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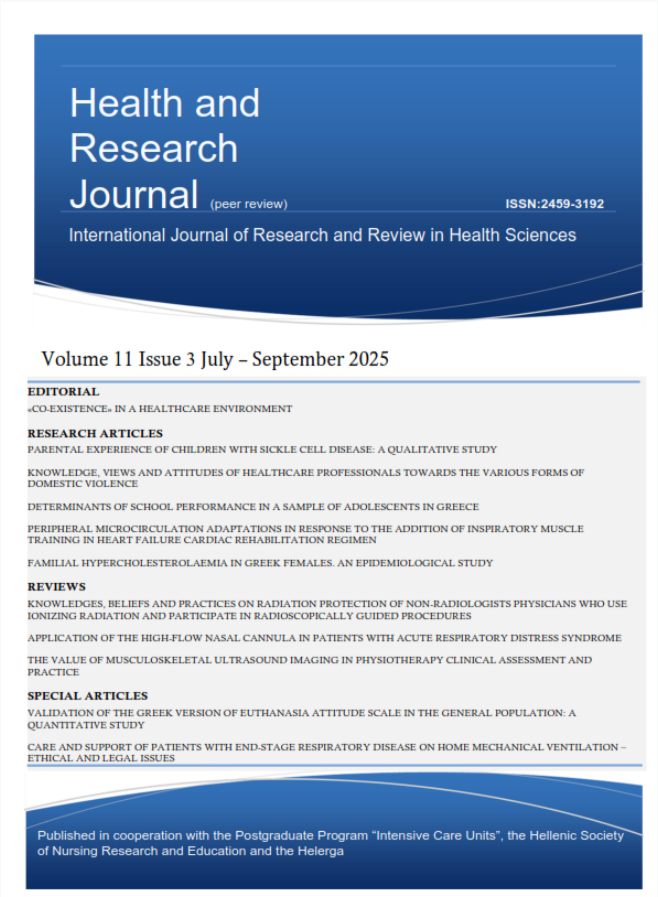

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SPECIAL ARTICLE

VALIDATION OF THE GREEK VERSION OF THE EUTHANASIA ATTITUDE SCALE IN A SAMPLE OF THE GENERAL POPULATION: A QUANTITATIVE STUDY

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Abstract

In examining the broader ethical implications of euthanasia, which is defined as the ace of ending one's life with the intention of alleviating suffering, it is essential to consider ethical principles such as autonomy and the right to die. Euthanasia is a complex and ethically sensitive issue that continues to spark heated debate globally. Understanding public opinions toward euthanasia is critical for informing policy and healthcare decision-making. This study attempted to validate the Euthanasia Attitude Scale in the Greek general population since this issue affects both healthcare workers and the public. A cross-sectional study design was adopted with a sample of 120 Greek adults who completed a questionnaire which included demographic data and the Euthanasia Attitude Scale. The Cronbach's alpha was determined at a=0.950 for all questions, indicating that the questionnaire has a high internal consistency. The Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy indicated that factor analysis was appropriate for the data (KMO = 0.913), while Bartlett's test of sphericity was statistically significant ($p < 0.001$), confirming the suitability of the correlation matrix for factor extraction. The components had statistically significant positive relationships with the overall Euthanasia Attitude Scale ($p<0.001$). The assessment of the validity and reliability of the Euthanasia Attitude Scale demonstrated that it is a psychometrically sound instrument for evaluating the general population's attitudes and perceptions toward euthanasia, and can be effectively used to measure individuals' proclivity toward its acceptance. The scale may serve as a valuable tool for informing public health policies by offering insight into societal attitudes, thereby guiding ethical decision-making related to euthanasia legislation and healthcare practice.

Keywords: Euthanasia, Greek, validation study, euthanasia attitude scale.

