

## **"Voluntary Society: Motivation and Characteristics of Portuguese"**

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### **Abstract**

*This research gives a better understanding on the features of voluntary Portuguese society and to estimate its motivation towards patterns and trends in volunteering. This study is based on an empirical literature research using both a questionnaire survey and an econometric model. Motivated volunteers usually value the work that they conduct contributing to the success of the organization for which they work. It is assumed that looking at motivated potential volunteers, the organizations are able to better identify the volunteer who might be adapted to a certain position, having greater probability of job satisfaction and well-being with the entrusted tasks and within the whole organization. Therefore, in its universality, the good recognition of the volunteer's initial motivation provides a good job for both parties.*

**Keywords:** Volunteering, motivation, utility, well-being, volunteers

### **1. Introduction**

Examining the reality of volunteer's work in Portugal is not a new phenomenon, but it is rather necessary, especially considering the fact that this topic is broad. It varies depending on the geographical areas of intervention and areas of work and many authors consider the existing research as still limited. Nevertheless, we believe that volunteering has undergone many changes in recent decades as it is no longer an activity which is carried out purely for middle-aged women who stay at home and receive instructions. Still it implies an activity carried out by a small group of individuals, a varied range of people from different social backgrounds with different education levels, motivation, age, living histories, etc. who decide to volunteer. However, different individuals may be involved in the same activities but having different objectives. The social value added by voluntary work is immeasurable, but the low participation and involvement of the Portuguese society is a fact that has some explanations.

Authors as Franco, R. C. *et al.* (2005) and the European Volunteer Centre (EVC) explain that the low involvement in volunteering of the Portuguese society might be seen due to several factors including the 48 years of authoritarian regime, little civic culture of the country, high status of the middle and upper-middle classes, working overtime is better remunerated, conditions that do not promote volunteering and a very recent awareness of corporate and social responsibility. Franco, R. C. *et al.* (2005) show that in Portugal civil society (including NGO's) involves almost a quarter of a million full-time equivalent employees, of which about 70 % in paid positions and the remaining 30 % as volunteers.

According to this study, they represent around 4.2 % of the active population. The present research is intended to measure and evaluate the characteristics of this voluntary society and to define its motivation towards finding patterns and trends. A wide variety of data will be examined, even considering their superficiality, using an econometric model whose dependent variable refers to the frequency with which the individual volunteers. More details will be specified below.

In this study we will analyse the relationship between the impact of the voluntary performance, depending on age, gender, income and level of education. In the first section we address the theoretical framework, followed by methodology used, results and conclusions.

## **2. Theoretical Framework**

It is generally accepted that volunteering can play an important role as it contributes to happiness and well-being of individuals; for instance, volunteering can help to build social networks and give a sense of purpose and belonging within the community itself. Mellor *et al.* (2009) find that volunteers have better contact and personal link with neighbors and general better well-being than non-volunteers. Defining well-being might be difficult as it is influenced by such variables as age, gender, socio-economic and cultural environment. Markus Nahas *et al.* (2000) consider well-being as a combination between several factors such as the physical, the mental, the emotional and the spiritual. In this paper we mean utility as the satisfaction or pleasure that volunteers experience by practicing volunteer work.

### **2.1. Motivation for volunteering**

Volunteering to serve (for altruistic purposes), for social contacts or even to promote the objectives of an organization – those are some of the motivations that have been suggested. To understand better the concept of “motivation” it might be useful to point out Pinder’s definition (1984) that motivation is a set of weak or strong forces to initiate or continue certain work behaviour. While for many authors altruism is the main motivation for volunteering (Wisner *et al.*, 2005), for Pearce (1993) altruism does not exist and he considers volunteer work as a pro-social activity designed to produce and maintain the well-being of others without other types of potential returns for the actors. For several authors volunteering can take various forms such as opportunity to meet co-workers and upgrade social contacts, recognition, socialise, sharing common experiences, or volunteering because the individual wants to help the organization in achieving its objectives (Clary *et al.*, 1998; Pearce, 2003; Wisner *et al.*, 2005).

