

Prediction of Students' Attitudes toward Euthanasia Using Their Religious Orientation, Self-Esteem and Death Anxiety

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Abstract

Background and Objectives: Euthanasia is one of the major challenges in philosophical, medical, ethical, legal, and religious circles that has fueled many debates. The aim of this study was to investigate prediction of students' attitudes toward euthanasia using their religious orientation, self-esteem, and death anxiety.

Methods: The samples of this descriptive-correlational study were 247 students selected from the humanities students in the University of Zanzan and the students of medical related studies in the Zanzan University of Medical Sciences by random multi-stage cluster sampling. Data collection was conducted by Euthanasia Attitude Scale, Religious Orientation Scale, Rosenberg Self-Esteem Scale, and Templer Death Anxiety Scale. Data analysis was conducted by MANOVA and stepwise multiple regression.

Results: MANOVA results showed that the levels of self-esteem and religious orientation were significantly different between the students of humanities and medical related studies with significantly higher scores attained by the humanities students. Standard (simultaneous) multiple regression showed that the regression model was significant based on three variables, i.e. religious orientation, self-esteem, and death anxiety. Religious orientation predicted attitudes toward euthanasia inversely.

Conclusion: The levels of self-esteem and religious orientation were lower in the students of medical related studies than in the humanities students, and the higher the levels of their religious orientation were, the more opposed to euthanasia they were.

Keywords: Euthanasia, Death Anxiety, Religious Orientation, Self-esteem.

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Introduction

Euthanasia is one of the important challenges that has fueled many debates in philosophical, medical, ethical, legal, and religious circles. The term "euthanasia" is derived from two Greek words: eu, meaning "good" and thanatos, meaning "death" and is used to refer to good death, comfortable death, desirable death, and sweet death (1).

Islam's orientation toward this issue is very clear and decisive. From Islamic perspective, any soul is respectable. Patients does not have the right to voluntary death, because life is considered God's gift and therefore its termination through medical interventions, either active or passive, is not allowed (2). According to Surat Al-A'raf [7:34]: "So when their time has come, they will not remain behind an hour, nor will they precede [it]".

From the perspectives of two large religions, Christianity and Judaism, both suicide and euthanasia are unlawful and are condemned in their teachings. A study conducted in 33 European countries reported that highly educated and less religious adults were opener to euthanasia (3).

According to Allport and Ross theory, religious orientation refers to the tendency to performing religious practices and religious thoughts, and can be intrinsic and extrinsic (4). Through an inseparable connection with people's lives, religiosity and religious orientation influence their behaviors and attitudes toward the complicated issues of life and have numerous basic functions in this area. Respect for material and corporeal life equals respect for hereafter life that leads to respect

for self. According to religious teachings, Islam emphasizes self-esteem and negates any factor that humiliates or disgraces it. Self-esteem is a concept that is applied for whatever that is commendable, valuable, and satisfying. Besides that, from Quran's perspective, self-esteem has negative attributes i.e. evading vices and whatever that causes humiliation and debasement of humanity, in addition to positive attributes, i.e. being adorned with values and achieving higher spiritual ranks (5). Self-esteem can serve as a predictor of the types of people's decisions and attitudes toward certain complicated issues such as euthanasia. People with high self-esteem seek to obey the commandments of God and explicit religious instructions regarding prohibition of suicide and euthanasia and oppose the right to choose to end life due to becoming frustrated by the treatment and getting rid of pain and suffering. Harmon-Jones et al. defines death anxiety as conscious or unconscious fear of death or dying (6). Based on Greenberg et al.'s terror management theory, faith in a cultural meaningful worldview and self-respect derived from it is considered an appropriate and adaptive defense to deal with thoughts of one's own death (7-9)

The recapitulation and review of experimental studies on euthanasia, self-esteem, death anxiety, and religious orientation indicate that attitudes toward euthanasia and religious beliefs are inversely correlated (3,10-12). Regarding that euthanasia is a relatively new issue in medical ethics, and no study has yet been conducted, in either Iran or other countries, to investigate euthanasia as a covariate alongside mental health-related variables such as self-esteem and death anxiety, and belief-related variables such as religious orientation, this study was conducted to investigate whether students' attitudes toward euthanasia can be predicted using their religious orientation, self-esteem, and death anxiety.