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INTRODUCTION

Euthanasia is etymologically derived from the Greek prefix *'eu'* (meaning 'good') and the word *'thanatos'* (meaning 'death'), collectively referring to a 'good death.' Since antiquity, the term has described a painless and peaceful natural death occurring at home, allowing family and friends the opportunity to bid farewell. The ethical issues surrounding euthanasia have been a subject of concern for society for many centuries. In ancient Greece, references to euthanasia and abortion can be found in the writings of philosophers such as Aristotle and Plato and in the Hippocratic Oath.[1,2] In recent years, euthanasia has constituted one of the most active areas of research in contemporary bioethics.[3] Euthanasia is currently defined as the intentional act of ending a patient's life in order to alleviate pain and suffering.[4,5]

Euthanasia is commonly classified into two main categories: active and passive. Active euthanasia involves the intentional hastening of death through specific interventions, such as the administration of lethal medication by a third party, either at the explicit request of the terminally ill patient or, in some cases, without their consent. The degree of the patient's involvement determines whether the act is considered direct or indirect.[6] Voluntary active euthanasia is defined as the deliberate termination of the life of a competent and well-informed individual suffering from a terminal illness, performed following the patient's explicit and written consent. This is most commonly carried out through the administration of lethal medication or other medical interventions by a physician. In contrast, voluntary passive euthanasia refers to situations in which the patient takes responsibility for ending their own life, with the assistance of a physician—typically through the provision of means rather than direct action. This form of euthanasia is commonly referred to as 'physician-assisted suicide.[7,8] Passive euthanasia is described as the act of a physician by withholding or withdrawing an ongoing treatment, hastening the patient's death.[7,9]

Both forms of euthanasia are currently prohibited by the Greek law.[10] At the moment, euthanasia is legal in Belgium, the Netherlands, Luxembourg, Austria, Canada, the Australian states of Victoria and Western Australia, Colombia.[4,11], New Zealand[12] and Spain.[13]

In general, attitudes and beliefs regarding death and euthanasia among the Greek population are deeply rooted in the traditions of the Orthodox Christian faith. Physicians in Greece are widely regarded as the most appropriate professionals to evaluate the severity of a patient's condition and the potential for recovery, based on the adequacy of existing treatment protocols. Even in cases where the patient and/or their family consider the option of euthanasia, the final decision and its implementation ultimately lie with the attending physician. However, it is important to note that, under Greek law, such practices are considered an offense against human life and are subject to legal penalties.[2,14,15]

The Euthanasia Attitude Scale (EAS) has been used constantly to study the attitudes among healthcare professionals about euthanasia. Previous studies have yielded significant insights into how various healthcare professionals in Greece perceive euthanasia, underscoring the existence of nuanced ethical, professional and cultural stances. Kranidiotis et al. (2015)[16] found that both Greek physicians and nurses working in intensive care units (ICUs) tend to express objections to assisted suicide, primarily due to ethical considerations and the influence of religious beliefs. Nevertheless, attitudes differed according to professional role, with nurses exhibiting more opposition than physicians. Another study suggests that Greek nurses tend to be hesitant in endorsing euthanasia, primarily due to professional ethical considerations and concerns about moral responsibility. Nurses with prior experience in end-of-life care were found to hold particularly conservative views regarding euthanasia.[17] Furthermore, research conducted in four regional Greek hospitals indicated that both medical and nursing staff while generally cautious, they were occasionally inclined to consider euthanasia in specific contexts, particularly in cases involving terminal illness.[18] Variations in attitudes across different medical specialties provide valuable insight into the complex perspectives on euthanasia within Greece. Kontaxaki et al. (2018)[19] found that psychiatry residents in Greece generally show a greater openness to discussing euthanasia and physician-assisted suicide, despite prevailing ethical reservations.

Findings from studies comparing the perspectives of Greek laypeople and healthcare professionals contribute to a broader understanding of societal attitudes. Parpa et al. (2010)[20] indicates that both Greek physicians and the general public approach euthanasia with compassion yet caution, particularly in cases involving terminal illness. Notably, while healthcare professionals tend to hold more conservative views, relatives of terminally ill patients and the general public display a higher degree of openness toward euthanasia.[20]

Although, the healthcare professionals are responsible for the patients and keeping them alive, the family members are burdened with the loss and grief. Investigating public attitudes is instrumental in identifying the moral frameworks that guide people's opinions, thereby informing ethical debates and guiding healthcare practices. Understanding these attitudes is essential for addressing the complex interplay of individual rights, societal values, and medical ethics.[21]

Bearing the aforementioned in mind, it is imperative to investigate the attitudes of the general population toward euthanasia for several reasons, including ethical, legal, medical, and social considerations. By comprehending public sentiment, policymakers, healthcare professionals, and ethicists can make informed decisions that reflect societal values while preserving individual rights and upholding the integrity of medical ethics.[22-25] Additionally, research into public opinion can reveal misconceptions or gaps in knowledge about euthanasia, highlighting the need for public education campaigns to promote informed decision-making.[21,23]