Table 1 presents the analysis performed by Ferreira, Proença & Proença (2008) to various studies as a form of consolidating the motivations by types and objectives. After the division of motivations into four distinct groups: altruism, belonging, ego and personal recognition and development, it was an important issue for us to know whether these motives and their percentages are reflected in the Portuguese reality. The categorization of Ferreira, Proença & Proença (2008) was used to construct the survey we have applied to participants regarding the issue of motivation to undertake volunteer work.

## **3. Research Methodology**

The data collection process started in August 2011 and was finished on 4th October 2011. Until its end, contacts were made with the main platforms and voluntary associations including the National Council for the Promotion of Volunteering and the Portuguese Non-governmental Platform for Development Organizations (ONGD) in order to ask for cooperation on sending the questionnaires to their associates via email. The questionnaire included mostly of multiple choice questions regarding socio-biographical information: gender, age, occupation, education, religious habits and lifestyle. The general criterion was used on over 100 respondents, with stratification by sex. We have obtained a sample on 151 people (102 women and 47 men) aged between 19 and 83 years ( $M = 36.7$ ;  $SD = 15.62$ ).

In order to ascertain the most relevant data for practicing volunteer work it was also developed an econometric model whose dependent variable refers to the frequency which the individual undertakes voluntary work.

## **4. Results**

### **Socio-demographic profile of volunteers**

During the research it has been found that out of 151 participants, 102 were women (68 %) and 47 men (31 %). Portuguese volunteers confirm the trend that women show greater involvement in voluntary activities than men.

Findings show that 7 % have 4th grade, 6th grade or recent preparatory cycle; 7 % have the 5th grade or 9th unified grade, 10th grade or 11th grade; 11 % have the 7<sup>th</sup> grade, introductory year, 12th year or a special course, 12 % attend university and 61 % have a Bachelor's, Master's or PhD. Participants with less than the 4<sup>th</sup> grade of primary school were not found. Our research confirms the trend for volunteering by people with a higher level of education – namely 61 % of our respondents claimed to have a Bachelor's, Master's or PhD.

Concerning professional occupation of our participants, the data shows that 21 % are high qualified professionals; 12 % belong to the middle management, 5 % work in the services sector, 11 % in specialised services, 5 % are housekeepers, 22 % are students, 7 % are unemployed, 12 % are retired. There were 7 respondents (5 %) than did not know or did not reply to the question. From our research, it might be concluded that two broad groups of participants are students (22 %) and high-qualified professionals (21 %).

### ***Intensity of participation***

Table 2 summarises the frequency with which the volunteers, split by gender, implement their volunteering activities. According to the statistics, both male and female, perform volunteer work mainly once or twice a week. However, it is clear that women focus on volunteering at least once or twice a week representing 49 % of the participants. It should be considered also that the percentage of male volunteers is slightly higher in relation with volunteering “all days” – namely 19.1 % of male participants comparing with 12.7 % of female. Following the Table 3 it could be noticed that, among 151 participants, 26 %, declare the family income between €1,000 to €1,745 meanwhile 22 % receive between €605 and €97. Volunteers with average income between €1,000 and €1,745 replied more frequently “once or twice a week” than those with lower or higher income.

On table 4 data shows that the groups carrying out volunteering work vary according to their professions. For instance, retired people often are volunteers once or twice a week. It can also be seen that students and higher professionals frequently carry out voluntary work as they indicated the answer “once or twice a week. Taking into account the age within our participants group, the involved people were between 19 and 83, with an average of 36.7 years with a standard deviation of 15.62. By analyzing table 5 it might be noted that the majority of volunteers perform volunteering at least once or twice a week. It became clear that these volunteers are committed to a weekly scale leading to continuous exercise of its activity. As the frequency of time reduces, the number of volunteers reduces, i.e. the more frequent attendance, the more volunteers are involved.

### **4.1 Motivations**

Individuals continue to undertake voluntary work for altruistic reasons (concern with others) or rather appreciate the opportunity to learn and to develop a network of professional contacts and friends or with the hope of improving their qualifications and subsequently obtain a better professional career. Between the various cases examined in the course of the presented investigation, it may be pointed out several reasons: socialization or recreation, sharing, networking, the need to pursue a mission within an organization, to learn about new tasks and social recognition. In our research we would like to highlight 4 main reasons: altruistic reasons, sense of belonging, satisfaction of the ego and learning. The data illustrates great unanimity regarding motivation to undertake a volunteer work to “bring social justice” and “learn to be a better citizen/personal growth.” Furthermore, the majority of volunteers are also divided between altruistic and learning motivations.

