

# Euthanasia attitude; a comparison of two scales

Naser Aghababaei<sup>1\*</sup>, Hojjatollah Farahani<sup>2</sup>, Javad Hatami<sup>2</sup>

1.MA in General Psychology, Department of Psychology, Faculty of Psychology and Education, University of Tehran, Tehran, Iran. 2.Assistant professor, Department of Psychology, Faculty of Psychology and Education, University of Tehran, Tehran, Iran.

\*Corresponding author: Naser Aghababaei Address: Al-Ahmad Ave, Tehran, Iran. Postal Box: 14155-6456 Tel: (+98) 21 88 25 00 62 E-mail: naseragha@gmail.com

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#### Abstract

The main purposes of the present study were to see how the term "euthanasia" influences people's support for or opposition to euthanasia; and to see how euthanasia attitude relates to religious orientation and personality factors. In this study two different euthanasia attitude scales were compared. 197 students were selected to fill out either the Euthanasia Attitude Scale (EAS) or Wasserman's Attitude Towards Euthanasia scale (ATE scale). The former scale includes the term "euthanasia", the latter does not. All participants filled out 50 items of International Personality Item Pool, 16 items of the HEXACO openness, and 14 items of Religious Orientation Scale-Revised. Results indicated that even though the two groups were not different in terms of gender, age, education, religiosity and personality, mean score on the ATE scale was significantly higher than that of the EAS. Euthanasia attitude was negatively correlated with religiosity and conscientiousness and it was positively correlated with psychoticism and openness. It can be concluded that analyzing the attitude towards euthanasia with the use of EAS rather than the ATE scale results in lower levels of opposition against euthanasia. This study raises the question of whether euthanasia attitude scales should contain definitions and concepts of euthanasia or they should describe cases of it.

Keywords: Euthanasia, Attitude towards euthanasia, Personality.

## Introduction

In the last 20 years, the controversy surrounding euthanasia has grown remarkably and it has been a subject of debate amongst scholars and philosophers in different areas of science such as medicine, psychology, psychiatry, ethics, sociology, and philosophy. Numerous surveys have been carried out in different regions of the world to evaluate the attitude of the public and professionals towards euthanasia (1). It is been argued that significant advances in medical technology (2-8) and social movements which emphasize on identity, individuality and control of one's body (9-12) resulted in the emergence of this issue. It is argued that if a social movement is to be successful in initiating and maintaining social change, it needs to develop a public opinion in favor of its particular cause. The uncommitted or bystander public have always been an important target group for different social movements. In the recent years, publicizing results of public opinion polls has been used in stabilization of different movements. Pro-euthanasia social movements not only publicize the results, but also regularly commission such polls. These activities are meant to highlight the issue in the public eye, and this alone can facilitate the public's acceptance of it. For pro-euthanasia movements, which tend not to mobilize their members in conventional public activities such as street marches and protests, polls have become a particularly attractive option, serving as a mass demonstration of public determination (10, 11). such activities have been considerably successful. As a result, euthanasia has become one of the most important topics of interest and debate (13). Many studies have demonstrated that the public has become more supportive of euthanasia in the past few years (14). However, using different scales makes it difficult to compare the results of research carried out on the attitude towards euthanasia. In fact, many have questioned the validity of the findings of studies aiming at assessing the attitude of the public towards euthanasia as different studies have shown different results based on the precise wordings and definitions used in their questionnaire (15, 16). For example, some scales describe cases of euthanasia without mentioning the term "euthanasia". A scale developed by Wasserman et al. (5) could be considered an example of such questionnaires. Other scales are designed according to the explanation of the term or based on the assumption that the respondent is already familiar with it. The Euthanasia Attitude Scale (EAS) which was originally developed and validated by Tordella and Neutens is an example of such questionnaires (3). To our knowledge, there are not any studies conducted on the differences between the abovementioned attitude scales. This study aims to elucidate the difference between two scales in terms of their ability to demonstrate the level of support for euthanasia.

