

ATTITUDES OF TURKISH YOUNG PEOPLE TOWARD ORGAN DONATION: THE ROLES OF PUBLIC SERVICE ADVERTISEMENTS AND PERSONALITY DIFFERENCES

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ABSTRACT

In order to investigate how the argument quality in public service advertisements and personality differences (confidence degree to organ donation campaigns, level of involvement with organ diseases and empathic tendency) can affect to attitude and volunteering, we develop and test a conceptual model via an experimental study. The study was conducted on the students of Mustafa Kemal University, in Hatay, Turkey. Data were obtained from 204 students, after watching videos of advertisement, by personal interview. To test effects of these determinants on attitude and volunteering, a two-way, 2 (empathy: high and low) x 2 (argument quality: strong and weak) factorial design was employed, using involvement and trust as a covariate, separately. The results show that the main effects of argument quality of ads, involvement and trust were significant on attitudes. However, a main effect of empathic tendency was insignificant on attitudes and volunteering.

Keywords: Organ donation, attitude, volunteering, advertising, trust, involvement, empathy.

1. Introduction

In recent years, medical advances and improvements in surgical techniques are transforming transplantation into an ever safer therapeutic option. However, this crucial limitation of this therapy is the lack of available organs. As a result, it is necessary to join forces to try to achieve maximum organ donation and the prevent the loss of potential donors (Rios et.al., 2015). To accomplish this, Turkish government and non-profit organizations have carried out promotional campaigns to persuade of public. In this process, young people are an important group that can be affected by public service advertisements (PSAs). In order to better understand which variables play an important role in changing public opinion toward participating in donor groups and how people become further engaged in organ donation are crucial. Given that transplantation is mainly a surgical treatment, this study aims to analyze the variables that impact on attitudes and volunteering toward organ donation. A review of the literature indicated that argument quality of public service advertisements, an individual's confidence degree to organ donation campaigns, level of involvement in organ diseases, and emphatic tendency are likely to affect to attitude and volunteering. There is a lack of detailed knowledge in the marketing literature in means of the simultaneously roles of these variables. This study would make important theoretical and managerial contributions to the literature.

In Turkey, medical statistics show that the number of patients awaiting liver, kidney, and heart transplantation is 24.000 persons in 2015. Young people has a first rank on the basis of organ donation in Turkey. The system used for organ donation in Turkey is similar to that in the Western countries. It is an opting-in policy, under which individuals exercise their right to posthumous organ donation by signing a card indicating their wishes. This signing of a donor card is seen as giving to others as opposed to taking. National Organ and Tissue Transplantation Coordination System was established in Turkey in 2000 under the coordination and supervision of Ministry of Health (Akıs et.al., 2008). The Supreme Board of Religious Affairs by its decision date March 6th 1980 has announced that organ transplantation is permissible (Cetin et.al., cited in Hacettepe Universitesi Doku ve Organ Nakli Egitim, Uygulama ve Araştırma Merkezi, Organ Bağısı).

2. Conceptual Framework

The conceptual model which integrates the hypothesized relationships appears in Figure 1.

2.1. *Public Service Advertisements*

In order to attract more volunteers, it is critical for government agencies to develop effective promotional strategies. Specifically, advertising can be one of the most effective marketing tools for those organizations. Advertising has been used in marketing communication because its reach is broader than other forms of marketing activities. Mass media advertising can be an effective promotional tool to enhance citizens' awareness (Park et.al., 2008). The advertisement of organ donation can be categorized as Public Service Advertisements (PSAs). PSAs, an important area of social marketing, have become a critical part of mass media systems (Andreasen, 1993 Hirschman, 1991). They are designed to increase public awareness and are designed to get the public to help people by donating to a worthwhile cause. It's important to incorporate persuasion into public service advertisements to create successful PSAs (O'Keefe and Reid, 1990). Messages with strong arguments elicit predominately favorable thoughts about the message's advocated position and lead to more positive attitudes and volunteering. On the contrary, messages with weak arguments produce mainly unfavorable thoughts about the advocacy and result in less positive attitudes and volunteering (Petty and Cacioppo, 1986a).

