Psychometric Properties of the Persian Version of Death Attitude Profile

Abbas Ali Haratiyan1*, Saced Salari 2, Mahmud Isfahaniyan, 3, Hadi N Dehqani 4, Fatemeh Sadat Shamsi Nejad 5

1. PhD Student of Psychology, Research Institute of Hawzah and University
2. PhD Student of Psychology, Imam Khomeini Educational and Research Institute.
3. MA. Positive Islamic Psychology, University of Quran and Hadith, Qom.
4. MA. Counseling and Guidance, The Academic Institute for Ethics and Education. Qom.
5. MA Student of Psychology, Azad University of Tafresh.

(*Corresponding Author: Abbas Ali Haratiyan, Email: a.haratiyan@rihu.ac.ir)

Abstract

Introduction: The type of human attitude toward death, as an unavoidable event, can affect the human approach to the themes of the worldly life and the afterlife. This study aimed to identify the factor structure of Persian version of Death Attitude Profile.

Methods: In this descriptive survey research, 444 students of Jamia al-Zahra Seminary and Khomein Azad University, were selected by convenient sampling method. They responded to Persian version of the Death Attitude Profile.

Results: Analysis of the findings indicated the Persian version of this profile, while deleting some items, supports the same 5-factor structure of the original form. Cronbach's alpha coefficient was 0.79 in the research sample.

Conclusion: The obtained psychometric properties indicated the validity and reliability of this scale in Iranian society. Therefore, it can be used to measure the attitudinal properties of individuals to death.

Declaration of Interest: None.

Key words: Death Attitude Profile, factor structure, Validity, Reliability.

Introduction

Death is one of the inevitable processes of human life and because this is a final stage in the lives of people, there is little information or experience about it (1). Thinking about death has been one of the most important human concerns ever since, and according to beliefs, cultures, and attitudes of people toward life, there has been a variety of consequences, from denial of death and escape from it to its acceptance (2). It is often assumed that thinking of death entails fear of it and apprehension; in the sense that “death thinking” is always causing panic, so to eliminate the result, they try to eliminate the lemma (3). Many believe that the main reason for perceiving death as a horrible thing is that the individual does not know much about the reality of death and its consequences (1and 4). Fry (5) enumerates the fear of sensory loss, uncertainty of life after death, physical pain and suffering, the loss of the opportunity of redress and salvation, and attention to the survival of family members are among the causes of fear of death. In Avicenna's view, the ignorance of the reality of death, which is due to ignorance of the reality of the soul and its perpetuity, the delusion of the painful death of the body, the belief in the punishment after death, the attachment to the world and its goods, and the quandary and ignorance of the stages after death, are the other causes of fear of death (6).

On the other hand, the desire for survival and permanent life is innate and the most fundamental motive for people (7). Indeed, as
Freud (8) believed, the unconscious part of human does not believe in her/his own death, and acts as if he/she is eternal, even when he/she hypocritically accept the reality of death, he/she do not believe in death in her/his unconscious (8).

In religious culture, death is nothing but transference of the human soul from the natural world to other worlds and its return to the origin of existence. In Holy Qur'an's view, death is back to God (9. Al-Qiyama: 30), it also considers death to be an indispensable and ineluctable law which finds man wherever he is (A-Nisa: 78). But, basically, death from the perspective of the Qur'an is an umbrella that shades all creatures (Ar-Rahman: 26).

A remarkable point in religious culture is that there is a difference between the death of believers and unbelievers in the Qur'an; although all humans eventually die, the soul of the believers separates by greetings (A-Nahl: 32) but, the soul of unbelievers separates by torture (Al-Anfal: 50). In the Islamic religion, the attention and remembrance of death is of great importance in such a way that it has been introduced as one of the greatest worships (10). Islam thinks of death as having numerous effects, including the tendency to do positive things (11), the reduction of negative greediness, the avoidance of negligence and mundane lusts (12), and the acceptance of death and not afraid of it (13).

After World War II, Thanatology was created as a step toward finding an answer to the end of this world and life, as an interdisciplinary discipline. In the mid-1990s, when Templer (14) began studying the death anxiety, death was known as a forbidden topic in behavioral science.