# **Methods**

A convenient sample of 197 female students from the University of Tehran and Islamic Azad University were recruited. All participants were volunteers and their ages ranged between 19 and 43 [ $21.6\pm 3.04$  (mean $\pm$ SD)]. A between-group design was applied; and subsequently, participants were randomized into two groups: a total number of 100 participants filled out the EAS and the rest (97 students) completed the ATE scale form.

The results of previous studies have suggested that variables such as age, gender, education,

religion, and personality have influence on the attitude towards euthanasia (17). In order to ensure that two groups were well matched in terms of other variables, all of the participants were required to fill out 50 items of International Personality Item Pool, 16 items of the HEXACO Openness, and 14 items of Religious Orientation Scale-Revised. Persian version of all measures were used with previous Iranian samples and proved to be highly valid (17-21).

# Euthanasia Attitude Scale (EAS)

In 1979, Tordella and Neutens reported the development and initial reliability analysis of a euthanasia attitude scale. The original pool of the EAS items was generated by a group of 150 college students and was edited into 74 statements. These statements were rated by a group of 19 judges who were expert in the area of thanatology. Twenty one of the original items were selected as statistically representing the greatest consensus of the judges. A one-week test-retest analysis produced a reliability estimate of 0.84. Rogers and his colleagues edited the EAS items for gender-biased language. They reported an internal reliability of 0.85 and a positive correlation with the Right to Die Scale (3, 6). As for the Persian version which was consisted of 20 items, Cronbach's alpha in a sample of 233 students of University of Tehran was 0.88 (17). The scoring method used in this study was similar to the original design. The scores for the 20-item ranged from 1 to 5, with 5 indicating strong support for euthanasia, 3 indicating neutral, and 1 indicating strong opposition to euthanasia.

#### Attitudes Towards Euthanasia scale (ATE scale)

Wasserman and his colleagues designed this 10 item scale which was intended to measure attitude towards euthanasia in regards with different issues such as severity of pain, no recovery, patient's request, and doctor's authority. An internal consistency of 0.87 was reported. Construct external consistency was established by correlating the scale with other predictors such as race and spirituality (5, 22). Cronbach's alpha for the Persian version of this scale in a group of Iranian students was 0.90 (18) and the scoring method used in this study was similar to the original design. The scores for the 10-item ranged from 1 to 5, with 5 indicating strong support for euthanasia, 3 indicating neutral, and 1 indicating strong opposition to euthanasia.

#### International Personality Item Pool (IPIP)

This well-validated 50-item inventory assesses the Big Five factors; namely, emotional stability (reversed neuroticism), extraversion, agreeableness, conscientiousness, and openness to experience with 10 item per factor. Internal consistencies ranged from very good to excellent, Cronbach's alpha ranging was from 0.85 to 0.94 (23, 24). Cronbach's alpha for the Persian version of this scale in a sample of 94 philosophy teachers and 397 philosophy students ranged between 0.50 and 1.70 (19). The scoring method used in this study was the same as the original design. The scores for the 50-item ranged from 1 to 5, with 5 indicating totally accordance of an item to one's personality, 3 indicating neutral, and 1 indicating conflict of an item to one's personality.

# The HEXACO Personality Inventory-Revised (HEXACO-PI-R)

The HEXACO model of personality structure is an alternative framework based on six personality dimensions. Considering our research and different aspects of it, and for brevity, only the 16 items of openness were used. This subscale had a Cronbach's alpha of 0.90 and a positive correlation of 0.68 with the IPIP openness (25, 26). Cronbach's alpha for the Persian version of this scale in a sample of 711 Iranian students from five different universities in five different cities of Iran was 0.88 (20). The scoring method used in this study was similar to the original design. The scores for the 16-item ranged from 1 to 5, with 5 indicating totally accordance of an item to one's personality, 3 indicating neutral, and 1 indicating conflict of an item to one's personality.