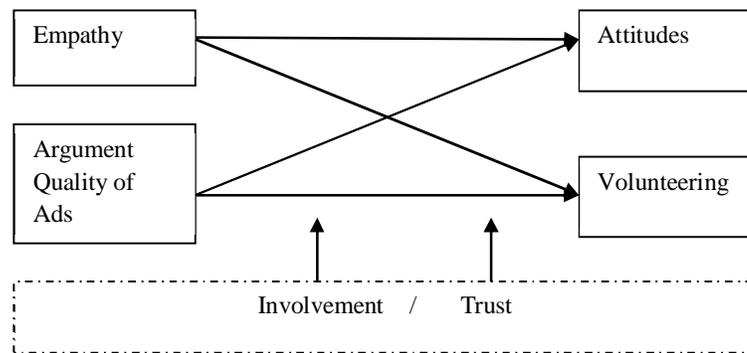


Figure 1 Conceptual Model: The roles of the public service advertisements and personality variables on attitudes and volunteering for organ donation

2.2. Personality variables

To better understanding of the psychological process of target audiences, it is also critical to understand the role of individual differences in the effects of PSA on the information process for those messages. Individual psychological differences become a more viable foundation for developing advertising messages aimed at each target market (Labarbera et.al., 1998). From a theoretical point of view, Haugtvedt et.al., (1988) indicated that personality variables can be useful in understanding how advertisements may affect the generation of an attitude toward a consumer product. As personality variables related to helping behavior; empathic tendency, involvement and trust have been shown to predict an individual's social behavior, including volunteering.

Empathy

Most of studies in social psychology have found that empathy can enhance individuals' pro-social behavior. Some scholars define empathy in terms of a cognitive aspect, or knowing what another person is feeling (Hoffman, 1984). This cognitive component is conceptualized by many scholars in the area of social psychology as "perspective taking". Although several definitions were made for concept of "empathy", scholars commonly focus on multidimensional structure of empathy which combines emotional and cognitive components (Davis et.al., 1987; Stiff et.al. 1988). Harvey et.al. (1961) stated that some individuals tend to have higher cognitive complexity (i.e. they have greater cognitive capacity to take other perspectives). The current study attempted to examine whether empathy, as a personality variable, can serve as a motivational component in processing persuasive information.

On the other hand, researchers in social psychology have found that there are stable individual differences in empathy related characteristics (Batson, 1991; Staub, 1984). Regarding gender differences in empathy, most studies have indicated that females score are higher on empathy than do males. In addition, women are natural empathizers, while men are better systemizing (Lennon and Eisenberg, 1987).

Involvement

Involvement is defined that the extent to which viewers perceive an issue as personally relevant (Petty, Cacioppo and Goldman, 1981). Research findings indicated that audiences who are highly involved with an issue are motivated to evaluate message arguments on the issue more carefully than those who are not involved. Involvement has a significant effect on a person's attitude toward ads by affecting motivation to process information in the ads (Petty et.al, 1983; Park et.al.,2008). Involvement can also serve as a determinant of attitudes and volunteering for organ donation. Thus, it is necessary to control the effect of involvement on the basis of Elaboration Likelihood Model (ELM) theory.

Trust

Trust is a key determinant of relational commitment. Moorman, Zaltman, and Deshpande (1992, p.315) define trust as “a willingness to rely on an exchange partner in whom one has confidence”. Other researchers, Sirdeshmukh et.al. (2002, p.15) also defined trust as “existing when one party has confidence in the exchange partner’s reliability and integrity”. Many studies have shown that persons have many misconceptions about organ donation. Common misconceptions involve fear that potential donors will not receive the same-saving measures as others. There are mistaken beliefs about that rich and famous people receive preferential treatment on the transplant waiting list, and most religions are generally opposed to donation (Sander and Miller, 2004). Due to the several misconceptions, many people may not trust in the arguments mentioned in public service advertisements. As a result, trust influence viewers' motivation to process the message arguments. Trust can also serve as a determinant of attitudes and volunteering for organ donation. Thus, it is necessary to control the effect of trust on the attitudes and volunteering.

2.3. Attitudes and Volunteering toward Organ Donation

There are several theoretical models explaining consumer attitude formation and change, including Elaboration Likelihood Model (ELM), Heuristic-Systematic Model, and Motivation and Opportunity act a Determinants Model. All of the models provide good persuasion perspectives on attitude change. General framework of ELM claims that receivers exposed to persuasive message are thought to use either a central route or a peripheral route to persuasion. Under the central route, viewers are interested or motivated, and capable of processing the message within ability and thus, they carefully scrutinize the arguments in the message presented. In these situations, extensive cognitive activities occur, and people’s thoughts about the central merits of the issue-relevant information are the main determinant of persuasion. Attitudes changed by the central route have been found to be more persistent over time, predictive behavior, and resistant to change, since they are based on the rational thinking process. There are several factors in the ELM model affecting motivation to process a message, such as involvement and sources.