Today, the psychologists have shown the positive correlation between religious beliefs and mental health (15). The results of Basharpour et al. (16) research showed that among the components of quality of life, there is a positive correlation between mental health and internal religious orientation and approach acceptance of death, and positive correlation between social relations and neutral and approach acceptance, and there is a positive relationship between the environmental health and the avoidance of death. Also, there is a negative relationship between internal religious orientation and avoidance of death attitudes and positive relationship between internal religious orientation and approach acceptance of death. Also, Hojjati et al. (17), in examining the attitude of nurses towards death, concluded that there was a significant negative correlation between attitude toward death and their work history, so that with each year, increasing their work experience, the negative attitude toward death decreases by five times. They also reported a significant positive correlation between attitude towards death and education. Sadeqzadeh (18) also reported a significant positive relationship between the obsession of death and the components fear of death and escape from death, and negative relationship between the obsession of death and neutral acceptance and approach acceptance, and no relationship between the obsession of death and avoidance of death. Psychologists who are interested in studying psychological and religious variables, have empirically studied issues such as attitude and reaction to death, and have used contemporary behavioral and social science methods. Undoubtedly, death, life afterwards, as well as the attitude of man toward it, is one of the fundamental issues discussed in all divine religions (19). Religious beliefs in the field of death can promote mental health and reduce fear of death (20). The positive attitude toward death is related to various components of psychological well-being (21). Interestingly, researchers have shown that our view of life affects the attitude we have about death, but also the opposite is correct, meaning that our view of death is influential in our attitude to the present life (22).

Psychologists who are interested in measuring the attitudes and views of people about death are utilizing different tools that each measure the views of people about death. One of these tools was the Death Anxiety Scale, developed and assessed its validity and reliability by Templer in 1967, which has been used for the attitude of death more than any other tool around the world (23). In native researches, the Fear of Death Scale was also built on the basis of fear of death scale based on cognitive approach of Avicenna (FDA) by Azadi,
Haratiyan, Fat, hi- Ashtiani, and Janbozorgi (24), based on the opinions of Avicenna in his essay "Al-Shifa men Khawf Al-Mout" (25) which led to the discovery of five factors of A complete annihilation. The severe pain of death, sins consequences, interpersonal attachments and possessions attachments.

Attitude toward death refers to the set of cognitive, emotional and behavioral responses of a person to the reality of death. These attitudes can be positive or negative. Negative attitudes include fear or avoidance of death, while positive attitudes toward death is the acceptance of death (16).

With the advent of theories about death, the lack of researches on attitude toward death was revealed (26). Death Attitude Profile has advantages over other existing death-related questionnaires; although psychologists have developed different tools for measuring attitudes toward death, each one firstly assesses only one dimension. For example, Death Anxiety Inventory only measures anxiety about death. While attitudes toward death are widespread, each one of them is important for human clinical studies (23).

Existing scales also suggest that all people are somewhat fearful of death (27) while as some aspects of this questionnaire show, some people welcome death, some to achieve a life full of satisfaction, and some to end their worldly afflictions (although this belief is slightly different in the Muslim context). Other questionnaires investigate the negative attitudes toward death, but the attitude toward death is not always negative, as in this questionnaire, one of the dimensions of this questionnaire is the acceptance of death (1).

Considering the importance of the concept of death in Islamic teachings and the inadequacy of existing scales, the purpose of this study was to investigate the validity and reliability of the Death Attitude Profile-Revised in Iranian society and examine the psychometric properties of the Persian version of this scale.

Methods
This is a descriptive survey research. The statistical population consisted of students of Khomein Azad University and Jamia al Zahra Seminary, who studied in these centers during the academic year of 1395-96. Using convenience sampling method, 444 students were selected from this population. According to the opinions expressed in the topics of factor analysis, this sample size was more than the minimum sample size (200 people) accepted in this area (28). 136 boys were selected from the Khomein Azad University and 308 girls were selected from Jamia al Zahra Seminary. The age range of participants was between 17 and 45 years old with an average age of 27.04 and a standard deviation of 5.48.