# **Religious Orientation Scale-Revised (ROS-R)**

This scale is a revision of the Age-Universal Religious Orientation Scale, which is an updated version of Allport and Ross's original measure. This 14-item scale consists of intrinsic, social extrinsic, and personal extrinsic items. Internal consistency of its subscales in Iran and the United States ranged between 0.62 and 0.84. Positive correlation of this scale with Muslim-Christian Religious Orientation Scales in Iran and the United States can be supportive of its validity (21, 27). The scoring method used in this study was similar to the original design. The scores for the 14-item ranged from 1 to 5, with 5 indicating totally accordance of an item to one's religiosity, 3 indicating neutral, and 1 indicating conflict of an item to one's religiosity. For all the items in negative-worded statements, the scoring orders were reversed.

After providing demographic information, participants completed research booklets that included the detailed questionnaires. For all questionnaires, a five-point Likert-type scale was used. The cut-off point for determining euthanasia attitude in this study was set at <3 to account for the negative attitude towards euthanasia. All data were analyzed using SPSS software version 16. Applied statistic methods and indices include mean, standard deviation, t-test, and Pearson correlation coefficient.

# Results

Table 1 shows that regarding the age, personality and religiosity of the participants, there is no significant difference between two groups showing that two groups are matched in age, religion and personality (in addition to gender and education). However, the EAS's mean score ( $2.66\pm0.75$ ) was significantly higher than that of the ATE scale ( $2.01\pm0.91$ ) (t= 5.42, P<0.01). Respondents to the ATE (82.5%) and EAS scales (65%) respectively had a less than 3 point mean score.

Cronbach's alphas for the EAS and the ATE scale were 0.88 and 0.90 respectively.

Table 2 demonstrates the inter-correlations (Pearson correlation) of euthanasia attitude with personality and religiosity variables. Euthanasia attitude negatively correlated with religiosity and conscientiousness, and positively correlated to psychoticism and openness.

# Discussion

This study, which aimed to compare two scales of assessment of the attitude towards euthanasia, showed significant differences between the results of them. Mean score on the EAS was significantly higher than that of the ATE scale. This finding raises the issue of whether concepts or cases should be considered in order to assess attitude towards euthanasia. The results of our study demonstrated a significant difference in the results of the assessment of attitude towards euthanasia; and the intriguing finding was that if mean score of scales is used as the criteria for support or opposition to euthanasia, the two scores demonstrated a 17.5 percent difference.

The negative relationship between religiosity and euthanasia attitude was in accordance with previous studies (2, 14, 17, 18, 22, 28-35). Although religious orientation has become the dominant paradigm in the study of religious motivation and of the psychological study of religiousness in general (36), such paradigm has hardly ever been applied in euthanasia studies. Intrinsic orientation refers to a mature form of religious sentiment that serves as a master motive and guide for one's way of life, while extrinsic orientation addresses the issue of immature faith that serves as a means of convenience for selfserving social or psychological ends (37). The different relationships of religiosity subscales with euthanasia attitude might be of interest to euthanasia researchers as well as those who are interested in religion studies. We found that intrinsic religiosity has the strongest correlation with the negative attitude towards euthanasia. This could be a supporting evidence for Allport's theory. Allport's model suggests that the intrinsic dimension should

predict whether religious individuals will act congruently or incongruently with their religious principles (38). Since most religions are against euthanasia (39), a stronger correlation between intrinsic religiosity and negative attitude towards euthanasia may be considered as being in congruence with the Allport's model and theory.

Lester et al. (40) suggested that death-of-self actions (e.g. suicide) are correlated with psychoticism, while death-of-others actions (e.g. abortion, euthanasia) are related to neuroticism and irrational thinking. They found that refusal of medical treatment as a moral issue was associated with lower neuroticism and irrationality scores while considering euthanasia as moral was associated with lower Lie Scale scores. We didn't find any relationship between attitude towards euthanasia and emotional stability which is defined as reversed neuroticism. Although euthanasia involves death of others, a positive relation between euthanasia attitude and psychoticism was demonstrated. This might be, according to Lester et al (40), because of the argument that euthanasia can arouse thoughts of one's own death.