On the other hand, volunteerism is defined as “long-term, planned, pro-social behaviors that benefit strangers and occur within an organizational setting” (Penner, 2002, p.448). Thus volunteering “calls for considerably more planning, sorting out of priorities, and matching of personal capabilities and interests with types of intervention” (Benson et.al., 1980, p.89). Volunteer motivations can be egoistic, altruistic, or both. Contrary of the egoistic motivation, altruistic motivation has the ultimate goal of enhancing the welfare of the needy, even at the expense of a person’s own welfare. The antecedents of volunteering include volunteer motivations and personality differences. Regarding personality variables associated with volunteering, empathy, level of involvement and level of trust appear the most important predictors for individuals’ pro-social behaviors.

Public attitudes toward organ donation have been explored in the literature. Donation helps families cope with their grief. Positive feelings about organ donation have been found to be derived from personal satisfaction, beliefs in the humanitarian benefit of donation, and feelings of pride in being a donor, while negative feelings have reflected fears of body mutilation and of receiving inadequate medical care (Sander and Miller, 2005). The generally positive attitude towards organ donation leads to volunteering behavior to participate in campaign (Gallup Organization, 1993). According to a General Household survey conducted in Hong Kong, more than 60% of all interviewers expressed a negative attitude towards posthumous organ donation. With regard to commitment to organ donation, the trend was similarly low. Only 29% reported that they might donate their organs after death. The main reason for objection to organ donation was traditional reluctance to let the human body be incised after death. Fears of possible disfigurement of the body and fears that doctors might prematurely remove organs for transplantation were also indicated (Mok, 1994).

2.4. Hypotheses

Based on knowledge mentioned above, the following hypotheses are proposed:

H1: Persons with high empathetic tendency (after being exposed to ads about organ donation) would generate more positive thoughts than those with low empathetic tendency.

H2a: The *ads having strong arguments* would have a greater influence on *attitudes* of individuals who have high on empathetic tendency toward organ donation than those low on empathetic tendency, using *involvement* as a covariate.

H2b: The *ads having strong arguments* would have a greater influence on *volunteering* of individuals who have high on empathetic tendency toward organ donation than those low on empathetic tendency, using *involvement* as a covariate.

H3a: The *ads having strong arguments* would have a greater influence on *attitudes* of individuals who have high on empathetic tendency toward organ donation than those low on empathetic tendency, using *trust* as a covariate.

H3b: The *ads having strong arguments* would have a greater influence on *volunteering* of individuals who have high on empathetic tendency toward organ donation than those low on empathetic tendency, using *trust* as a covariate.

H4: The effects of involvement, positive thoughts, trust, and attitudes on volunteering are significant and positive.

H5: The *ads having strong arguments* would have a greater influence on *attitudes* of individuals than do the *ads having weak arguments*.

H6: High empathy subjects would have a stronger correlation between attitudes and volunteering than would low empathy subjects.

H7: Females would have greater empathic tendency than males.

3. Method

3.1. Sampling and Data Collection

The study was conducted at the Mustafa Kemal University located in Hatay, Turkey. Sample unit was identified as student only enrolled in business department because of setting up a homogeneous sample. This is desirable as effect testing is enhanced when subjects are more similar than dissimilar (Park et.al. 2008). Data were obtained from four classes, totally 204 students. Each participant was randomly assigned to one of the two treatment groups: (1) strong arguments; (2) weak arguments. Each group consists of approximately 100 participants. Then, the participants in each group were divided into two groups (high or low empathy), based on scores from the Multidimensional Empathy Scale (Davis, 1983).

Instrumentation: The questionnaire included the independent measures (empathic tendency, involvement, trust and cognitive responses) and dependent measures (volunteer intention and attitudes). Participants watched the advertisements on video into the class, later, they were asked for completing a questionnaire asking their impressions, attitudes toward organ donation, cognitive responses, and volunteer intentions.

Argument quality manipulations: Study contained two different versions of advertisement (strong and

weak) which were currently shown on TV in Turkey. The strong argument message was a report that contained strong and valid arguments in favor of volunteering for organ donation, while the weak argument message was a report that included weak and uncertain arguments in favor of volunteering for organ donation. In developing strong and weak arguments, researchers employed the focus groups procedure. Each of these groups was consisted of ten students. After watching ads, moderator asked for participants to evaluate which ad has the stronger arguments than the other has. Final decision was made according to these evaluations. The strong argument message focused on (1) the difficult situations of people suffered from organ disease (2) immediate positive benefits for patient and her family. (3) happiness of the donor. The weak argument message focused on (1) general information about organ donation rather than specific information (2) lack of knowledge the benefits for patients.