It can be noticed that 44% of responders feel that they have achieved “the desire to feel useful for others” and 41 % have noticed “improvement in the quality of life of others”. Moreover, 29 % had access to “training/education” and 19 % to “new projects.” According the presented values, it might be concluded that prevails the interest in realization, contribution to equality and social well-being. We also found out that almost all volunteers are satisfied with what they accomplished. Several authors see positive relationship between individuals who have been in touch with volunteers and the probability to undertake a volunteer work. It became clear that this relationship exists between the volunteers as the majority of the responders know someone who does or has done volunteer work - 37 %. In addition to that, 25 % of the participants answered “someone I spoke to related to some organization”. There might be noted a strong link between the motivation for volunteering and the direct contact with people who are connected with volunteer organizations. In his investigation Dutta (2004) argues that the individual undertaking volunteer work chooses to live in a responsible manner reflecting in daily life choices. Therefore, we wanted to analyze different lifestyles such as vegetarianism, consumption, interest in sports, environment and recycling.

To begin with the analysis of various interests that volunteers could share, we concluded that the vast majority of volunteers is concerned about the environment and share the interest in recycling. To a lesser extent, there might be seen some similarities regarding interest in sport and none attention is given to vegetarianism. Individuals that reported a higher satisfaction with life are most likely to become volunteers but also it is recognized that volunteering can have a positive effect upon the subjective well-being. It was noted that 56 % of participants considers themselves to be “happy”.

To summarize, it can be noticed that the Portuguese volunteers are mostly women who consider themselves Catholic. Their motivations are divided between large contribution to quality of life of others, social justice, learning to be a better citizen and developing new skills. These individuals volunteer mainly in the health sector and acknowledge voluntary work through other volunteers. They also share interest in environment and are involved in recycling. It can be seen also a common interest in responsible consumption. The vast majority is committed to voluntary work on a weekly basis and they consider themselves as generally happy. Although, the previous studies have used various sources and different data, the results of our research are reasonably consistent and highlight a number of key characteristics.

## 4.2 Modeling

### a) Data

In order to determine the most relevant data for the practice of voluntary work we developed an econometric model whose dependent variable refers to the frequency that the individual performs volunteer work – Volunt. Whereas, the response variable is an ordinal variable (takes discrete values on the set 1 to 5). This model aims to explain the average probability of an individual committing voluntary work with a given frequency  $j - j = 1,2,3,4,5$ . The objective is to understand and modelize the impact of marginal variations in the covariates to the dependent variable. For example, it is intended to answer the following question: What is the probability for an individual to commit to voluntary work with a frequency  $j$ , if the income increases by 1 euro? The Table 6 presented below on this article describes the variables in our model.

Regarding to the way the variables has been calculated it is important to make some comments. In relation to the variable Happy, it takes the value 1 if the individual is considered to be happy or very happy (see question 16 of the questionnaire). Taking into account the variables **Altruism, Belonging, Ego and Learning**, they have the value 1 when the person shows that their main motivations (motivation with decisive influence or some influence) for volunteering are in categories *Altruism, Belonging, Ego and Learning*.<sup>1</sup> Altruism takes the value 1 when the participant shows that volunteering is mainly to “contribute to social justice or to reflect on the significance of volunteering”; the variable Belonging takes the value 1 if the person states that the main motivation for volunteering is “making friends, search for adventure or to meet and share experiences with other volunteers”; the variable Ego takes the value 1 when the individual is motivated to “engage in a voluntary organization or as a free time occupation”; the variable Learning takes the value 1 in circumstances when a volunteer mentions that engage in volunteering for “learning how to be a better citizen, to know another country, learn another language, develop skills or improve the employment situation.”

Below we present the econometric model used in modeling the problem at stake.