Methods

The study population of this descriptive-correlational study consisted of all students of the University of Zanjan and the Zanjan

University of Medical Sciences in academic year 2015. 16 (n: 3416). From this population, 247 people (151 females and 96 males) were selected by Cochran's sample size formula as the study samples. The sampling was conducted by random multi-stage cluster method. To achieve this purpose, first, the Departments of Psychology and Islamic Teachings of the University of Zanjan and the Faculty of Nursing and Midwifery of the Zanjan University of Medical Sciences were selected. Then, the questionnaires were administered randomly in the classrooms.

Euthanasia Attitude Scale was developed by Holloway et al. in 1995 to investigate people's general attitudes toward euthanasia and decisions to end life (13). The items of this questionnaire are rated by 4-point Likert scale with the choices ranging from Absolutely disagree: 1 to Absolutely agree: 4. The higher the score is, the more positive the respondent's attitudes toward euthanasia are and therefore the opener he is to euthanasia. The Cronbach's alpha coefficient of this questionnaire was reported to be 0.79 by Mohammadi et al. (14). In the current study, its Cronbach's alpha was derived 0.80.

Rosenberg Self-Esteem Scale was used to investigate self-esteem. This scale consists of 10 items to measure general self-esteem. The items are rated by two choices, Yes and No (15). The reliability and validity of this scale have been reported to be acceptable according to internal consistency coefficient, test-retest method, and content validity (16), and its reliability derived 0.74.

Templer Death Anxiety Scale was used to measure death anxiety. This scale consists of 15 Yes/No questions. Each Yes answer is scored 1 and each No answer scored 0. The higher the score for this scale is, the higher the level of death anxiety is. The reliability and validity of the Persian version of this scale were investigated by Rajabi and Bohrani. They reported the split-half reliability coefficient and internal consistency coefficient of this questionnaire 0.6 and 0.73, respectively (17-18).

Religious Orientation Questionnaire was constructed in 1967. This instrument consists

of 21 items that are rated by 4-point Likert scale (from Absolutely disagree: 1 to Absolutely agree: 4). Items 1-12 measure extrinsic religious orientation and items 13-21 do intrinsic religious orientation. The higher a respondent's score for a subscale is, the higher level of that subscale the respondent has (4). This questionnaire was translated into Persian by Janbozorgi and the Cronbach's alpha coefficient of its Persian duplicate calculated 0.73 (19). In the current study, the Cronbach's alpha coefficient of this questionnaire was derived 0.90.

Result

To investigate the significance of difference in attitudes toward euthanasia, self-esteem, death anxiety, and religious orientation between the two groups of the students, multivariate analysis of variance was used. The results demonstrated that there were statistically significant differences in the studied variables between the students of humanities and medical related studies according to Wilks' lambda test (0.84, $P < 0.001$ significant at $P < 0.05$). To further investigate the difference in all dependent variables, descriptive statistics and the inter-subject effects of attitudes toward euthanasia, self-esteem, death anxiety, and religious orientation in the students of medical related studies and humanities were used separately.

Self-esteem was significantly different between the students of medical related studies and humanities ($F = 25.25$; $P < 0.001$). In addition, religious orientation was significantly different between the students of medical related studies and humanities ($F = 89.34$; $P < 0.001$). Partial chi eta of self-esteem and religious orientation was derived 0.09 and 0.125, respectively, which represent small effect sizes according to Cohen's logic. In the current study, the type of university was found to explain only 9% of variance in self-esteem and 12.5% of variance in religious orientation. Mean score for self-esteem was 4.93 ± 4.98 in the humanities students and higher than that in the students of medical related studies (1.43 ± 5.18). Mean score for religious orientation was 36.55 ± 8.51 in the humanities students and higher than that

in the students of medical related studies (46.38 ± 15.32) (Table 1).