3.2. Scales

To measure of the structures in the conceptual model, we utilized from the current scales in the literature. The scale of "Empathic tendency" developed by Davis (1983) was used. The original scale of empathic tendency consists of the 28 items of Davis' model designed to capture four dimensions- Perceptive taking (PT; 7 items), Empathic concern (EC; 7 items), Personal distress (PD; 7 items), and Fantasy scale (FS; 7 items). Among the four subscales, the Perception taking scale and Empathic concern scale were considered in this study, since these scales possess a good degree of convergent and discriminant validity (Park et.al., 2008; Giancola, 2003). All subjects in the current study responded to the empathy scale on a 5-point scale ranging from, "extremely uncharacteristic of me" to "extremely characteristic of me". One hundred and four subjects whose empathy scores were placed in the bottom of mean (mean = 53) and above of the mean of the distribution, were categorized into two groups: High Empathy and Low Empathy. This way is the representative very well for either high and low empathic individual.

Involvement was measured by ten-item scale, a revised version of original scale, by adapted from Zaichkowsky (1985; 2012). Zaichkowsky's Revised Personal Involvement Inventory scale was used to measure a person's perceived relevance of volunteering for organ donation. "The scale's items are randomly reversed and also randomly interspersed with one another. This randomization is important for reliability and validity of the test taking. Respondents are less likely to blindly tick down a column, they are led, by random format, to actually think and register the word they are responding to" (Zaichkowsky, 2012, p.527).

In order to measure attitudes, respondents were asked to indicate their overall impression of the ads. Attitudes were obtained via two measures by having the participants respond to: (a) a 5-point scale ranging from strongly agree (5) to strongly disagree (1), and (b) to four 5-point semantic differential scales (good-bad, beneficial-harmful, wise-foolish, and favorable - unfavorable; e.g., Park et.al. 2008; Petty and Cacioppo, (1986).

After being exposed to the persuasive communications, a measure of "cognitive activity" was assessed immediately. The participants were asked to explain their thoughts about the topic of volunteering for organ donation on the basis of 5-point scale ranging from "negative" (1) to "positive" (5).

Volunteer intention was measured via 5-point scales. There were three questions that assessed the intention: (1) short-term intention to volunteer, (2) long-term intention to volunteer, (3) intention to help the organ donation campaign. Three variables were modified from the Volunteer Motivation Scale developed by Clary et.al. (1998) and Park et.al. (2008).

Trust was measured via 5-point scales. There were three questions that assessed the trust: (1) I believe the arguments in ads, (2) I believe that organs donated receive to persons who really need them, (3) I feel full confidence to hospitals, and their personnel handling transplantation.

Mean score was calculated for each scale mentioned above which in turn used in this study's analyses. Four demographic items, namely gender, age, income and educational level were also asked in the questionnaire. The items of "Empathic tendency" and "Involvement" scales along with their codes are presented in Table 1.

Table 1 Items of empathy and involvement scales

Items
<i>Empathic tendency</i>
PT1.I sometimes find it difficult to see things from the "other guy's" point of view. (R)
PT2.I try to look at everybody's side of a disagreement before I make a decision.
PT3.I sometimes try to understand my friends better by imagining how things look from their perspective.
PT4.If I'm sure I'm right about something, I don't waste much time listening to other people's arguments (R).
PT5.I believe that there are two sides to every question and try to look at them both.
PT6.When I'm upset at someone, I usually try to "put myself in his shoes" for a while.
PT7.Before criticizing somebody, I try to imagine how I would feel if I were in their place.
EC1.I often have tender, concerned feelings for people less fortunate than me.
EC2.Sometimes I don't feel very sorry for other people when they are having problems. (R)
EC3.When I see someone being taken advantage of, I feel kind of protective towards them.
EC4.Other people's misfortunes do not usually disturb me a great deal. (R)
EC5.When I see someone being treated unfairly, I sometimes don't feel very much pity for them. (R)
EC6. I am often quite touched by things that I see happen.
EC7.I would describe myself as a pretty soft-hearted person.
<i>Involvement</i>
To me relevance of volunteering for organ donation is..
I1. Important ----- Unimportant ¹ (R)
I2. Boring ----- Interesting ²
I3. Relevant ----- Irrelevant ¹ (R)
I4. Exciting ----- Unexciting ² (R)
I5. Means nothing to me ----- Means a lot to me ¹
I6. Appealing ----- Unappealing ² (R)
I7. Fascinating ----- Mundane ² (R)
I8. Worthless ----- Valuable ¹
I9. Involving ----- Uninvolving ² (R)
I10. Not needed ----- Needed ¹
Note: (R) reverse code (5-1); 1 indicates a cognitive involvement measure; 2 indicates an affective involvement measure.

