BELIEF IN GOD AND ALTRUISM. IS THERE ANY EFFECT?

by

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"The great idea of immortality would have vanished, and they would have to fill its place; and all the wealth of love lavished of old upon Him, who was immortal, would be turned upon the whole of nature, on the world, on men, on every blade of grass."

- Fyodor Dostoyevsky, *The Raw Youth*

Abstract

The influence of individual's belief in God and other factors, such as religiousity, education, perception of happiness, *et cetera*, on altruistic behavior was empirically examined during this study. It was discovered that "it is important to do something for the good of society" to people that believe in God. However, belief in God decreases the probability of participation in humanitarian and charitable organizations.

Keywords: altruism, charity, God, religiousity

Contents

1 Introduction

Altruistic behavior can be described as a desire to help others and actions motivated by this desire. It is opposed to egoism, which is a behavior motivated solely by self-interest. Altruistic acts can be driven by mixed motives, when they are motivated not only by a desire to help others but by self-interest as well. On the other hand, when egoistic motives are absent, it is called "pure" altruism. In this study, active membership in humanitarian and charitable organizations and willingness to do something for the good of society are considered as indicators of altruistic behavior. While the former is related to altruistic acts, the latter can be considered as a measure of altruistic enthusiasm.

Religion can be defined as a system of beliefs, concepts and practices. In the most widely practiced religions, Christianity and Islam, the concept of altruism, or selflessness, plays an important role in the life of the believer: "And do not forget to do good and to share with others, for with such sacrifices God is pleased" (Hebrews 13:16, NIV)[1], "...and to parents do good and to relatives, orphans, and the needy. And speak to people good [words] and establish prayer and give zakah" (Qur'an 2:83). Helping society and the needy is one of the basic ways to atone for sins in order to avoid punishment in the afterlife and one of the fundamental requirements to become a righteous. In Hinduism, the concept of "karma yoga", which is one of the spiritual paths, encourages followers to act for the benefit of others (Brodd 2009). *Dāna*, or giving, is one of the foundations of Indian religions and philosophies, such as Hinduism, Buddhism, Sikhism and Jainism. Overall, major world religions

[1] *The Holy Bible: New International Version.* Grand Rapids: Zondervan, 1984.

promote altruistic behavior.

The main objective of the presented study is to empirically analyze the effect of belief in God and religiousity on altruistic behavior. If we assume that altruistic behavior has positive externalities, then discovering whether belief in God and religiousity have a positive effect on altruistic behavior answers the question: "Is religion useful for society?". Furthermore, the influence of various economic, social and psychological factors on altruistic behavior will be estimated as well. Identifiying what factors influence altruistic behavior might considerably contribute to the philosophical, psychological and game-theoretic discussions on altruism and its motives. Several articles related to the study of altruistic behavior are reviewed in the next section.

2 Literature Review

2.1 Determinants of Altruistic Behavior

The effect of family income and social proximity on altruistic sentiments of children was evaluated by Chen *et al* (2013). During the study, researchers interviewed 469 four-year-old children that played a modified version of the dictator game. One-sample Kolmogorov-Smirnov test results showed that children's choices followed Poisson distributions. The results from regression analyses suggested that family income and social distance affected the dictator game offers of children significantly. Researches concluded that children from families with low income demonstrated more altruistic behavior and children were more generous to their friends compared to strangers.

Empirical study on the effect of age, gender and income on altruistic behavior was conducted by Nakavachara (2017). Thailand's National Mental Health Survey data was used. Author concluded that women, older people and higher income people were more altruistic.

Empirical analysis of how war experience influences social values was conducted by Edachev *et al* (2016). This influence was evaluated using data from the World Values Surveys conducted in 1990 and 1996. Regression results showed that respondents who grew up in close contact with World War II veterans were more likely to help strangers. The effect was significant at 1% level.

Lee *et al* (2014) found statistically significant effects of belief systems on altruistic behaviors towards parents, children and non-family members. Surveys

conducted in Korea, Japan and the US were analyzed. Authors also concluded that Easterners, in comparison to Westerners, tend to use relationships more than categories.

2.2 The Effect of Religion on Altruism

Benjamin *et al* (2016) conducted a psychological experiment, where 817 Cornell University students played a public goods game and a dictator game, and were asked to complete the religion-salient task and several other tasks, which were used to reveal respondent's risk aversion and time preferences. At the end of the experimental session, students were asked to identify their religious beliefs. Authors discovered that religious priming influences economic decisions. For instance, priming led to the increase of contributions to public goods by Protestants, while the opposite was discovered for Catholics.

Another public goods experiment was conducted by Akay *et al* (2011). Obtained results suggest that respondents with low and medium levels of religiousity contributed to the public good more during the religious festivals. On the other hand, contributions by those with a high degree of religiousity were not influenced by religious festivals.

The role of religious experience in altruistic behavior was studied by Brown (2009). He analyzed the 2004 General Social Survey (GSS). Strong correlation between the frequency of religious experiences, when an individual thinks that the emotional connection with God was achieved, and the frequency of altruistic acts was discovered. Results also suggest that retired people decrease the number of their altruistic acts. Moreover, non-wage income showed a

positive effect on altruistic behavior.