### b) Econometric model

The model concerned is a generalization of the models of binary response (dependent variable for observation only assumes 0 or 1 value) shaped by a distribution of *Bernoulli*. As we have seen recently, the dependent variable can take any value from 5 categories thus, the distribution of the dependent variable is a distribution of the multinomial family. Hence, the model that will be used in the *Ordered Probit* (Wooldridge, 2010).

It is assumed, like the binary choice models, that the dependent variable is the observable counterpart of a latent variable  $Y^*$ , variable non-observable expressing the usefulness or the desire of individual I. This means that the individual replies that practice volunteering with a variable frequency  $j$  ( $Y$  - observed variable) — due to its desire — ( $Y^*$  - latent variable) to engage in voluntary activities.

Mathematically the relationship between the variable and its counterpart can be observed in the following way:

$$y^* = X'\beta + \epsilon, \quad \epsilon|X \sim N(0, \sigma_\epsilon^2)$$

<sup>1</sup> In this respect see question 7 of the questionnaire that underpins our database.

$$\begin{aligned}
 y &= 1, & \text{se } y^* \leq 0 \\
 &= 2, & \text{se } 0 < y^* \leq \alpha_1 \\
 &= 3, & \text{se } \alpha_1 < y^* \leq \alpha_2 \\
 &\vdots \\
 &= j, & \text{se } \alpha_{j-1} < y^*
 \end{aligned}$$

Where  $\alpha_i \ i = 1, \dots, J$  are unknown parameters?

Therefore, by construction, the probabilities of one practice volunteering with the frequency j are as follows:

$$\begin{aligned}
 P(Y = 1|X) &= \Phi(-X'\beta) \\
 P(Y = 2|X) &= \Phi(\alpha_1 - X'\beta) - \Phi(-X'\beta) \\
 P(Y = 2|X) &= \Phi(\alpha_2 - X'\beta) - \Phi(\alpha_1 - X'\beta) \\
 &\vdots \\
 P(Y = j|X) &= 1 - \Phi(\alpha_{j-1} - X'\beta)
 \end{aligned}$$

These parameters are estimated throughout the conditional maximum likelihood estimator — CMLE.

One of the particular features of this kind of non-linear models is that the effects are dependent on partial repressors, mathematically:

$$\begin{aligned}
 \frac{dP(Y = 1|X)}{dx} &= \phi(X'\beta)\beta \\
 &\frac{dP(Y = 2|X)}{dx} - \{\phi(-X'\beta) - \phi(\alpha_1 - X'\beta)\}\beta
 \end{aligned}$$

Hence, the estimated coefficients  $\beta$ , unlike the linear models, have no economic interpretation (one can just look at the statistical significance and sign).

Therefore the solution to measure the partial effects is to consider the average of the partial effects over the sample, i.e.:

$$\widehat{AME}_k = N^{-1} \sum_{i=1}^N \frac{dP(Y = j|X)}{dx}, \quad j = 1, \dots, J; k = 1, \dots, K$$

It should be noted that this methodology is the most usual to find a *closed* expression to measure covariates partial effects. Partial effects together with the estimated coefficients shall be described and explained in the next section.

**c) Results**

In Table 7 it can be found estimated coefficients; however, as mentioned above, they are not liable to be interpreted. They are far from not being informative as their statistical significance requires the statistical significance of the average marginal effects.

The variables that are statistically different than zero, i.e. statistically significant are the variables **Age, Income, Happy, Membership, Student, Ego and Learn**. Opposite in the field are the variables Bachelor, Atheist and Altruism which are non-significant as they do not explain the dependent variable from purely statistical perspective. In other words, to have a Bachelor, to be an Atheist or Altruistic is not statistically significant for volunteering. Overall, the estimated model certificate is very significant and is attested by the statistical value of Wald (p = 0,003), which rejects the nullity of joint coefficients in gradient.

As has been already shown in the previous section, the partial effects depend on the matrix of the regressors in order to show the actual effects that the variables have in the likelihood of individuals to engage in voluntary work with the frequency j we need to use the average marginal effects (AME).

In the Table 8 presented below in this article there are estimates of AME's over the values underpinning the variable *Volunt* – frequency with which the individual is doing voluntary work.