Table 1 Descriptive statistics and the inter-subject effects of attitudes toward euthanasia, self-esteem, death anxiety, and religious orientation in the students of medical related studies and humanities

Variables	Students	N	Mean \pm SD	p
Attitudes toward euthanasia	Medical	77	55.94 \pm 7.57	0.49
	Humanities	170	55.12 \pm 9.26	
Self-esteem	Medical	77	1.43 \pm 5.18	0.001
	Humanities	170	4.93 \pm 4.98	
Death anxiety	Medical	77	8.23 \pm 4.06	0.03
	Humanities	170	6.99 \pm 4.15	
Religious orientation	Medical	77	46.38 \pm 15.32	0.001
	Humanities	170	55.36 \pm 8.51	

Standard or simultaneous multiple regression analysis was conducted to investigate prediction of attitudes toward euthanasia using religious orientation, self-esteem, and death anxiety. Examining the presuppositions of the analysis indicated that the data sufficed to conduct data analysis. According to this analysis, religious orientation, self-esteem, and death anxiety were simultaneously included in the regression model 1 as predictor variables. The results of ANOVA demonstrated that the regression model, multiple regression coefficient, and coefficient of determination were significant ($P < 0.001$)

Multiple correlation coefficient was 0.37, and 13% of variance in attitudes toward euthanasia was explained by religious orientation, self-esteem, and death anxiety (Table 2).

Table 2 The regression coefficients of Model 1 based on predictor variables

Model	Unstandardized beta	SE	Standardized Beta	t	p
constant	67.77	3.28	-----	20.7	0.001
religious orientation	-0.27	0.05	-0.36	-5.01	0.001
self-esteem	.110	0.13	0.07	0.86	0.39
death anxiety	0.17	0.16	0.08	1.04	0.3

Religious orientation significantly predicted attitudes toward euthanasia ($\beta = -0.36$, $P \leq 0.05$). It was also determined that the higher the levels of religious orientation were, the more opposed to euthanasia the students were.

Discussion

The current study demonstrated that there were significant differences in self-esteem and religious orientation between the students of medical related studies and humanities, and the humanities students attained higher scores for both variables. Regarding death anxiety and attitudes toward euthanasia, there were no significant differences between the two groups of the students. As far as we searched, no study has yet been conducted to compare these four variables between the students of medical related and humanities in Iran and other countries, and a number of studies only investigated mental health and attitudes toward euthanasia comparatively.

Shahabinejad et al. study to compare mental health between medical and non-medical students in Rafsanjan, Iran demonstrated that there were significant differences in the nine domains of mental health between the two groups of the students ($p < 0.05$). Mean scores for disorders in all nine domains were higher in non-medical students than in medical ones (20), which is inconsistent with the current study. The findings of our study are consistent with Dyrbye et al. study that reported that the medical students' mental health worsened after they started to study in medical schools, and their associated problems were exacerbated during their studies (21), because the levels of self-esteem, as one of the constituents of mental health (22), were higher in the humanities students than in the students of medical related studies.

Medical students experience high levels of stress because of certain characteristics of their occupation such as direct contact with human's health, communication with people with different moods and from different cultures, contact with people suffering from pain, discomfort, and different lesions and disorders as well as death, all of which can cause high levels of stress for them (23) and therefore decline their self-esteem compared to non-medical students, because people who have high levels of self-esteem are more empowered to deal with stressors than those with low levels of self-esteem (24), and more capable of dealing with psychological stress.

A study conducted in Hong Kong demonstrated that half of medical students did not have positive attitudes toward Do not resuscitate (indirect euthanasia) (25), yet their attitudes were more positive than those of non-medical students (26). Shahabinejad et al. study demonstrated that the scores for anxiety were significantly different between the students of medical related studies and other studies (20), which is inconsistent with the current study regarding insignificant difference in attitudes toward euthanasia and death anxiety between the students of medical related studies and humanities.

To the best of our knowledge, no study has yet been conducted to compare religious orientation between the students of medical and non-medical universities. Dominant cultural and religious characteristics of the community represent one of the determinants of attitudes toward ethical challenges, including euthanasia, in the community (27). Because the students of the two studied universities had the same national culture and common religious beliefs, their attitudes toward euthanasia were not different and generally had low attitudes toward this unethical act. People's religious orientation can be influenced by their experiences, educational history, and fields of study. In the current study, the humanities students were found to have higher levels of religious orientation and self-esteem than the students of medical related studies.

