

# Relation of Personality characteristics and tenacity with signs of gloom and post-traumatic stress based on religious opinions in casualties of earthquake in Kermanshah area.

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## Abstract

**background:** Post-traumatic stress disorder (PTSD) is a mental health condition caused by terrifying, shocking, scary, or dangerous events. These events are so severe that one usually cannot gain proper insight into them and they are rooted in traumatic experiences in life. These incidents are expected to recur, if left untreated, creating a chain of events in a person's life. Based on available evidence, PTSD can lead to depression and panic disorder.

**Objectives:** The present study aimed to assess relation of Personality characteristics and tenacity with signs of gloom and post-traumatic stress based on religious opinions in casualties of earthquake in Kermanshah area.

**Materials and Methods:** In this study, 400 people who had survived the temblor of Kermanshah in Sarpol-e Zahab who suffered from PTSD were randomly selected, and the research questionnaires were distributed among them. Data were analyzed in SPSS software (version 20) using an independent t-test, one-way analysis of variance, path analysis, and Pearson correlation. The descriptive results of the study demonstrated that 196 (51.3%) subjects were male and 186 (48.7%) cases were female. Regarding age, the lowest frequency (n=70; 18.3%) was related to the age range of under 20 years old. In terms of education, the highest frequency (n=149; 39%) was related to the cases who hold a diploma, while the lowest frequency was related to subjects with a master's degree and higher.

**Results:** The results pointed out that Fit Index (IFI), relative fit index (RFI), Normed Fit Index (NFI), comparative fit index (CFI), Tucker Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA) indices were at the desired level, indicating the suitable fit of the model. Due to the negative effects of religiosity on stress disorder (B=-0.14) and depression (B=-0.04) in Kermanshah earthquake victims, it has an inverse relationship with stress disorder and depression and reduces stress. Moreover, there was a positive association between acceptance personality trait and religious beliefs, and the significance level of the test was less than 0.05, pointing to a direct and significant relationship between acceptance and religious beliefs at %95 confidence level. Nonetheless, there was a negative association between neuroticism and religious beliefs, and the significance level of the test was less than 0.01, pointing to a significant inverse relationship between neuroticism and religious beliefs at a %99 confidence level.

**Conclusion:** As evidenced by the results of the present study, hardiness and personality traits were significantly correlated with depression and PTSD based on the mediating role of religious beliefs among earthquake victims in Kermanshah province. This helps to better understand the relationship of religious beliefs with spontaneous and controlled processes in a more systematic way and helps people to create a more accurate view.

**Keywords:** Personality traits, Depressive symptoms, stress, Religious beliefs, Earthquake

## Introduction

Sometimes people experience shocking events with damaging severity, and as a result, they develop some symptoms, such as the resurrection of the events in dreams or fantasies when awake, increasing arousal, and continuous avoidance of accident recall. These cases are categorized in the fifth version of the guidance in the diagnostic and statistical category of mental disorders of post-traumatic stress disorder

(PTSD) (1). Shocking incidents which include the experiences of the battlefield, natural disasters (floods, earthquakes), being attacked or raped, and severe traffic accidents while working can adversely affect all levels of an individual's existence, including physical, mental, social, and spiritual.

One of the affected dimensions of human life is spirituality which consists of unifying energy that connects all aspects of one's existence. One aspect of

spirituality is religiosity which is a personal way of expressing spirituality by participating in ceremonies, rituals, and acts based on Shariah (2). Religiosity has a major role to play in the life and culture of Iranian people. In The Holy Quran in several verses, people are asked to call God and seek his help when they are in dangerous life situations. For example, verse 67 of Sura al-Isra'a suggests: "And when there are injuries to you, whoever you call upon but he disappears, and when God saves you from dryness, you turn away and man is always ungrateful."

Based on the reports from the U.S., attendance at religious ceremonies in the church has increased after the September 11 attacks (3). Verse 1. 56 Sura al-Baqara (Cow) also points out that when a believer loses someone or is inflicted with calamity, he/she interprets the tragedy with his/her divine worldview. "Among them who, when a disaster may come to them, say that we are from God and return to Him. In verse 28 of Qur'an 28, it is mentioned that the hearts of faithful people rest with the remembrance of God, and therefore, the remembrance of God reduces the anxiety and tension that enters the heart of the believer: "Those who believe, and whose hearts find comfort in the remembrance of Allah. "Surely in the remembrance of Allah do hearts find comfort".