Research findings indicate that the general public often holds favorable attitudes toward euthanasia, particularly in cases involving patients living with dementia, though religious beliefs can significantly influence opposition to such practices.[26] Furthermore, demographic factors—such as education level, country of residence, and age—play a role in shaping perspectives on bioethical issues like euthanasia. These insights underscore the importance of considering diverse viewpoints and cultural contexts when addressing end-of-life care and euthanasia policies.[23,27,28]

Therefore, the purpose of this study was to present a validation of the EAS, as well as to examine its psychometric qualities in a sample of the Greek general public. Thus, in order to broaden the spectrum of debate on euthanasia it is important to study the attitudes of the general population on bioethical issues and not only of healthcare professionals, who are often knowledgeable on these issues.

METHODS

Participants

A cross-sectional study design was adopted with the research tool initially applied to a pilot sub-sample of 20 people from the general population of Greece, randomly selected and without having been confronted with the issue of euthanasia either through prior knowledge or personal familiarity. The pilot study was deemed necessary in order to investigate the level of understanding of the questions and to identify any ambiguities[29], given that we were targeting the general population and not a population with specialized knowledge or experience. No problems were encountered during the pilot study. Therefore, the initial participants were included in the sample. The average time to complete the questionnaire was estimated to be 10 minutes.

In order to obtain the final sample, 120 questionnaires were randomly distributed to the target population. A convenience sampling method was used i.e. by asking people on the street at random to partake in the study and complete the questionnaire (i.e. Street-Intercept Survey Method). Yet, this means that there is a 95% probability that the real value is within ±8.95% of the measured/surveyed value.[30] The ethical and moral rules were adhered to, including explanation of the purpose to the potential participants, anonymity, consent, voluntary participation and free release of the participant.[31] The sampling took place during the months of October and November 2023.

Variables and Instruments

The original questionnaire used in this study was developed by Holloway et al. (1995)[32]. The instrument consists of 30 items, which were factored according to the structure outlined in Table1. Initially, the questionnaire was administered to students, both those with and without prior relevance to the issue of euthanasia in patients.

The questionnaire was translated from English into Greek by

Malliarou et al. (2022)[33], following established guidelines for the "cross-cultural adaptation of self-report measures". The original EAS was independently translated into Greek by two physicians proficient in English. The two translations were compared and then a consensus version was created after any discrepancies were resolved. Then, it was subjected to back-translation by two individuals who were bilingual and unfamiliar of the original questionnaire. The back-translated version was then compared with the original English version to confirm its accuracy and consistency. Following the translation, a pilot test was conducted with a sample of 20 individuals to assess the clarity, comprehension, and cultural appropriateness of the translated items. Feedback from the pilot test was used to refine the wording and ensure that the questions were easily understood and acceptable to the target population.[33]

The variable under consideration is the Euthanasia Attitude Scale (EAS) and is obtained as a sum of the variables of the questionnaire. Responses are given on a 4-point scale. Thus, the EAS scale can take values from 30 to 120. A score greater than 75 indicates an attitude "positive" towards euthanasia. In Table 1 it can be observed that five sentences are considered to express more than one factor. Sentence Q13 does not fit into any factor.

Data Analysis

Qualitative variables were described by absolute and relative frequencies. For the quantitative variables, descriptive measures such as mean, standard deviation, skewness and kurtosis were calculated. If the skewness and kurtosis values are between -2 and 2 it is assumed that the data follow a normal distribution and then parametric tests can be used for hypothesis testing.[34,35]. The degree of correlation between the quantitative variables was calculated through Pearson's correlation coefficient r, which ranges between -1 and 1. The effect of demographic characteristics on the EAS scale was tested using the Independent Samples test, for binary categorical variables and analysis of variance (ANOVA), for variables described by more than two categories.[36].

A fit test of the data to the factors was performed using Confirmatory Factor Analysis (CFA). CFA is recommended when factors have already been determined and the researcher is asked to confirm its validity before using the research instrument.[37]. On the other hand, when there is no previous study suggesting allocation of variables into factors, Exploratory Factor Analysis (EFA) is used.[38]. Confirmatory Factor Analysis (CFA) is primarily evaluated using the Comparative Fit Index (CFI), with values above 0.95 indicating excellent fit and values between 0.90 and 0.95 considered indicative of good fit. Additionally, model fit is assessed using the Root Mean Square Error of Approximation (RMSEA), where values below 0.05 are interpreted as indicating excellent fit and values between 0.05 and 0.08 as good fit.[39]. In combination, the ratio X^2/df is ideal to be less than or equal to 1. If it is between 1 and 2 it is also considered a good fit.[40].