3.3. Analyses

Descriptive statistics were employed to characterize each of variables and provide demographic profile of respondents. Independent samples t tests were used to examine the differences between two groups in positive thoughts. The study employed an experimental design to test hypotheses. A two-way factorial design was selected for this study. A 2x2 (strong arguments versus weak arguments x high empathy versus low empathy) analysis of covariance (ANCOVA), using involvement as a covariate, on the attitude

and volunteering was used to test hypothesis 2a and hypothesis 2b. A 2x2 (strong arguments versus weak arguments x high empathy versus low empathy) analysis of covariance (ANCOVA), using trust as a covariate, on the attitude and volunteering was also used to test hypothesis 3a and hypothesis 3b. The correlation between attitudes and volunteering for high empathy subjects and for low empathy subjects was analyzed to test differences of two groups. In addition, stepwise linear regression was used to examine the contribution of each variable to volunteer intention. An independent samples t test was also used to examine gender differences in empathy.

3.3.1. Profile of respondents

The sample consisted of young people ranged in age from 18 to 29. The largest age group was those between 21 and 23 (64.7 percent). The majority of the participants were female (59.9 percent). The frequency of respondents on the basis of their class level was almost equal. The largest group (27.9 percent) had monthly family income between \$ 500 and \$750. The means of whole sample on the basis of empathy, volunteering, attitudes, trust, involvement and positive thoughts variables are 4.0; 3.2; 4.3; 3.2; 3.6 and 4.1, respectively. Empathy, positive thoughts, and attitudes scores of respondents were yielded above the mean, while volunteer tendency, trust and involvement score of respondents were found at the neutral point on the 5-point scale.

3.3.2. Reliability estimates of the study's scales

The assessment of measurement properties for the scales was carried out Cronbach's alpha value procedure. The internal consistencies of items within the scales are very high as shown Table 2.

Table 2 Reliability values of the study's scales

Scales	Cronbach's alpha
Empathy (by deleting PT4 variable)	0.81
Trust	0.77
Involvement	0.87
Attitude	0.77
Volunteering	0.78

3.3.3. Hypothesis Testing

1. The difference of the cognitive activity (thoughts) between high and low empathic tendency groups.

Hypothesis 1 predicted that persons with high empathic tendency (after being exposed to PSAs) would generate more positive thoughts than those with low empathic tendency. Subjects high in empathy ($M = 4.34$, $SD = 0.76$) produced significantly more positive thoughts than subjects low in empathy ($M = 4.03$, $SD = 1.06$); $t(204) = -2.38$, $p = 0.01$). Thus H1 was supported.

2. The effects of argument quality of ads and empathic tendency on attitude and volunteering toward organ donation by controlling for involvement-ANCOVA analysis

Hypothesis 2a predicted that the ads having strong arguments would have a greater influence on attitudes of individuals who have high on empathetic tendency than those low on empathetic tendency toward organ donation, by controlling for involvement. The ANCOVA revealed a main effect for argument quality of ads was significant ($F_{1,200} = 10.365$, $p < 0.01$) on attitudes. In addition, a main effect for involvement was significant ($F_{1,200} = 40.231$, $p < 0.01$) on attitudes. However, a main effect for empathic tendency was insignificant on attitudes. Thus, hypothesis 2a was partially supported.

Hypothesis 2b predicted that the *ads having strong arguments* would have a greater influence on *volunteering* of individuals who have high on empathetic tendency toward organ donation than those low on empathetic tendency, by controlling for *involvement*. The ANCOVA revealed a main effect for involvement was significant ($F_{1,200} = 46.408$, $p < 0.01$) on volunteering. However, main effects for argument quality of ads and empathetic tendency were insignificant on volunteering. Thus, hypothesis 2b was partially supported.

