than men ($M = 2.81$), $F (1, 1124) = 14.33$, $p < .001$.

Difference in Social Axioms between Rural and Urban Groups

No significant difference on social axioms was found between rural and urban groups after controlling the covariates of age, education and income.

Marital Status and Social Axioms

A MANOVA was used to test the differences across marital status on the five dimensions. After controlling the covariates of age, education, and income, a significant Wilks' Lambda was found, $F (15, 3070.144) = 3.75$, $p < .001$. Tests of between subjects effects indicated that marital status had a significant effect for the dimension of religiosity, $F (3, 1116) = 5.27$, $p < .001$, and fate control, $F (3, 1116) = 9.28$, $p < .001$.

Pairwise comparisons showed that widowed participants scored significantly higher than all other groups on both religiosity and fate control. No other significant differences in social axioms among groups of different marital status were found.

Discussion

Given its large number of respondents, this study sought to firmly establish the dimensionality and composition of the Social Axioms Survey in Romania, and to explore its demographic differences in social beliefs.

The data from the factor analyses revealed a somewhat different five-factor model of social axioms in Romania. The new factor of interpersonal relations took the place of the social complexity factor repeatedly found in previous research (Leung et al., 2002), but mirroring an earlier dimension of the same name that had been found for Germans. Interpersonal relations are often perceived as complexly determined, and there is some overlap in their item content. Whether the belief dimension of interpersonal relations works differently in the psychological processes of Romanians than social complexity works with other cultural groups elsewhere remains to be discovered.

One problem that remains is the somewhat lower reliabilities of some of the belief dimensions. The lack of strong internal consistency has been a persistent problem with psychological measures of cultural difference (see Oyserman, Coon, & Klemmelmeier, 2002). Future studies may wish to explore the possibility of adding additional items in a given cultural setting to bolster the internal consistency of belief dimensions with lower internal consistency. This work is currently being conducted in ten nations around the world, as the second phase of work on social axioms.

A second purpose of this study was to explore demographic differences in the endorsement of social axioms. Canonical correlation showed that people of an older age, lower education, and lower income gave higher endorsement of social cynicism and

religiosity. For older people with lower SES, life seemed tougher for them than others, e.g., it has been found among Romanians that economic pressure was associated with higher marital conflict (Robila & Krishnakumar, 2005). Hard life experience may lead them to social cynicism, since "social cynicism emerges as a response to a fundamental requirement of survival and adaptation in a social world in which deception by others is frequent, and gullibility dangerous" (Leung & Bond, 2004, p. 183). As has been found in other cultures, social cynicism relates to lower life satisfaction (Chen et al., 2006), higher loneliness, and lower self-esteem (Neto, 2006). People with higher levels of social cynicism also tended to collaborate and compromise less in resolving conflict, and showed a stronger preference for wishful thinking as a coping strategy (Bond et al., 2004).

Older people and those with lower SES conditions may tend to attribute their life to the exploitation, oppression, and other repressive elements of the society, particularly derived from Romania's difficult recent history. However, stronger religiosity provides them with meaning in life, more psychological peacefulness, and a moderation of the anxiety surrounding death (Hui, Bond, & Ng, in press).

Gender differences in social axioms on the dimensions of religiosity, interpersonal relations and fate control might be related to the gender roles and unequal status of males and females in Romania. Females in Romania are socialized as subordinate to males in almost all subsystems of society, and even after 1989 the role requirements and opportunities for females have not improved as fast as in other domains of social life (Roman, 2002). Females in Romania encounter more difficulties which cannot be resolved by their own efforts, so they may attend to signs, signals, and omens, reacting in ways that they believe will help

them steer clear of negative events, instead of directly solving their problems. They may also rely more on religiosity and interpersonal relations to mobilize social support and find meaning in life. Future research on life satisfaction could help verify these speculations.

In terms of marital status, it was also found that widowed participants scored significantly higher than all other groups on both religiosity and fate control. This finding may complement the results of Diener et al. (2000), who did not include widowed people in their analyses. Widowed people tended to have more negative feelings about their life, experience loneliness, receive less social support and engage in fewer social activities, perhaps accounting for their higher beliefs on religiosity and fate control as ways to find meaning in life and coping with increasingly less rewarding experience. What is interesting about this result is that the divorced group did not show any differences with the married and unmarried groups, a finding worth further research.