The internal consistency of the overall instrument and the individual factors was judged by Cronbach's alpha coefficient, according to which, a factor is considered reliable if the coefficient value exceeds 0.7.[41].

Data analysis was performed using SPSS v.21. All statistical tests were performed at 5% level of significance. CFA was implemented using programming language R 4.3.2.

Ethical Considerations

Study was approved by the appropriate local ethical committee (n. 18/22.12.2022) and the study was conducted according to the declaration of Helsinki. All data were anonymized prior to any archiving and analysis to ensure complete anonymization. All participants were informed about the objectives of the study and provided written informed consent prior to their participation in any data collection procedures.

RESULTS

Sample Analysis

All 120 respondents were from the general population of Greece. The majority of the sample was women (76.7%). The age ranged from 21 to 64 years. The mean age was calculated to be 39.78 years (SD=10.34). In terms of marital status, participants were divided into single (40.8%) and married (53.3%), while the rest (5.8%) were divorced. The majority held a Master's degree (45.8%), 32.5% had a Bachelor's degree and 19.2%

were high school graduates. Only one participant had elementary education and only two held a PhD degree. Regarding religion, 82.5% of the sample reported to be Orthodox Christians, 16.7% declared themselves as atheists and there was one person who declared another religion (agnostic). 40% of the participants self-identified as quite religious, 35.8% a little religious and 21.7% atheists. There were three participants (2.5%) who declared themselves extremely religious.

For this study, levels of education were merged (basic and high school & Master's degree and PhD degree holders) and the 'extremely religious' were included in the 'quite religious' group, while the participant declaring himself 'agnostic' was excluded from the religion-related controls. Table 2 illustrates the scores obtained by the various groups of participants on general attitudes toward euthanasia, as well as the impact of each category on the establishment of views on euthanasia.

All of the categorical variables, corresponding to the 30 questionnaire items, determined the overall EAS scale, which had a mean value of 86.45 (SD=15.418). The mean values of the overall EAS scale (Table 2) generally indicated the rather positive attitude of the sample towards euthanasia, since all categories had a score above 75.[33]. 82.5% of the sample had an overall score above 75.

Positive or negative attitudes towards euthanasia were not affected by gender, marital status and education level. On the contrary, religion and level of religious beliefs affected the formation of views on euthanasia ($p<0.001$). Specifically, atheists score statistically significantly higher on the overall EAS scale (M=96.90, SD=12.928) compared to orthodox Christians who had more conservative views on euthanasia (M=84.32, SD=15.146). Moreover, as the post-hoc test showed, the statistically significant difference in euthanasia was found in the group of the fairly religious, which incorporated the small percentage of the extremely religious ($p<0.001$). Both the atheists and the group which reported as little religious noted the same perception of euthanasia ($p=0.552$) and were more in favor than the fairly/extremely religious.

Age had a statistically significant negative correlation with pro-euthanasia attitudes ($r=-0.286$, $p=0.002$). Thus, in the general population, it appeared that younger age groups are more in favor of euthanasia.

In the Table 3 the descriptive statistics for each of the variables comprising the EAS index are depicted, as well as the item-total correlation and the internal consistency of the questionnaire as it is formed if the variable in question is removed.

The Cronbach's alpha was calculated at $a=0.950$ for all questions, a value that indicates the high internal consistency of the questionnaire. Table 3 shows that the removal of questions 4, 12 and 13 would have yielded a higher value for the coefficient, but this difference is subtle and requires more careful investigation.

Confirmatory Factor Analysis

The Kaiser-Meyer-Olkin (KMO) test confirmed that factorization is feasible based on the sample (KMO=0.913) and Bartlett's test of sphericity was statistically significant ($p<0.001$). The variables of the questionnaire were categorized into the five factors as proposed by Holloway et al. (1995)[32] whose validity was confirmed by Malliarou et al. (2022)[33].