Table 3 Descriptive Statistics-Mean and Standard Division

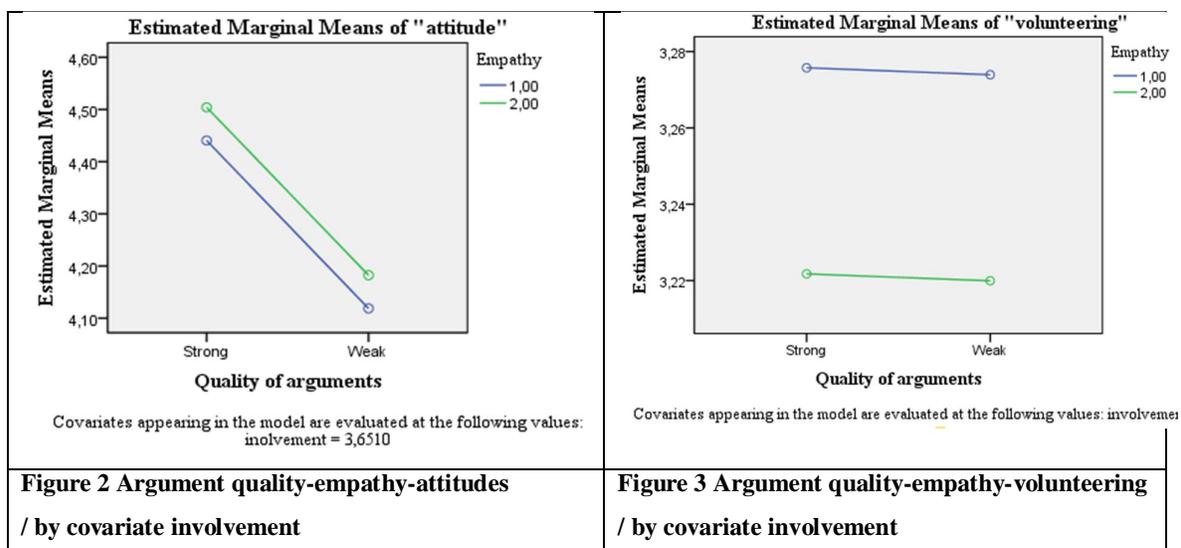
Arguments quality of ads		Empathy	Mean	Std.Dev.	N
Attitude	Strong	Low	4,42	,7575	45
		High	4,57	,6218	57
	Weak	Low	4,02	,9385	59
		High	4,23	,7090	43
Total	Low	4,19	,8843	104	
	High	4,43	,6795	100	
Volunteering	Strong	Low	3,25	1,1831	45
		High	3,33	1,1312	57
	Weak	Low	3,12	1,1561	59
		High	3,29	,9872	43
Total	Low	3,17	1,1639	104	
	High	3,32	1,0667	100	

Table 3 shows descriptive statistics and Table 4 shows the findings of ANCOVA analysis.

Table 4 ANCOVA analysis for ads x empathy by covariate involvement

Source	Dependent Variable	Mean Square	F	Sig.
Corrected Model	Attitudes	9,951	20,063	0,000
	Volunteering	16,270	15,921	0,000
Intercept	Attitudes	97,386	196,337	0,000
	Volunteering	16,085	15,740	0,000
Ads	Attitudes	5,141	10,365	0,049
	Volunteering	0,000	0,000	0,990
Empathy	Attitudes	0,196	0,395	0,531
	Volunteering	0,141	0,138	0,711
Involvement	Attitudes	19,955	40,231	0,000
	Volunteering	47,425	46,408	0,000
Error	Attitudes	0,496		
	Volunteering	1,022		

The figures of ANCOVA findings are shown in Figure 2 and Figure 3.



3. The effects of argument quality of ads and empathic tendency on attitude and volunteering toward organ donation by controlling for trust-ANCOVA analysis