Taken together, the results revealed a new structure for social axioms within Romanian culture and variations in social beliefs among groups divided by gender, age, SES conditions, and marital status. Further research may be conducted to determine what are the mediators of the relations between demographic variables and social axioms, and the consequences of these beliefs in Romanian society.

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Table 1

Rotated Component Matrix of the Social Axioms

Items	Components				
	1	2	3	4	5
1. Religious faith contributes to good mental health.	.697				
60. Belief in a religion helps one understand the meaning of life.	.676				
14. There is a supreme being controlling the universe.	.672				
71. Belief in a religion makes people good citizens.	.659				
11. Religious people are more likely to maintain moral standards.	.602				
63. After life on earth, one carries on an existence in another form.	.590				
49. One feels safer in the world through a belief in a supreme being.	.544				
76. To care about societal affairs only brings trouble for yourself.		.542			
75. Kind-hearted people usually suffer losses.		.531			
22. It is rare to see a happy ending in real life.		.499			
13. Individual effort makes little difference in the outcome.		.481			
64. Kind-hearted people are easily bullied.		.462			

Items	Components				
	1	2	3	4	5
20. Young people are impulsive and unreliable.		.455			
9. Fate determines one's successes and failures.		.441			
57. People will stop working hard after they secure a comfortable life.		.431			
54. It is hard to make friends with people who have different opinions from yourself.		.418			
47. To experience various life styles is a way to enjoy life.		.391			
46. Humility is dishonesty.		.379			
32. There is usually only one way to solve a problem.		.377			
62. It is easier to succeed if one knows how to take short-cuts.		.373			
80. If one belongs to a marginal group, it is difficult to gain acceptance from the majority group.		.365			
28. Every problem has a solution.			.594		
43. One will succeed if he/she really tries.			.574		
27. Adversity can be overcome by effort.			.540		
35. To deal with things in a flexible way leads to success.			.533		
31. Competition brings about progress.			.519		

Items	Components				
	1	2	3	4	5
78. Hard working people will achieve more in the end.			.476		
19. Knowledge is necessary for success.			.446		
69. To identify a problem, open criticism is important.			.389		
52. To plan for possible mistakes will result in fewer obstacles.			.370		
44. Failure is the beginning of success.			.342		
4. Human behavior changes with the social context.			.342		
7. People may have opposite behaviors on different occasions.				.535	
10. A pleasant interpersonal environment and a sense of well-being lead to better performance.				.511	
17. There are phenomena in the world that cannot be explained by science.				.502	
61. A good relationship requires compromises from both sides.				.491	
56. Powerful people tend to exploit others.				.369	
15. Life without love is flat and insipid.				.357	
38. A person's talents are inborn.				.354	
23. Mutual tolerance can lead to satisfactory human relationships.				.335	

Items	Components				
	1	2	3	4	5
77. There are many ways for people to predict what will happen in the future.					.711
42. There are certain ways to help us improve our luck and avoid unlucky things.					.587
34. Most disasters can be predicted.					.548
24. Individual characteristics, such as appearance and birthday, affect one's fate.					.466
12. Ghosts or spirits are people's fantasy.					.456
40. One's behaviors may be contrary to his or her true feelings.					.386

Note: Only loadings larger than .30 are presented. The variances accounted for by these five factors are 7.554% (factor 1), 6.720% (factor 2), 6.389% (factor 3), 4.863% (factor 4), and 4.668% (factor 5).

Table 2

Correlations between the Dimensions of the Social Axioms Scale

	Religiosity	Social Cynicism	Reward for Application	Interpersonal Relations	Fate Control
Religiosity	1.00				
Cynicism	.165***	1.00			
Reward for Application	.189***	.054	1.00		
Interpersonal Relations	.242***	.048	.251***	1.00	
Fate Control	.225***	.169***	.086**	.074*	1.00

*** Correlation is significant at the 0.001 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 3

Correlations between the Demographic Variables and Social Axioms

	Age	Income	Education
Age	1.00		
Income	-.015	1.00	
Education level	-.208***	.357***	1.00
Religiosity	.236***	-.171***	-.133***
Social Cynicism	.228***	-.122***	-.228***
Reward for Application	-.001	-.057	-.038
Interpersonal Relations	.037	-.070*	.007
Fate Control	.026	-.090**	-.069*

***   Correlation is significant at the 0.001 level (2-tailed).

**   Correlation is significant at the 0.01 level (2-tailed).

*   Correlation is significant at the 0.05 level (2-tailed).