After testing the initial variables, some necessary corrections were made in order to optimize the model fit measures.[42]. Thus, variables Q3, Q11, Q12 and Q24 were additionally removed while Q5 was moved to the F5 factor as more relevant, as evidenced by the evolution of CFI and RMSEA. The final factorization was formulated according to Table 4 below:

The CFA estimation indices demonstrated that the adjustment was acceptable, since their values are CFI = 0.900, RMSEA = 0.076, Chi-square = 436.641 ($p<0.001$), df = 260 and the ratio $X^2/df = 1.68$. After removing the variables mentioned above, the internal consistency of the EAS remained the same high ($a = 0.949$) and all factors showed acceptable to very high reliability.

The correlations between the factors and the correlation of each of them with the overall EAS scale are shown in Table 5. All factors show statistically significant positive correlations ($p<0.001$).

DISCUSSION

The present study examined the attitudes towards euthanasia of ordinary citizens residing in Greece. The survey was based on the questionnaire of Holloway et al (1995)[32], as translated in Greek language by Malliarou et al. (2022)[33] and distributed to medical personnel in Greece. The validity and reliability of the instrument was checked in order to use it in further research regarding the general population. The initial questionnaire contained 30 questions (variables) and it was proposed to divide them into five factors, referring to positive orientation towards euthanasia, patients' rights, the role of technology, the role of professionals and ethical issues. The very high value of the KMO test and the significance of Bartlett's Test of Sphericity ($p<0.001$) confirmed the adequacy of the sample and the possibility of factorization of the variables, which was reinforced by the very high internal consistency of the original questionnaire ($a=0.950$) and the fact that there were no variables that reduced its reliability (alpha if item deleted ≈ 0.950).

The results of the CFA on the original proposed distribution showed that the general population perceived some of the proposals differently and some modifications had to be made in order for the confirmatory factor analysis to perform. The final questionnaire was limited to 25 statements. After these modifications, the factorization was deemed adequate since the CFI was calculated at 0.9, which is the threshold of goodness of fit. Similarly, the RMSEA was 0.076, a value marginally less than 0.08. The reliability of the modelled 25-item Gr-EAS instrument was maintained at the same high level ($a=0.949$) and the reliability of the factors ranged from 0.723 to 0.915. All factors were positively correlated with the Gr-EAS scale and with each other.

The Euthanasia Attitude Scale (EAS) has been validated across multiple cultural and professional contexts. Malliarou et al. (2022) (33) evaluated the scale among Greek medical doctors, finding outstanding reliability (Cronbach's alpha = 0.944, KMO = 0.868). In a study conducted by Tang et al. (2010)[43] among Chinese medical doctors, the scale revealed strong psychometric qualities, as illustrated by a Kaiser-Meyer-Olkin (KMO) value of 0.90 and Cronbach's alpha ranging from 0.79 to 0.92 across three main components. Similarly, in research in which the EAS scale was validated for Spanish health workers[44], primarily nurses, the EAS demonstrated strong internal consistency with a Cronbach's alpha of 0.827, while retaining a noteworthy KMO more than 0.802 in all cases.

Statistical analysis showed the effect of age and religion on people's perceptions of euthanasia. Younger people are more positive towards such measures. Similar attitudes are shown by people who declare themselves to be atheists. In contrast, those with higher religious sentiment are significantly less receptive to life decisions. This observation was corroborated by Mystakidou's study (2005)[15], which identified a statistically significant correlation between religious beliefs and attitudes towards euthanasia. This finding suggests that these beliefs have a profound and entrenched presence in the Greek populace and their historical and cultural heritage. Regarding religious affiliation, no conclusions can be drawn about the influence of different religions, as the sample lacked religious diversity. Although differences were observed between Orthodox Christians and atheists, other religious groups were not represented. Therefore, we are limited to the difference between individuals with different levels of belief. The study of Patelarou (2009)[17] indicates that nurses hold a negative stance towards passive euthanasia, stemming from their perceived role in the process. In the present survey, the public's stance towards euthanasia may be influenced by a lack of comprehensive information, potentially leading to attitudes that are influenced by personal, moral, or religious beliefs. This underscores the significance of religion in bioethical discourse.

Limitations

It is imperative to acknowledge the limitations inherent in the present study when interpreting its findings. Firstly, the general population's limited familiarity with euthanasia may affect the applicability and understanding of the questionnaire. A second point is the confusion within the questionnaire itself as it contains similar points on both the role of healthcare professionals and that of technology, whereby decisions to use life-sustaining or end-of-life interventions are taken. Thirdly, non-health professionals often find it difficult to separate medical ethics from the morals of the individual. Moreover, the absence of religious diversity within the sample is evident. Besides, in

the original factorization there were variables that were classified into more than one factor, which means that the meaning of each factor is not clearly separated but there are overlaps. When these sentences were removed, the CFA improved significantly. Finally, it would probably give more clarity to participants' responses if the sentences included distinct disease cases to reduce any ethical dilemmas.