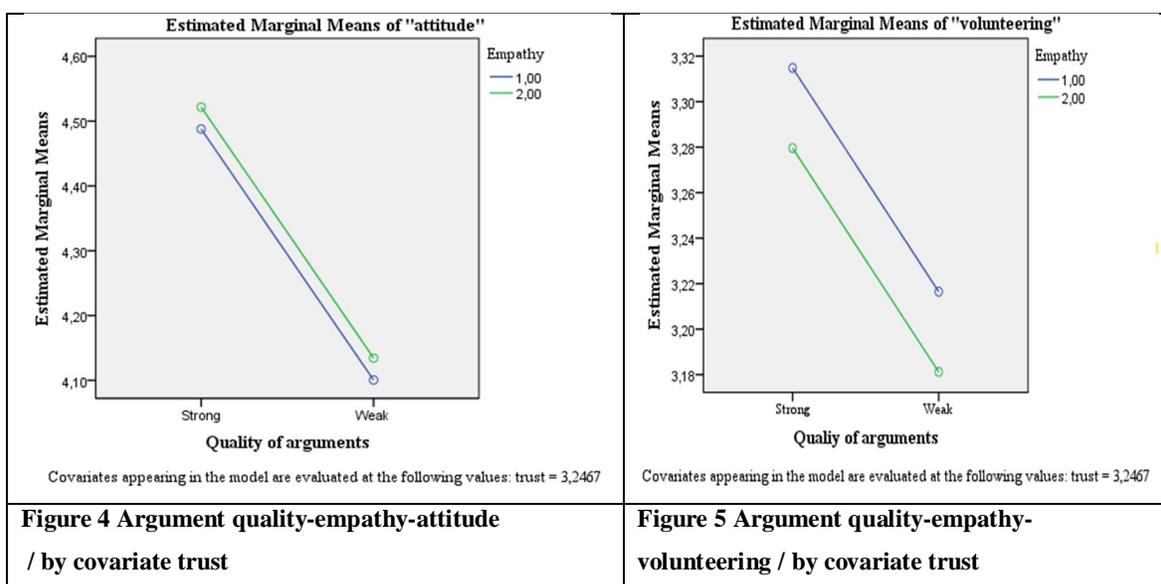
Hypothesis 3a predicted that the ads having strong arguments would have a greater influence on attitudes of individuals who have high on empathetic tendency than those low on empathetic tendency toward organ donation, by controlling for trust. The ANCOVA revealed a main effect for argument quality of ads was significant ($F_{1,200} = 15.903$, $p < 0.01$) on attitudes. In addition, a main effect of trust was significant ($F_{1,200} = 52.523$, $p < 0.01$) on attitudes. However, a main effect of empathic tendency was insignificant on attitudes. Thus, hypothesis 3a was partially supported.

Hypothesis 3b predicted that the ads having strong arguments would have a greater influence on volunteering of individuals who have high on empathetic tendency toward organ donation than those low on empathetic tendency, by controlling for trust. The ANCOVA revealed a main effect of trust was significant ($F_{1,200} = 27,343$, $p < 0.01$) on volunteering. However, main effects for quality of ads and empathic tendency were insignificant on volunteering. Thus, hypothesis 3b was partially supported (Table 5).

Table 5 ANCOVA analysis for ads x empathy by covariate trust

Source	Dependent Variable	Mean Square	F	Sig.
Corrected Model	Attitudes	11,561	24,500	0,000
	Volunteering	10,558	9,532	0,000
Intercept	Attitudes	189,519	401,634	0,000
	Volunteering	75,728	68,372	0,000
Ads	Attitudes	7,504	15,903	0,000
	Volunteering	0,484	0,437	0,509
Empathy	Attitudes	0,055	0,117	0,733
	Volunteering	0,059	0,054	0,817
Trust	Attitudes	24,784	52,523	0,000
	Volunteering	30,290	27,347	0,000
Error	Attitudes	0,472		
	Volunteering	1,108		

The figures of ANCOVA findings are shown in Figure 4 and Figure 5.



4. The effects of cognitive activity (thoughts), involvement, trust and attitude on volunteering toward organ donation-Stepwise Regression Analysis.

A stepwise multiple-regression was employed to examine the contribution of each variable to the dependent variable, volunteering. The model was significant ($F = 40.097$; $p < 0.01$; $R^2 = 0,37$; Durbin-Watson value = 1,72). The most contribution to intent being volunteers for organ donation was provided by positive thoughts. An additional 6.3% of variance was explained when involvement and trust was included as predictors (Table 6).

Table 6 Stepwise regression analysis of volunteering for all subjects

Step	Variables	R	R ²	Δ R ²	β
1	Thoughts	0,55	0,31	0,31	0,55**
2	Involvement	0,60	0,36	0,04	0,24**
3	Trust	0,61	0,37	0,01	0,13*

Note: n =204; ** p < 0.01; * p < 0.05

5. Group differences

Hypothesis 5 predicted that the *ads having strong arguments* would have a greater influence on *attitudes* of individuals than the *ads having weak arguments*. As predicted, an independent samples t test showed that *ads having strong arguments* ($M = 4.512$, $SD = 0.68$) affected significantly higher levels of positive attitudes of individuals that did *ads having weak arguments* ($M = 4.10$, $SD = 0.85$; $t(204) = 3.71$, $p < 0.01$). Thus, Hypothesis 5 was supported.