Materials
Death Attitude Profile-Revised (DAP-R): A questionnaire that was developed by Wong et al. (29) based on an existential view, which states that individuals are motivated to pursue a personal meaning. According to this view, fear of death results from a failure to find personal meaning in life or death (30). The questionnaire is a revised version of a questionnaire that Gesser et al. (31) formulated from a combination of several sources and based on several theoretical classifications that have four different dimensions: Fear of death and dying, Approach Acceptance, Escape Acceptance, and Neutral Acceptance. But, the Revised Attitudes Profile by Wong et al. (22) has five dimensions: Fear of death, death Avoidance, neutral acceptance, approach acceptance and escape acceptance. In this questionnaire, because the composers intended to examine the attitude of death, items that were related to death were eliminated and other items were added under the three subsamples of acceptance. Also, the main questionnaire of 21 items was extended to 36 cases, which later decreased to 32 items in the factor structure. Validity and reliability of this questionnaire were investigated by Wong et al (22).

In a sample of 300 people of different ages (young, middle-aged, and old) and in order to convergent validity and divergent validity of this questionnaire, its correlation coefficient was calculated using death anxiety questionnaire, death perspective scale, perceived well-being questionnaire, and Zung Depression Scale. The alpha coefficient in the

---

1 Healing from the fear of death
components of this questionnaire in the neutral acceptance was 0.65, escape acceptance 0.84, fear of death 0.86, death avoidance 0.88, approach acceptance 0.97, and the reliability coefficient after four weeks of implementation was 0.64, 0.83, 0.71, 0.61 and 0.95 respectively. These components explained 66.2% of the total variance. The average and standard deviation of scores in men were 20.61 and 6.07 and in women were 21.13 and 6.09 respectively.

In Iran, Bashapour et al. (16) used Death Attitude Questionnaire to study the relationship between attitude toward death and quality of life and symptoms of somatization in women. Cronbach's alpha coefficient for the components of this questionnaire obtained at range 0.64 for death avoidance and 0.88 for approach acceptance of death. The original text of the questionnaire, was carefully considered and after translation by a specialist and making corrections, translated into English to ensure translation. The result showed the correctness of the original translation. Out of 470 distributed questionnaires, 444 questionnaires were entered into the analysis stage due to the incomplete and non-return of some of them. To analyze the data in this research, correlation and exploratory factor analysis methods were used by SPSS.

Results

Cronbach's alpha coefficient was used to assess the internal consistency of scale items. This study showed that by eliminating 6 items (4-7-17-22-30-31), the internal validity of the scale reaches its maximum. The internal consistency of the scale and its factors based on Cronbach's alpha value are shown in Table 1.

<p>| Table 1: Calculation of Cronbach's Alpha Coefficients for the Death Attitude Profile-Revised and its Factors |</p>
<table>
<thead>
<tr>
<th>Scale</th>
<th>Number of items</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole scale</td>
<td>26</td>
<td>Man 0.79</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Woman 0.79</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total 0.79</td>
</tr>
<tr>
<td>factor I: Fear of Death (FD)</td>
<td>7</td>
<td>86</td>
</tr>
<tr>
<td>factor II: Death Avoidance (DA)</td>
<td>5</td>
<td>88</td>
</tr>
<tr>
<td>factor III: Neutral Acceptance (NA)</td>
<td>3</td>
<td>65</td>
</tr>
<tr>
<td>factor IV: Approach Acceptance (AA)</td>
<td>6</td>
<td>97</td>
</tr>
<tr>
<td>factor V: Escape Acceptance (EA)</td>
<td>5</td>
<td>84</td>
</tr>
</tbody>
</table>

As shown in the table above, Cronbach's alpha coefficient in the research sample is 0.79. This factor is 0.81 for the first factor, 0.84 for the second factor, 0.84 for the third factor, 60.0 for the fourth factor, 0.80 for the factor and 0.79 for the fifth factor. In addition, in order to evaluate the internal validity of the scale, the halving method was used. Based on the results, the first half alpha coefficient was 0.648, the second half coefficient was 0.639 and spearman-brown coefficient and the halving was 0.809. The correlation between two halves was 0.680.

Also, to assess the construct validity of the scale, the correlation of each item with the whole questionnaire was calculated. The results showed that all items had a significant correlation with the total scale score. The range of this correlation was from 0.54 to 0.161 and the average was 0.39. The correlation between the factors was in the range between 0.009 and 0.485 (with an average of 217) and the correlation between the factors and the total scale score was in the range between 0.303 and 0.07 (with an average of 517). The results indicated that the factors were independent of each other and had a good correlation with the total scale.