It is worth to remind at this point the correspondence between the figures 1, 2, 3, 4 and 5 and the frequency with which the individual is volunteering:

- Y = 1, if the individual has done voluntary work once a year
- Y = 2, if the individual has done voluntary work few times a year.

- Y = 3, if the individual has done voluntary work once or twice per month
- Y = 4, if the individual has done voluntary work once or twice a week
- Y = 5, if the individual has done voluntary work every day

Regarding the significant statistical variables in relation to the variable age, this has a negative effect on the likelihood of an individual to volunteer with a low frequency and a positive effect on the likelihood of an individual volunteering with greater frequency (on a weekly basis or on a daily basis). As an example, it is estimated that on average for each additional year (being one year older), the likelihood of practicing voluntary work each day decreases by about 5 percentage points (pp). In other words, volunteering is more likely to happen if the individual is younger and less if the individual is older.

Analogically, it can be seen in the diagnostic included in the variables *Income*, *Student*, *Happy* and *Belonging* that as these contribute negatively to an individual engage in volunteering in a low frequency, they have a positive effect on the likelihood of an individual to become volunteer on a more frequent basis. As an example, it is estimated that on average, students have the probability of 13.7 pp to be engage in volunteering all days comparing with the group of non-students. Also, it is estimated that on average for each additional euro the individual earns, the probability to be involved in volunteering increases every day by 10 pp. On the contrary, there is the *Learning* variable – individuals whose main motivation for volunteering belongs to the Learning group have more (smaller) probability to be involved in volunteering with a lower (high) frequency than those who do not practice volunteering for learning purposes. Thus, it is estimated that on average a person whose motivation for voluntary work is *learning* has a lower likelihood in 16 pp to be engaged in volunteering on a daily basis than individuals whose motivation for volunteering is different than Learning.

Finally, they might be pointed out a curious and, to some extent expected, result that has to do with the motivation for volunteering concerning the affirmation of Ego. Individuals that indicate their main reason for volunteering as belonging to the category of Ego always have a lower likelihood of volunteering (at all frequencies) when compared to individuals who take part in volunteering for other reasons. It is estimated that individuals who practice volunteering for reasons related to their Ego have a lower probability to volunteering on a daily basis than individuals with other motivations by 16.2 pp.

## 5. Conclusions

As stated previously, individuals' motivations to carry out voluntary work constitute a difficult topic for reflection. Volunteering can be treated as a mean to acquire knowledge, exercise power and develop social networks in order to improve job opportunities. However, the volunteer is also motivated by a basic wish to help others, especially the most vulnerable. Therefore, volunteering not only contributes to the development of the competences and the economy, but also reinforces the desire of individuals to see reduced social inequalities directly by participating in building a society where the quality of life of people living today and those who will live in the future is the main objective. This research aims to strengthen, defend and specify the reasons for its implementation and also assumes a more serious and committed reflection on that matter, in particular, on this transfer of responsibilities from the state to civil society.

When the state ceases the fulfillment of its basic function in establishing sound structures of public policies shifting responsibilities to civil society, enhancing volunteering and philanthropy we see the beginning of a social gap where social rights are no longer constitutionalised. In the chapter of results and modeling we have tried to outline who is the volunteer, i.e. those with more likelihood to become a volunteer as well as the context in which people practice voluntary work. There is a great will of students to practice volunteering on a daily basis when compared with non-students or, what is also worth mentioning, on average for each additional euro that the individual receives, the likelihood to be involved in voluntary work on a daily basis increases. Moreover, with the motivation to Learn, the volunteer will probably perform voluntary work once a year or a few times per year meanwhile individuals who practice volunteering for reasons of Ego have a lower probability comparing to individuals who take part in volunteering for other reasons than Ego. It has been also verified that having a Bachelor degree, being Altruistic or Atheist it is not statistically relevant or significant to perform voluntary work. This research shows that much has been done concerning voluntary work however, in many aspects, volunteering in Portugal still has little attention. These points out the need to remove legal barriers that discourage the low-skilled people and those with many obligations to be involved in volunteering.

A potential obstacle that might have been indicated regarding this research could be to collect participants on a web-based search. Despite the increasing popularity of Internet, it is possible that the samples obtained via e-mail may not be fully representative.