CONCLUSIONS

The validity and reliability study of the EAS questionnaire has demonstrated that it is acceptable as a tool for researching attitudes and perceptions of the general population towards euthanasia. It can be used to assess population trends regarding attitudes toward euthanasia in cases involving irreversible medical conditions. In case of future application to non-professionals, since the factors constituting the EAS play a crucial role in research, it is suggested to use the modified 25-item instrument to avoid confounding factors and possible distorting of the results.

COMPETING INTERESTS STATEMENT

The authors declare that they have no competing interests.

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ANNEX

TABLE 1. Initial item distribution into EAS factors

Factor	Description	#Items	Items
F1	General orientation toward euthanasia	14	Q1, Q3, Q5, Q8, Q9, Q10, Q16, Q20, Q21, Q22, Q23, Q24, Q27, Q28
F2	Patients' rights issues	7	Q7, Q9, Q14, Q16, Q17, Q29, Q30
F3	Role of life sustaining technology	5	Q6, Q11, Q12, Q14, Q15
F4	Professionals' role	4	Q2, Q4, Q25, Q26
F5	Values and ethics	5	Q1, Q3, Q10, Q18, Q19

TABLE 2. Effect of demographic factors on EAS

Category				
	N	**Mean**	**SD**	**p-value**
Sex *(N=120)*				
Male	28	90.00	13.244	0.165
Female	92	85.37	15.931	
Marital Status *(N=120)*				
Single	64	89.17	13.940	
Married	49	83.75	15.822	0.102
Divorced	7	80.43	22.165	
Education *(N=120)*				
Elementary education / High School	24	84.91	15.128	
Bachelor degree	39	83.69	15.996	0.222
M.Sc./Ph.D. degree	57	88.98	15.063	
Religion *(N=119)*				
Christian Orthodox	99	84.32	15.146	0.001
No religion	20	96.90	12.928	
Level of religious belief *(N=120)*				
No religious	26	94.96	12.249	
A little religious	43	90.32	15.709	<0.001
Quite religious	51	78.84	13.187	

TABLE 3. EAS items, descriptive statistics, homogeneity and reliability if item deleted

#	Items	Mean	SD	Corrected Item-Total Correlation	Cronbach's a if Item Deleted	Skewness	Kurtosis
1	Even if death is positively preferable to life in the judgment of a terminal patient, no action should be taken to induce the patient's death.	2.70	0.894	0.697	0.947	-0.371	-0.532
2	Under any circumstances I believe that physicians should try to prolong the lives of their patients.	2.31	0.906	0.598	0.948	0.244	-0.684
3	To me there is absolutely no justification for ending the lives of persons, even though they are terminally ill.	2.73	0.925	0.750	0.947	-0.328	-0.684
4	Some patients receive "comfort measures only" (for example. pain relieving drugs) and are allowed to die in peace without further life extending treatment. This practice should be prohibited.	2.97	0.798	0.317	0.951	-0.645	0.280
5	I believe it is more humane to take the life of an individual who is terminally ill and in severe pain than to allow him/her to suffer.	2.77	0.827	0.641	0.948	-0.354	-0.302
6	An individual who is "brain dead" should be kept alive with proper medical intervention.	2.71	0.738	0.559	0.948	-0.241	-0.101
7	I believe that a person with a terminal and painful disease should have the right to refuse life-sustaining treatments.	3.12	0.735	0.531	0.949	-0.574	0.221
8	I bear no ill feelings toward a person who hastens the death of a loved one to spare the loved one further unbearable physical pain.	2.99	0.728	0.618	0.948	-0.520	0.398
9	I believe there should be legal avenues by which an individual could pre-authorize their own death in case intolerable illnesses arise.	3.18	0.756	0.746	0.947	-0.676	0.152
10	I cannot envision any medical circumstance in which the termination of life would be merciful.	2.72	0.871	0.557	0.949	-0.264	-0.556
11	I would support the decision to reject additional treatments if a dying per-	2.80	0.795	0.541	0.949	-0.033	-0.682