Several studies in other countries have shown that people who have religious beliefs or practice religious acts have better mental health and adaptations than those who do not. Moreover, they get lower scores in indicators, such as depression, anxiety, psychological turmoil, and psychological damage (4). The results of a study by Rahi (2017) (5) suggested that mental health was, directly and indirectly, related to post-traumatic stress disorder through personality traits. Among personality traits, only neuroticism and openness were significant. In fact, the findings of the referred study showed that having mental health, along with personality traits, was a solution for relieving PTSD symptoms.

The likelihood of occurrence and severity of PTSD symptoms is increased in people with mental health and positive personality traits, such as openness to experiences. Post-traumatic growth in patients with Multiple sclerosis in Tehran has been also stated. The results showed that post-traumatic growth can be predicted based on religious beliefs, psychological hardiness, and perceived social support. Younesian and Yasemi (2003) (7) also compared the severity of depression symptoms and the speed of information processing among patients with PTSD and normal individuals. The results of the stated study indicated that compared to normal people, patients with PTSD showed negative mood, low self-esteem, higher inefficiency, and slower information processing

speed. However, there was no difference between the two groups in terms of symptoms of lack of pleasure and communication problems. Therefore, it can be concluded that adolescents with PTSD are more susceptible to experiencing mood symptoms and cognitive problems, such as weakness in information processing, compared to normal adolescents. Consequently, paying attention to these cases is also necessary in treatment interventions for people with PTSD

Although it has been a long time since the earthquake in Kermanshah province, no study has assessed the psychological nature of PTSD among these people, and lack of attention to this issue may lead to chronic and more complex disorders. Some studies have been conducted on the relationship of personality traits and religious beliefs with symptoms of PTSD and depression; nonetheless, they yielded contradictory results. For instance, in some studies, it has been shown that religious beliefs are associated with decreased PTSD; however, some others reported the opposite (i.e., stronger religious beliefs were found to be associated with the occurrence of PTSD symptoms).

Furthermore, in these studies, the role of other psychological factors, such as hardiness or depression, has not been taken into account. The present study makes it possible to better understand the process of PTSD formation among earthquake victims in Kermanshah. A thorough understanding of this process provides better treatment recommendations for coping with psychological problems in earthquake-stricken people in Kermanshah province. In light of the aforementioned issues, the present study aimed to investigate the relationship of hardiness and personality traits with depression and PTSD based on the mediating role of religious beliefs among earthquake victims in Kermanshah province and explaining a comprehensive model for it. In this study, we seek to examine the following relationships:

- 1-The relation among Personality characteristics and tenacity with signs of PTSD based religious opinions in casualties of earthquake in Kermanshah area .2-The relationship between hardiness and symptoms of PTSD based on the intermediary role of religious beliefs in casualties of earthquake in Kermanshah area.3-The relationship between personality traits and depressive symptoms based on the intermediary role of religious opinions in casualties of earthquake in Kermanshah area. 4-The relationship between hardiness and depressive symptoms based on the intermediary role of religious opinions in casualties of earthquake in Kermanshah area.