As Saroglou's (41, 42) meta-analytic review indicated, religiosity correlates with low psychoticism (or high agreeableness and conscientiousness), while openness is negatively related to intrinsic-general religiosity. Since religiosity strongly correlates with (negative) attitude towards euthanasia (17), it is understandable that attitude towards euthanasia was associated with religion related personality characteristics.

Despite its importance as being the first study to make a comparison between different euthanasia scales to our knowledge, the current study had several limitations. Using a convenient small sample of female students can be considered as the major limitation of our study. Although it might be suggested that the proportion of students favoring euthanasia in the current study was similar to that of different national studies, this can be explained by the fact that the youth generally tend to be more liberal and open minded. In fact, a study by Horsfall et al (43) showed that positive attitude towards euthanasia is more common amongst students in comparison with the general population. Therefore, it can be speculated that positive opinion towards euthanasia may be less common amongst Iranian general population than what the findings of our study indicated.

Our results cannot be generalized to a wider society because of the local sampling of the study. Future research on the topic should be carried out on more representative samples. We are still quite unaware of Iran's public opinion towards euthanasia and more research is needed to shed some light on the issue. Only a few studies have been carried out in Iran and the majority of them indicate that there is moderate to strong opposition to euthanasia. Amongst them, two studies were limited to demographic characteristics such as age and gender, and demonstrated no significant correlation between euthanasia attitude and age and gender of the study samples which were consisted of 100 interns and 102 nurses (44, 45). Another study conducted on 233 students of University of Tehran demonstrated that euthanasia attitude was negatively correlated with religiosity and agreeableness but showed no relation with age, gender, education, consequentialism and other personality factors (17).

It can be suggested that a within-group design is a superior method for comparison of the results of two scales. Therefore, using between-group design could be considered as another limitation of our study. In light of our findings, it can be suggested that the EAS is more sensitive to individual characteristics. However, such conclusion requires a within-group design and more research are warranted to explore it further.

In conclusion, we would like to highlight the issue that was raised initially in this study: in order to assess attitude towards euthanasia (and other social issues), should we put emphasis on the concept or cases of euthanasia? Should we define euthanasia or we should introduce a case of it (without specifically labeling it) to seek the opinion of the public? Further study will hopefully shed some light on the issue.

	ATE scale group		EAS group		t	Р
Variables	mean	SD	mean	SD	ť	
Age	21.80	3.88	21.56	1.86	0.53	0.59
Personality Factors						
Extraversion	3.17	0.71	2.98	0.70	1.87	0.06
Agreeableness	3.99	0.48	3.88	0.58	1.46	0.11
Conscientiousness	3.56	0.64	3.52	0.72	0.44	0.65
Emotional Stability	2.95	0.65	2.99	0.66	0.37	0.71
Openness to Experience	3.65	0.45	3.53	0.58	1.55	0.12
Psychoticism	7.56	0.88	7.40	1.05	1.12	0.26
HEXACO Openness	3.18	0.31	3.24	0.52	0.87	0.38
Religious Orientation						
Intrinsic	3.40	0.67	3.27	0.75	1.34	0.18
Social Extrinsic	1.85	0.76	2.04	0.90	1.59	0.11
Personal Extrinsic	3.87	0.95	3.69	0.99	1.33	0.18

# Table 1. Comparison of the two groups

**Table 2.** Intercorrelations of euthanasia attitude with religiosity and personality variables

Variables	ATE scale	EAS
Religious Orientation		
Intrinsic	-0.34**	-0.53**
Social Extrinsic	-0.12	0.20*
Personal Extrinsic	-0.25*	-0.32**
Personality		
Emotional Stability	-0.10	0.14
Agreeableness	-0.08	-0.07
Conscientiousness	-0.17	-0.23*
Emotional Stability	0.00	-0.12
Openness to Experience	0.05	0.02
Psychoticism	0.17	0.20*
HEXACO Openness *P<0.05, ** P<0.01	0.14	0.21*

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