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## List of Tables

**Table 1: Type of motivation**

	Objectives	Authors
<b>Altruism</b>	Helping others Doing something worthwhile Sense of mission The organisation helps those in need Form of solidarity	Cavalier, 2006; Soupourmas & Ironmonger, 2002; Holmberg & Soderlung, 2005; Yeung, 2004; Dolnicar & Randle, 2007b; Anderson & Shaw, 1999; Prouteau & Wolf, 2007; Trogdon, 2005; Edwards, 2005; Soupourmas & Ironmonger, 2000; Farrell, Johnston & Twynam, 1998; Vitner, Shalom & Yodfat, 2005; Clary e tal, 1998; Yavas & Riecken, 1997; Cassie & Halpenny, 2003; Figueiredo, 2005; Marta, Guglielmetti & Pozzi, 2006.
<b>Membership</b>	Social contact (know other people) Entertainment and travel Be well accepted in the Community Contact with persons who have the same interests	Soupourmas & Ironmonger, 2002; Anderson & Shaw, 1999; Edwards, 2005; Cassie & Halpenny, 2003; Kim, Chelladurai & Trail, 2007; Holmberg & Soderlung, 2004; Kemp, 2002; Cavalier, 2006; Prouteau & Wolf, 2007; Vitner, Shalom & Yodfat, 2005; Clary e tal, 1998; Cassie & Halpenny, 2003.
<b>Ego, recognition</b>	Interest in the activities of the organisation Spending free time with more quality Self-esteem, trust Contacts	Vitner, Shalom & Yodfat, 2005; Clary e tal, 1998; Anderson & Shaw, 1999; Edwards, 2005; Yavas & Riecken, 1997; Kemp, 2002; Soupourmas & Ironmonger, 2002; Clary e tal, 1998; Dolnicar & Randle, 2007b; Sinclair, Downson & Thistleton – Martins, 2006. Cassie & Halpenny, 2003; Kemp, 2002;
<b>Learning and Development</b>	New challenges and experience, learning. Possibility to continue to pursue a profession. Personal enrichment. Broadening horizons	Trogdon, 2005; Dolnicar & Randle, 2007b; Figueiredo, 2005; Vitner, Shalom & Yodfat, 2005; Edwards, 2005

**Table 2: Intensity of participation in volunteering by sex**

Sex/frequency	Once a year	A few times a year	Once or twice per month	Once or twice a week	Every day	Dk/dr
Male	2,1 %	25,5 %	14,9 %	<b>27,7 %</b>	19,1 %	10,6 %
Female	11,8 %	11,8 %	10,8 %	<b>49,0 %</b>	12,7 %	3,9 %

Source: Own source

**Table 3: Intensity of participation in voluntary per income**

Income/frequency	Once a year	A few times a year	Once or twice per month	Once or twice a week	Every day	dk/dr
Less than 300 euro	0	0	0	2	1	0
Between EUR 305 and EUR 600	1	4	0	10	0	1
Between EUR 605 and EUR 997	<b>6</b>	5	4	<b>11</b>	<b>5</b>	2
Between EUR 1 000 and EUR 1 745	4	<b>5</b>	<b>7</b>	<b>19</b>	3	2
Between EUR 1 750 and EUR 2 990	1	4	2	<b>11</b>	<b>5</b>	0
Between EUR 2 995 and EUR 4 990	0	3	1	3	2	1
Above EUR 4 990	0	0	0	1	0	0
Dk/dr	1	3	4	6	6	3

**Table 4: Intensity of participation in volunteering by professional occupation**

Profession/frequency	Highly specialized professionals	Medium technicians.	Services	Specialised work	Domestic	Retired	Students	Unemployed	Dk/dr
Once a year	4	1	0	3	0	0	2	2	1
A few times a year	5	5	2	3	0	0	5	3	1
Once or twice per month	4	3	2	2	0	1	5	1	0
Once or twice a week	<b>12</b>	4	2	4	7	<b>16</b>	<b>14</b>	2	2
Every day	4	4	1	2	0	1	6	2	2
Dk/dr	2	2	0	3	0	0	1	0	1