Because humanities are focused on humans' living conditions, and beliefs and attitudes toward these conditions, and more clearly humanities are mainly concerned with human and generally his living conditions while natural sciences, such as engineering and medicine, are concerned with nature and the external world. Self-esteem and religious orientation both are related to human's beliefs and attitudes; therefore, the humanities students are likely to have higher levels of religious orientation and subsequently self-esteem than those of medical related studies (28).

The regression model in this study was derived significant based on religious

orientation, self-esteem, and death anxiety. Religious orientation predicted the students' attitudes toward euthanasia inversely such that their attitudes toward euthanasia decreased with increase in religious orientation. Consistent with the current study, Hashemi and Mortazavi argued that according to human-oriented and non-divine schools, the patient can choose to end his life, and the right to dignified and painless death is the same as the right to dignified life. This argument has been used to justify and legalize the execution of euthanasia or compassionate murder in many cases. However, euthanasia in most countries is considered a condemned act from religious and legal perspectives (29); in addition, Soltaninejad et al. reported that suicidal behaviors were inversely correlated with religious orientation such that there were significant differences in Islamic ethics, Islamic beliefs and rituals, and religious orientation between people with suicidal thoughts and those without such thoughts (10).

Danyliv and O'Neill argue that the main increase in openness to euthanasia is seen in those with minimal religious dependency (11). Peretti-Watel et al. study demonstrated that French had more positive attitudes toward euthanasia compared to Italians and the Americans, which represents the lower religiosity of France compared to Italy and the U.S.A (12). A study in Turkey demonstrated that adopting Islamic viewpoints had negative effect on euthanasia (30). However, Aghababaei study demonstrated that gender, religiosity, and personality were not significantly associated with active and passive euthanasia (31), which is not in line with the present study. The levels of religious beliefs can represent positive or negative attitudes toward euthanasia. In the current study, death anxiety was not derived to be a predictor of attitudes toward euthanasia, which is consistent with those studies that demonstrated that attitudes toward physician-assisted suicide and scores for death anxiety were significantly associated (32,33).

Conclusion

Euthanasia or compassionate death is indefatigably debating with morality and the sublime values of life. It is essential to study association between attitudes toward euthanasia and certain variables such as self-esteem and death anxiety. The results of our study demonstrated that the levels of self-esteem and religious orientation were lower in the students of medical related studies than in those of humanities. In addition, the higher the levels of the students' religious orientation were, the less positive their attitudes toward euthanasia were.

Conflict of interest

The authors declare no conflict of interest.

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References

1. Imani M. Crimes and punishments of medicine. Hayyanabasaleh's cultural association. Tehran: Hayyan Pub; 2002. [Persian]
2. Sachedina A. End-of-life: the Islamic view. *Lancet*. 2005;366(9487):774-9.
3. Givens JL, Mitchell SL. Concerns about end-of-life care and support for euthanasia. *J Pain Symptom Manage*. 2009;38(2):167-73.
4. Allport GW, Ross JM. Personal religious orientation and prejudice. *J Pers Soc Psychol*. 1967;5(4):432.
5. Javadiamoli A. Munificence in Quran. Qom: Raja cultural center; 1995. [Persian]
6. Harmon-Jones E, Simon L, Greenberg J, Pyszczynski T, Solomon S, McGregor H. Terror management theory and self-esteem: Evidence that increased self-esteem reduced mortality salience effects. *J Pers Soc Psychol*. 1997;72(1):24.
7. Greenberg J, Pyszczynski T, Solomon S. The causes and consequences of a need for self-esteem: A terror management theory. New york InPublic: springer; 1986. p. 189-212.