In order to study convergent validity, Fear of Death Scale Based on Cognitive Approach of Avicenna (FDA) was used. The results showed that the correlation between the total score of fear of death with the total score of the death attitude
and its five factors (fear of death, death avoidance, neutral acceptance, approach acceptance and escape acceptance) were 0.423, 0.592, 0.409, 0.05, -0.200, and 127 respectively. In order to investigate the factor structure of the scale, exploratory factor analysis was performed using principle components and Varimax Rotation.

As shown in Table 2, the sampling adequacy index showed that appropriate sampling was performed for factor analysis (KMO = 0.85). The results of Bartlett’s test of sphericity also show a significant correlation between scale expressions. In fact, the significance of Bartlett’s test of sphericity is the least necessary condition for performing factor analysis. The results of this test with a degree of freedom of 325 and a square of Chi-square 4211.253 are significant at P<0.0001.

In the first phase, we used the net worth greater than 1 to determine the number of factors. In order to avoid the low accuracy in the output results, and also according to the Scree plot, which shows that the net worth in the descending part with a steep slope and before turning to the horizontal surface is slightly above the value of 1, the value in the second phase selected greater than 1. Table 3 shows the factor matrix after rotation, along with the factor loading of each item. As shown in Table 3, all scale items at this stage had a factor loading greater than 0.3. The factor loading range in the first factor was from 0.506 to 0.826 and in the second factor from 0.506 to 0.793, in the third factor from 0.300 to 0.833, in the fourth factor from 0.611 to 0.741 in the fifth factor from 0.630 to 0.791.

The first factor estimates 12.863%, the second factor 12.799%, the third factor 12.324%, the fourth factor 11.213%, and the fifth factor 10.712%, and the total of five factors 59.911% of the total variance of the Persian version of death attitude profile-revised.

<table>
<thead>
<tr>
<th>Item</th>
<th>Components</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>I'm terribly afraid of death.</td>
<td>0.826</td>
</tr>
<tr>
<td>15</td>
<td>I have an intense fear of death.</td>
<td>0.777</td>
</tr>
<tr>
<td>2</td>
<td>The prospect of my own death arouses anxiety in me.</td>
<td>0.732</td>
</tr>
<tr>
<td>17</td>
<td>The subject of life after death troubles me greatly.</td>
<td>0.609</td>
</tr>
<tr>
<td>26</td>
<td>The uncertainty of not knowing what happens after death worries me.</td>
<td>0.522</td>
</tr>
<tr>
<td>18</td>
<td>The fact that death will mean the end of everything as I know it frightens me.</td>
<td>0.518</td>
</tr>
<tr>
<td>1</td>
<td>Death is no doubt a grim experience.</td>
<td>0.506</td>
</tr>
<tr>
<td>8</td>
<td>Whenever the thought of death enters my mind, I try to push it away.</td>
<td>0.793</td>
</tr>
<tr>
<td>10</td>
<td>I always try not to think about death.</td>
<td>0.771</td>
</tr>
<tr>
<td>3</td>
<td>I avoid death thoughts at all cost.</td>
<td>0.767</td>
</tr>
<tr>
<td>16</td>
<td>I avoid thinking about death altogether.</td>
<td>0.757</td>
</tr>
</tbody>
</table>
I try to have nothing to do with the subject of death. 0.506

Component III: Neutral Acceptance (NA)
5 Death is a natural, undesirable, and unavoidable event. 0.833
12 Death is a natural aspect of life. 0.640
20 Death is simply a part of the process of life. 0.300

Component IV: Approach Acceptance (AA)
14 Death brings a promise of a new and glorious life. 0.741
24 One thing that gives me comfort in facing death is my belief in the afterlife. 0.735
21 I see death as a passage to an eternal and blessed place. 0.690
13 I look forward to a reunion with my loved ones after I die. 0.673
11 I believe that heaven will be a much better place than this world. 0.643
23 Death offers a wonderful release of the soul. 0.611

Component V: Escape Acceptance (EA)
7 Death provides an escape from this terrible world. 0.791
9 Death is deliverance from pain and suffering. 0.774
19 I view death as a relief from earthly suffering. 0.728
4 Death will bring an end to all my troubles. 0.643
25 I see death as a relief from the burden of life. 0.630