**Table 5: Intensity of participation in volunteering by age**

	Frequency in volunteering						Total
	Once a year	A few times a year	Once or twice per month	Once or twice a week	Every day	Dk/dr	
Age 15-20	1	0	0	4	0	0	5
20-30	<b>8</b>	<b>14</b>	<b>11</b>	<b>20</b>	<b>11</b>	5	69
30-40	<b>3</b>	<b>7</b>	<b>4</b>	<b>8</b>	<b>7</b>	3	32
40-50	1	3	1	1	0	1	7
50-60	0	0	0	14	2	0	16
60-70	0	0	2	13	2	0	17
70-80	0	0	0	1	0	0	1
80-90	0	0	0	1	0	0	1
Total	13	24	18	62	22	9	148

**Table 6: Description of variables**

Dependent variable	Description
Contribution	Ordinal variable. Takes the value 1 if the individual I practises volunteering once a year; 2 few times a year; 3 once or twice per month; 4 once or twice a week, 5 every day.
<b>Variables</b>	
Age	Age of the individual I
Bac	Dummy variable: Takes the value 1 if the individual I has a Bachelor degree and 0 if he/she does not
Income	Average income of the individual in euro
Atheist	Dummy variable: Takes the value 1 when the individual is atheist or agnostic, otherwise is 0
Students	Dummy variable: Takes the value 1 if the individual I is a student, otherwise is 0
Happy	Dummy variable: Takes the value 1 if the individual I feels happy, otherwise is 0
Altruism	Dummy variable: Takes the value 1 if the individual I practices volunteering for altruism reason, otherwise is 0
Membership	Dummy variable: Takes the value 1 if the individual I practices volunteering on grounds of belonging, otherwise is 0
Ego	Dummy variable: Takes the value 1 if the individual I practices volunteering for reasons associated with their ego, otherwise is 0
Learn	Dummy variable: Takes the value 1 if the individual I practices volunteering for learning purposes, otherwise is 0

**Table 7: Estimated coefficients**

	Age	Bac	Incm	Athei	Student	Happy	Altruism	Membership	Ego	Learn
Coef	<b>0,024</b>	— 0,073	<b>0,001</b>	0,100	<b>0,584</b>	<b>0,445</b>	0,033	<b>0,560</b>	— <b>0,514</b>	— <b>0,829</b>
If	<b>0,009</b>	0,276	<b>0,000</b>	0,261	<b>0,314</b>	<b>0,125</b>	0,395	<b>0,252</b>	<b>0,302</b>	<b>0,394</b>
Z-stat	<b>2,495</b>	— 0,264	<b>2,565</b>	0,383	<b>1,861</b>	<b>3,561</b>	0,083	<b>2,226</b>	— <b>1,703</b>	— <b>2,107</b>
Note: In bold come significant estimates at 5% nominal significance										

**Table 8: AMES estimated**

Variable	P (y = 1   X)	P (y = 2   X)	P (y = 3   X)	P (y = 4   X)	P (y = 5   X)
Age	— <b>0,038</b>	— <b>0,036</b>	— <b>0,011</b>	<b>0,037</b>	<b>0,047</b>
Bac	0,011	0,011	0,003	— 0,011	— 0,015
Incom	— <b>0,010</b>	— <b>0,012</b>	— <b>0,004</b>	<b>0,013</b>	<b>0,016</b>
Atheist	— 0,015	— 0,015	— 0,005	0,015	0,002
Student	— <b>0,076</b>	— <b>0,085</b>	— <b>0,033</b>	<b>0,056</b>	<b>0,137</b>
Happy	— <b>0,052</b>	— <b>0,077</b>	— <b>0,099</b>	<b>0,084</b>	<b>0,085</b>
Altruism	— 0,005	— 0,005	— 0,001	0,005	0,006
Membership	— <b>0,014</b>	— <b>0,128</b>	— <b>0,037</b>	<b>0,143</b>	<b>0,166</b>
Ego	— <b>0,046</b>	— <b>0,047</b>	— <b>0,016</b>	— <b>0,041</b>	— <b>0,376</b>
Learning	<b>0,069</b>	<b>0,092</b>	<b>0,041</b>	— <b>0,040</b>	— <b>0,162</b>
Note: In bold come significant estimates at 5% nominal significance					