Harms *et al* (2017) examined the relation between belief in free will and altruistic intentions. Researchers conducted an online experiment where respondents played a series of dictator games. Compared to previous experiments this study suggests that the effect of undermining belief in free will on pro-social behavior is insignificant. Nonetheless, the negative effect was observed and was significant only among non-religious subjects.

Mastromatteo and Russo (2017) investigated the influence of inequality on charity participation. They merged the World Values Survey data with the inequality indexes taken from the World Bank Development Indicators. The dependent dummy variable was equal to one if the respondent actively participated in charitable and humanitarian organizations. Authors also included religiousity and several sociological and demographic factors in the model as control variables. Probit regression results suggest that individuals living in countries with higher inequality have a higher probability of participating in charitable and humanitarian organizations. Furthermore, it was discovered that religious people and individuals regularly attending religious services were more likely to be active members of charitable organizations.

3 Data and Methodology

Cross-sectional data from the World Values Survey wave 6 (2010-2014), which is analyzed in this study, included 90,350 observations from more than 50 countries. The average age of the respondents was equal to 42.05 years. About 48% of the respondents were male and 52% were female. The dependent variables of this study are based on the questions shown below (Table 1).

Variable	**Question**	**Response options**	**Weight (OLS/probit)**	**Weight (oprobit)**
V74	It is important to this person to do something for the good of society	Very much like me	1	5
		Like me	1	4
		Somewhat like me	0	3
		A little like me	0	2
		Not like me	0	1
		Not at all like me	0	0
V32	Active/Inactive membership: Humanitarian or charitable organization	Active member	1	2
		Inactive member	0	1
		Not a member	0	0

Table 1: Description of the dependent variables.

The mean value of *V74* was around 3.52. 76,060 respondents were not members of humanitarian and charitable organizatons, while 7,656 and 5,583 respondents were inactive and active members, respectively. It should be noted that it is not specified in the data what amount of effort or donations characterizes active or inactive participation in humanitarian and charitable organizations.

Dummy variables *god* and *hell* represent respondents' beliefs in God and in Hell (indexed 1 if believes in existence, and indexed 0 - if not). Table 2 demonstrates descriptive statistics of these variables.

11,633 respondents do not believe in God and 28,878 respondents do not

believe in Hell. Whereas 67,846 and 48,340 respondents believe in God and in Hell, respectively. The difference between the number of believers in God and the number of believers in Hell might be caused by several factors. For example, there are religions, which have the concept of God, but no concept of Hell, and *vice versa*.

Variable	**Weight**	**Frequency**	**Percentage**
god	0	11,633	14.64%
	1	67,846	85.36%
hell	0	28,878	37.4%
	1	48,340	62.6%

Table 2: Descriptive statistics of predictor variables *god* and *hell*.

58,404 respondents identified themselves as religious people, while 3,986 and 22,543 respondents were atheists and not religious people, respectively. Notably, there are religious respondents that do not believe in God and Hell. For instance, buddhists and ancestral worshippers.

In order to identify what factors might influence altruistic behavior, different regression models were used: linear probability model (LPM/OLS), probit model and ordered probit model. In addition, I conducted ordinal logit estimations, which produced the similar results as ordinal probit estimations. Control variables are listed on Table 5 (Appendix B). Geographical variables, such as population of town and country dummies, were included. I controlled for religious denomination by including dummies in each regression, as well.

4 Results and Discussion

In this section, the obtained results are discussed and compared to the conclusions of the previous studies. Table 3 and Table 4 (Appendix A) demonstrate shortened versions of the regression outputs, which include only the main results of the paper. Full regression tables available upon request.

4.1 Willingness to Help Society

Estimation results suggest that respondents, who believe in God, are more concerned about helping society. On the other hand, the effect of belief in Hell is negative. Religious people care about society more than atheists and not religious individuals. Moreover, people regularly attending religious services demonstrate higher willingness to help society.

It is important to help society to the respondents that are "very happy" and "rather happy", in comparison to those who identified themselves as "not very happy" and "not at all happy". The effect of age on altruistic enthusiasm is positive and significant. More educated people also demonstrate higher altruistic enthusiasm. Furthermore, it is important to do something for the good of society to people that have children.

However, according to ordinal probit estimation, people with higher income show less enthusiasm to help society. The obtained negative impact of income on altruistic enthusiasm contradicts the results of Nakavachara (2017). Nonetheless, it is consistent with the results of Chen *et al* (2013), who found that children from low-income families were more altruistic.

4.2 Participation in charitable organizations

Evaluation results suggest that male respondents are less likely to be members of charitable organizations. The effect of age on charity participation is positive. The results, related to the effects of gender and age on altruistic behavior, are consistent with the conclusions of Nakavachara (2017). Respondents, who think that most people can be trusted, are more likely to be involved in charities. More educated people have higher probability of participating in charities as well.

In regressions related to active participation in charities, I consider not religious people as a base category for religiousity so that it is straightforward to compare my results to the results obtained by Mastromatteo and Russo (2017). Regression outputs show that my results are consistent with the conclusions of the mentioned researchers. Namely, religious people have higher probability to participate in charitable organizations compared to not religious individuals and atheists. Additionally, respondents that regularly attend religious services are more likely to be active members of humanitarian organizations.