	son contracts a secondary disease that is sure to bring about a quick and painless death.						
12	I would support a doctor's decision to reject extraordinary measures if a patient has no chance of survival.	2.44	0.868	0.114	0.953	0.026	-0.643
13	Support the decision to provide "comfort measures only" if a terminally ill patient is dying and has only a few hours of life left.	3.05	0.818	0.294	0.951	-0.654	0.060
14	If I were faced with the prospect of having a loved one suffer a slow and painful death, I would support his/her decision to refuse further medical life-sustaining treatment.	3.05	0.754	0.623	0.948	-0.561	0.217
15	To me it is an act of mercy to a living but "brain dead" person to turn off life-sustaining machines.	2.74	0.835	0.442	0.950	-0.273	-0.424
16	If I were faced with the situation of suffering a slow and painful death, I should have the right to choose to end my life in the fastest and easiest way possible.	3.21	0.839	0.720	0.947	-1.019	0.660
17	It is cruel to prolong intense suffering for someone who is mortally ill and desires to die.	3.12	0.688	0.662	0.948	-0.627	0.883
18	No one, including medical professionals, should be allowed to decide to end a suffering person's life.	2.61	0.873	0.733	0.947	-0.378	-0.503
19	To me, anyone who assists a suffering and terminally ill person to die is nothing but a common murderer.	3.29	0.738	0.549	0.949	-1.035	1.271
20	A terminally ill person who is in severe pain deserves the right to have his/her life ended in the easiest way possible.	3.03	0.761	0.621	0.948	-0.158	-0.929
21	If a friend of mine were in severe pain, close to death, and begged me to try to convince the doctors to end his/her life mercifully I would ignore their plea.	2.96	0.706	0.645	0.948	-0.676	1.008
22	The injection of a lethal dose of some drug to a person in order to prevent that person from dying an unbearably painful death is unethical.	2.79	0.891	0.766	0.946	-0.448	-0.436
23	No matter how much a	2.93	0.831	0.775	0.946	-0.594	0.012

	person might plead for death to avoid unbearable pain, no one should assist the person to accomplish his/her wish.						
24	Inducing death for merciful reasons is acceptable.	2.65	0.827	0.633	0.948	-0.355	-0.321
25	Terminally ill patients who try to starve themselves to death to avoid unbearable pain should be forcefully fed intravenously.	2.95	0.811	0.607	0.948	-0.391	-0.365
26	For me, it is unethical to allow the termination of a human life when medical technology is able to pre-serve it.	2.76	0.843	0.747	0.947	-0.459	-0.230
27	The termination of a per-son's life, done as an act of mercy, is unacceptable to me.	2.78	0.894	0.673	0.947	-0.494	-0.385
28	Assisting a person who faces a future life of un-bearable pain to end his/her life is murder, as I see it.	3.00	0.736	0.682	0.947	-0.518	0.317
29	One should have the right to choose to die if he/she is terminally ill and is suf-fering.	3.22	0.735	0.682	0.947	-0.753	0.487
30	A terminally ill individual should be allowed to reject life support systems.	3.07	0.817	0.719	0.947	-0.594	-0.144

TABLE 4. Modified EAS factorization for general population based on CFA

Factor	Description	#Items	Items	Cronbach's Alpha
F1	General orientation toward euthanasia	11	Q1, Q8, Q9, Q10, Q16, Q20, Q21, Q22, Q23, Q27, Q28	0.915
F2	Patients' rights issues	7	Q7, Q9, Q14, Q16, Q17, Q29, Q30	0.904
F3	Role of life sustaining technology	3	Q6, Q14, Q15	0.723
F4	Professionals' role	4	Q2, Q4, Q25, Q26	0.735
F5	Values and ethics	5	Q1, Q5, Q10, Q18, Q19	0.817
EAS	Total Euthanasia Attitude Scale	25		0.949

TABLE 5. Factor correlations and effect of factors on EAS

Factors	F1. General orientation toward euthanasia	F2. Patients' rights issues	F3. Role of life sustaining technology	F4. Professionals' role	F5. Values and ethics
F2. Patients' rights issues	0.789	1.000			
F3. Role of life sustaining technology	0.589	0.755	1.000		
F4. Professionals' role	0.744	0.517	0.465	1.000	
F5. Values and ethics	0.854	0.683	0.518	0.636	1.000
EAS. Total Euthanasia Attitude Scale	0.966	0.864	0.713	0.799	0.874