Diagram 1: Scree diagram for determining factors

Discussion
The purpose of this study was to investigate the psychometric properties of the Persian version of the Death Attitude Profile-Revised among students and seminary students. The results of this study showed that this scale has a good validity and reliability. Findings of this study were in accordance with the previous
findings. This means that the present research supported the five factors that were in the main form. The Death Attitude Profile-Revised Wong et al. (22) has five dimensions: fear of death, death avoidance, neutral acceptance, approach acceptance and escape acceptance. The fear of death is: having negative emotions and thoughts when talking about death. Fear of death and the death anxiety are the terms used in research literature instead of each other but fear considered as conscious and anxious as unconscious (32). This factor indicates those who are very fearful of death. They consider death as a disturbing notion, and they have many doubts about death and life after that, and they see it as the end of everything. Death avoidance means: not thinking about death and driving away thoughts of death from the mind. Wong et al., in their conceptual analysis of the death attitude have identified three forms of acceptance of death: neutral acceptance, approach acceptance, and escape acceptance, each of which is a component of the questionnaire (28). Avoidants attempt not to be exposed to death-related activities so that their thoughts are not engaged in the case. Neutral acceptance means that the individual knows that death is an inseparable part of his/her live and that he/she must live with this fact for being livelier (33). Approach acceptance refers to the belief that there is joy after death (34). People who have approach acceptance, have a strong belief in life after death, they see death as a pleasant occasion and see it as a path to a new, eternal and glorious life that brings them to those whom they love and have died before. Death is, in their view, a means of release of the soul and reaching heaven, which is more enjoyable than this world. Escape acceptance is when life is full of pain and suffering and death may be a pleasant alternative (28). The focus of these people is on relieving the pain and suffering of the present life, so death is a way to escape this terrible world and end the pressure of problems and burdens of life. The research sample tends to be less favorable to neutral and approach acceptance than other factors. Also, in order to verify the reliability of this study, based on Cronbach's alpha, the results were consistent with Wong's research results. There were only a few differences in two factors: the first factor was 0.81, the second factor was 0.84, the third factor was 0.60, the fourth factor was 0.80, and the fifth factor was 0.79, and in the Wong's research, the first factor was 0.86, the second factor was 0.88, the third factor was 65.0, the fourth factor was 0.97, and the fifth factor was 0.84. There is only a slight difference in the fourth and fifth factors. That may be due to the sampling of this research which was carried out in the Muslim context, and according to religious teachings, death is not a way to reach heaven and not a way to end the excruciating life. (35) Also, death is like a refinery that purifies the believers from sins (36). There is also an attitude about death and day of reckoning and entering heaven, that after death, the reckoning is done in an exact manner that nobody can be sure that he will enter heaven (9. Az-Zelzal. 8). Moreover, some items were removed due to Islamic context. In other words, some of the items like (I believe that I will be in heaven after I die) or (death is an entrance to a place of ultimate satisfaction) are not accepted in Islamic culture because these attitudes are different from religious teachings toward death. As it has been said, death is not the end of life, nor is a way to achieve a satisfying life, but each individual has an attitude and place in that world in light of the deeds that have been performed in this world (10). According to the Muslims, no one can claim that he will be an inmate in heaven or evil. As stated in the Qur'an: "tell them: I am not the first of the Messengers; and I do not know what shall be done with me or with you (9. Al-Ahqaf. 9). But it is Allah who will judge between humans and determine their heaven and evil according to what they have done (9. An-Nisa. 141). Another reason is that some of the intercultural studies point out that the Asians generally have less anxiety about death than the Westerners (37). As already mentioned, in order to assess the attitude toward death, this questionnaire has advantages over other existing death-related questionnaires. Because although psychologists have created different tools for measuring the attitude toward death, each one
only measures one dimension, while the attitude toward death has a wide dimension, each of which is important for human clinical research (23). Also, the attitude toward death is not always negative, as in this questionnaire, one of the dimensions of this questionnaire is the acceptance of death (1).

One of the limitations of this research despite the great emphasis on religious sources on death and remembrance of death is the absence of Iranian questionnaires regarding Islamic sources about attitudes toward death. As well as the absence of adequate knowledge of the teachings about death and the remembrance of death can have effects on life. Therefore, it is suggested that educational and scientific institutions to discuss death and inform the community about the effects of the remembrance of death and also neglect of death.

References


2. Motamedi, Gh (1396. SH) Man and Death: An Introduction to thanatology, 4st vol, Tehran, Iran, Markaz press.