However, the estimation results suggest that belief in God negatively and significantly (at 0.1 % level for both probit and oprobit estimations) influence charity participation. Although this result might seem counterintuitive, in my opinion, there is a logical explanation for this finding. In most religions, including Abrahamic religions, God is represented as a supreme being, which is omnipotent, omniscient and omnibenevolent. Hence, we can assume that a person, who believes in God, also believes that God is allmighty, allknowing and perfectly good. Consequently, when this person encounters sufferings

of others, he assumes that this is something that God knows about and is able to prevent, but does not, because of the reasons that are impossible to understand: "How unsearchable his judgments, and his paths beyond tracing out!" (Romans 11:33, NIV). Therefore, the person does not try to ease the sufferings of others (participate in charities), because he thinks that it is a result of the divine will (*Deus vult*).

4.3 Research Limitations

The presented research has several limitations. Firstly, the model suffers from endogeneity and omitted variable bias. For instance, upbringing might be correlated with religiousity, and is one of the important factors that influence altruistic behavior. However, the dataset does not include any relevant variables. Secondly, the number of surveyed people in each country is not proportional to population. Finally, survey questions were not specific. For example, it is not specified what amount of effort or donations characterizes active or inactive participation in humanitarian and charitable organizations. The mentioned limitations could be overcome in future. Analysis of the surveys with better design and more relevant questions could be performed in the future studies.

5 Conclusions

In this study, the effects of belief in God, religiousity and other factors on altruistic behavior are empirically analyzed. Results suggest that 1) educated and older people are more altruistic. 2) Women tend to participate in charities more than men. 3) Religious people are more altruistic than not religious individuals. 4) The effect of belief in God on charity participation is negative and significant. Nevertheless, 5) it is important to do something for the good of society to people that believe in God.

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Appendix A

Table 3: Regression Results (Willingness to Help Society)

	OLS	probit	oprobit
God	0.0396**	0.105***	0.116***
	(0.0137)	(0.0290)	(0.0234)
Religiousity			
A religious person	0.0247	0.0688	0.0917*
	(0.0184)	(0.0456)	(0.0364)
Not a religious person	-0.000554	-0.000839	0.0286
	(0.0115)	(0.0430)	(0.0342)
An atheist			
(base category)			
N	48511	48488	48511
adj. R^2	0.022		

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4: Regression Results (Charity Participation)

	OLS	probit	oprobit
God	-0.0350	-0.281***	-0.196***
	(0.0316)	(0.0436)	(0.0332)
Religiousity			
A religious person	0.00926*	0.0797**	0.0101
	(0.00362)	(0.0287)	(0.0212)
An atheist	-0.00762	-0.0204	0.0465
	(0.00937)	(0.0683)	(0.0494)
Not a religious person (base category)			
N	49988	49916	49988
adj. R^2	0.016		

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix B

Table 5: List of Control Variables

god	A dummy for belief in God
hell	A dummy for belief in Hell
i.V147	A set of dummies for religiousity: A religious person, Not a religious person, An atheist
i.V145	A set of dummies for attendance of religious services: More than once a week, Once a week, Once a month, Only on special holy days, Once a year, Less often than once a year, Never, practically never (base category)
i.V146	A set of dummies for frequency of praying: Several times a day, Once a day, Several times each week, Only when attending religious services, Only on special holy days, Once a year, Less often than once a year, Never, practically never (base category)
i.V144	A set of dummies for religious denomination
V242	Age of a respondent
male	A dummy for men
immigrant	A dummy equal to 1 if a respondent is an immigrant
i.V248	A set of dummies for the highest level of education attained: No formal education (base category), Incomplete primary school, Complete primary school, Incomplete secondary school (technical), Complete secondary school (technical), Incomplete secondary school, Complete secondary school, Incomplete university-level education, Complete university-level education
i.V239	Income scale: 1 (base category) to 10

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i.V57	A set of dummies for marital status: Married, Living together as married, Divorced, Separated, Widowed, Single (base category)
i.V58	Number of children: No children (base category), 1 child, 2 children, ... , 7 children, 8 or more children
i.V229	A set of dummies for employment status: Full time, Part time, Self employed, Retired, Housewife, Student, Unemployed (base category), Other
i.V10	A set of dummies for feeling of happiness: Very happy, Rather happy, Not very happy, Not at all happy (base category)
i.V11	A set of dummies for subjective state of health: Very good, Good, Fair, Poor (base category)
i.V23	Level of satisfaction with life: 10 degrees from Completely dissatisfied (base category) to Completely satisfied
i.V59	Level of satisfaction with financial situation of household: 10 degrees from Completely dissatisfied (base category) to Completely satisfied
V24	A dummy for trust (indexed 1 if a respondent thinks that most people can be trusted)
i.V253	Size of town: Under 2,000 (base category), 2,000-5,000, 5,000-10,000, 10,000-20,000, 20,000-50,000, 50,000-100,000, 100,000-500,000, 500,000 and more.