8. Gurari I, Strube MJ, Hetts JJ. Death? Be proud! The ironic effects of terror salience on implicit self-esteem. *J Appl Soc Psychol.* 2009;39(2):494-507.
9. Bassett JF. The effects of mortality salience and social dominance orientation on attitudes toward illegal immigrants. *Social Psychology.* 2010;41:52-5.
10. Soltaninajad A, fathi A, ahmadi KH, azad FP, Anisi J, Rahmati F, et al. Relation of religious orientations with Soldier's Suicide behaviors. *J Islam Lifestyles Focus Health.* 2012;(2)1:32-7. [Persian]
11. Danyliv A, O'Neill C. Attitudes towards legalising physician provided euthanasia in Britain: The role of religion over time. *Soc Sci Med.* 2015;128:52-6.
12. Peretti-Watel P, Bendiane MK, Moatti JP. Attitudes toward palliative care, conceptions of euthanasia and opinions about its legalization among French physicians. *Soc Sci Med.* 2005;60(8):1781-93.
13. Holloway HD, Hayslip B, Murdock ME, Maloy R, Servaty HL, Henard K, Lopez L, Lysaght R, Moreno G, Moroney T, Smith D. Measuring attitudes toward euthanasia. *OMEGA.* 1995;30(1):53-65.
14. Mohammadi S, Borhani F, Roshanzadeh M, Talebi F. Moral distress and attitude to euthanasia: A correlation study in nurses. *Med Ethics J.* 2014;8(28):121-42. [Persian]
15. Rosenberg M. *Society and the adolescent self image.* Princeton, NJ: Princeton University Press; 1965.
16. Alizadeh T, Farahani M, Shahrarai M, Alizadegan SH. Relation of self esteem, locus of control with male and female infertility stress. *J Reprod Infertil.* 2006;6(2):194-204. [Persian]
17. Templer DI. The construction and validation of a death anxiety scale. *J Gen Psychol.* 1970;82(2):165-77.
18. Rajabi GH, Bohrani M. Factor analysis death anxiety scales. *J Psychol.* 2001;5(4):331-4. [Persian]
19. Janbozorgi E. Effectiveness of short-term psychoanalysis with and without religious orientation on control of anxiety and tension. Ph.D dissertation. Tehran: Tehran University of Medical Sciences; 1999. [Persian]
20. Shahabinajad M, Tabandeh RM, Karimghasemi E, Esmailzadeh SH. Comparison of medical and non-medical student's psychological status in rafsanjans city. *J health community.* 2011;6(3,4):39-45. [Persian]
21. Dyrbye LN, Thomas MR, Shanafelt TD. Medical student distress: causes, consequences, and proposed solutions. *Mayo Clin Proc.* 2005;80(12):1613-22.
22. Safarzadeh S, Marashian F. Relation of body image, self-concept, self-esteem, and nutrition disorders in ahwazazad university students. *J Cult Women.* 2014;19:47-59. [Persian]
23. Kaplan H, Sadock B. *Synopsis of psychiatry.* 8th Ed. Baltimor: Williams & Wilkins; 1998.
24. Kahdoui J. Role of self-esteem, locus of control and coping styles in depress, anxious and normal persons. MD dissertations. Shiraz: Shiraz University; 2005. [Persian]
25. Eslamitabar SH, Elahimanesh M. *Moral and legal aspects of euthanasia.* Tehran; Mojaddad Pub: 2007. [Persian]
26. Sham CO, Cheng YW, Ho KW, Lai PH, Lo LW, Wan HL, Wong CY, Yeung YN, Yuen SH, Wong AY. Do-not-resuscitate decision: the attitudes of medical and non-medical students. *J Med Ethics.* 2007;33(5):261-5.
27. Steinberg SM. Cultural and religious aspects of palliative care. *Int J Crit Illn Inj Sci.* 2011;1(2):154-6
28. Shahryari H. Comparative analysis of political tendency in humanity students: case study in Tehran university students. *J polit knowl.* 2014;10(2):323-31. [Persian]
29. Hashemi ZS, Mohammad JM. Euthanasia from perspective of Islam and medical ethic. *J Ethic Med Hist.* 2009;1(3):35-43. [Persian]
30. Cavlak U, Aslan UB, Gurso S, Yagci N, Yeldan I. Attitudes of physiotherapists and physiotherapy students toward euthanasia: a comparative study. *Adv Ther.* 2007;24(1):135-45.
31. Aghababaei N. WAGEN's dilemma and its implications for passive euthanasia. *J Ethic Med Hist.* 2011;4(72):22-65. [Persian]
32. Abdel-Khalek AM, Lester D. Correlations of attitudes toward physician-assisted suicide, death depression, death obsession, and trait anxiety. *Psychol Rep.* 2006;98(3):734.
33. Abdel-Khalek A, Lester D, Schaller S. Attitudes toward physician-assisted suicide and death anxiety among Kuwaiti students. *Psychol Rep.* 2005;96(3 Pt 1):625-6.