Hypothesis 6 predicted that high empathy subjects would have a stronger correlation between attitudes and volunteering than would low empathy subjects. The results showed that there was significant difference between two correlation coefficients ($r = 0,40$ for high empathy subjects; $r = 0,36$ for low empathy subjects, $p < 0.01$). Thus, Hypothesis 6 was supported.

Hypothesis 7 predicted that females would have greater empathic tendency than males. As predicted, an independent samples t test showed that female subjects ($M = 4.22$, $SD = 0.54$) had significantly higher levels of empathic tendency that did male subjects ($M = 3.87$, $SD = 0.63$; $t(204) = 4.276$, $p < 0.01$). Thus, Hypothesis 7 was supported.

4. Results and Discussion

This study presents better understanding the roles of public service advertisements and personality differences (empathy, involvement and trust) in formatting and changing attitudes and volunteer intentions of youth Turkish people toward organ donation. The study is intended to make contribution to the current understanding by explaining whether public service advertisements and create a willingness to further engaged in organ donation or not. Furthermore, compared to previous studies, the study reports the findings in the context of Turkish social advertisements environment.

The results indicate that persons with high empathic tendency (after being exposed to PSAs) would generate more positive thoughts toward organ donation than those with low empathic tendency. Therefore, in order to facilitate organ donation of public, more emphasis should be given to create further positive thoughts by effective messages of ads causing cognitive effort. Marketers should include persuasive messages in the ads pertaining to rational reasons of organ donation and high value of humanitarian concerns; it by no means denies persons own moral views about organ donation.

The results also demonstrated that receivers exposed to strong persuasive messages were developing more positive attitudes than those exposed to weak persuasive messages. Therefore, in order for reviewers to have emotional responses, ads need to contain some important elements, such as negative feelings or positive images of the beneficiary.

However, there is no significant effect of ads on volunteering. Although individuals exposed to persuasive messages develop positive thoughts and positive attitudes toward organ donation, it is seen that they hesitate from a behavioral act. This discrepancy has been found in other studies in the literature. There are likely to many reasons except from ads, such as fears of possible disfigurement of the body and fears that doctors might prematurely remove organs for transplantation, selling organs on the black market, as indicated in literature. These misconceptions represent potential barriers to donation. Probably, for organ donation campaigns, it's better to consider new attractive suggestions for volunteering. For example, establishing trust may be beneficial for volunteer recruitment and retention by informed them appropriately and sufficiently. Health care providers can play a critical role in educating patients about donation. Roadside electronic message can be help to better understand donation by displaying donation facts and figures. Posters displayed in clinic waiting rooms or distribution of a brochure on donation during an office visit can also educate people.

Additionally, according to the findings of regression analysis, the most contribution to be volunteers for organ donation was provided by positive thoughts. Involvement and trust are also influence to volunteering as second and third.

The ads having strong arguments would have a greater influence on attitudes of individuals who have high on empathic tendency toward organ donation than those low on empathic tendency. On the other hand, there is no difference between high empathy group and low empathy group based on their attitudes and volunteering for organ donation. These findings may be explained that empathic tendency is insufficient solely, for changing attitudes and for volunteering. But, high empathy persons' attitudes would turn more easily into being volunteer for organ donation than those low empathy persons. Thus, it may be important for marketer empathy appeals ads can have a greater impact on persons' attitudes toward ads and for realizing a helping behavior.

Involvement influences to either attitudes or volunteering of both high empathy and low empathy subjects. Involvement has a significant effect on viewers' motivation to process the information in the ads. Thus, it may be effective for organ donation campaigns to target people suffered from organ disease and families or people who are highly involved in organ donation such as, nurses and doctors.

More importantly, trust was found to have the significant influences on either attitudes or volunteering. It may be effective for marketers to give the appropriate cues in the ads creating confidence between medicine environment and public.

Regarding gender differences in empathy, the result indicated that female subjects had significantly higher levels of empathic tendency than male subjects. These finding points out that woman are more concerned with social harmony than are men as stated by Petty et.al. (1983).

Some research limitations should be acknowledged. The findings may have cultural specific characteristic. Additional research is necessary to replicate and refine the research in other environments. Other personal and situational variables (e.g. fears regarding organ donation, religious beliefs, ethnicity) can have the potential to influence the motivation to process the advertising messages.

Consequently, this study should be counted meaningful in that it has explained the effects of public service advertisements as a marketing communication tool and evaluated organ donation drivers.

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