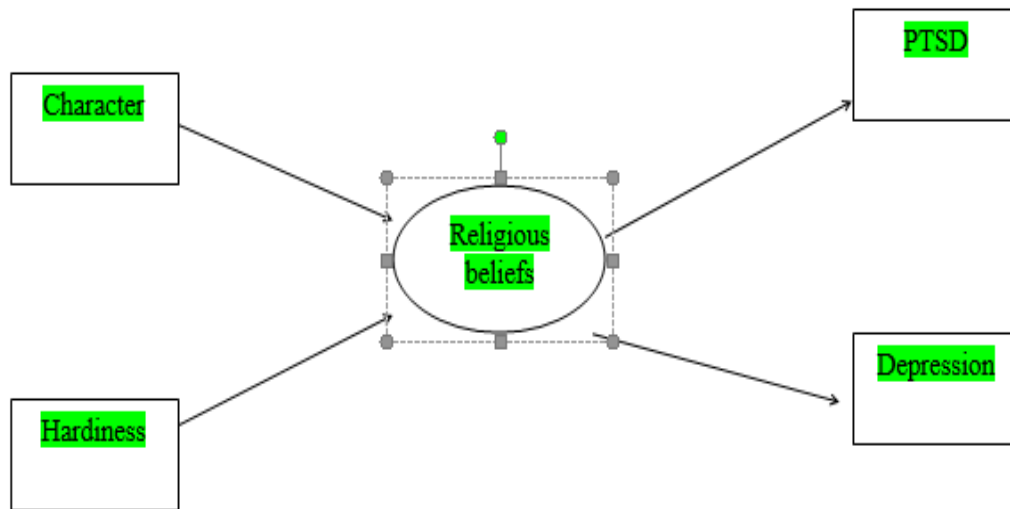


Figure 1. Conceptual model of research

### Research Hypotheses

- 1-The relation among hardiness and signs of PTSD based on the intermediary role of religious beliefs in casualties of earthquake in Kermanshah area
- 2-There is a relation among hardiness and PTSD with the intermediary role of religious beliefs in casualties of earthquake in Kermanshah area .
- 3-There is relation among Personality characteristics and depression with the intermediary role of religious beliefs in casualties of earthquake in Kermanshah area.
- 4-There is relation among hardiness and depression with the mediating role of religious beliefs in earthquake victims in Kermanshah province.

### Materials and Methods

The statistical population included all survivors over 16 years of age who were present during the Sarpol-e Zahab earthquake in Kermanshah in 2017. From among these people, 400 people were selected by multi-stage random sampling. The sample size was based on the Morgan-Krejcie table, which includes 382 people. To prevent possible sample loss and data loss, a total sample size of 400 people was selected. To introduce the sample of the city based on stratified sampling and according to the official urban division of Kermanshah Municipality from four health centers and referring to the health houses of the sample city among the people who met the research criteria and inclusion criteria) had PTSD disorder. Selected. 100 people were selected from health centers in each district.

### Data Collection Tools

#### 1) Structured Clinical Interview for DSM-5 (SCID-5)

The SCID-I is a semi-structured interview that provides diagnoses based on Kerr's DSM-5. It is semi-structured since it requires the interviewer's clinical judgment about the interviewee's answers. In Iran, the diagnostic agreement was moderate to good for most specific diagnoses and 11 overall (0.26). The overall agreement was 0.52 for the current diagnosis and 0.55 for total lifetime diagnoses (8).

#### 2) Posttraumatic Stress Disorder Checklist for DSM-5

This 17-item questionnaire covers PTSD criteria based on DSM. In this questionnaire, three categories of re-experience symptoms (n=5), avoidance symptoms (n=7), and severe arousal symptoms (n=5) are asked. The cases are ranked on a 5-point Likert scale ranging from 1-5 (On a 5-point Likert scale, items are ranked from 1 to 5), and the amount of score of materials (17-85) is regarded as the total score of the individual. A score of 35 is set as a cut-off point. The validity and reliability of this questionnaire were acceptable in Iran (9). Its reliability was obtained at 0.75 using the test-retest method. alpha of Cronbach value was 0.61.

#### 3) Mississippi Post-Traumatic Stress Disorder Questionnaire

This questionnaire which was developed by Zarei et al. (10) is used to assess the severity of

symptoms of PTSD. It consists of 35 items which are rated on a 5-point Likert scale. The total scores range from 35-175, with a score of 107 and above indicating the presence of PTSD. this scale's alpha of Cronbach coefficient reported 0.92 (10). To determine the concurrent validity of this scale, three tools of life events list, PTSD list, and Padua list were used. The correlation coefficients of the Mississippi scale were reported to be 0.23, 0.82, and 0.75, respectively (Goodarzi '1381).

#### **4) Short form of five-factor personality questionnaire (60- NEO- FFI)**

To measure personality traits, the Five Practical Personality Inventory (NEO) was developed by McCrae and Costa in 1985. This 60-item questionnaire encompasses five dimensions of extroversion, neuroticism, openness to experience, agreement, and responsibility. It has been translated into Persian by Grossi Farshi and the norm has been evaluated. McCrory and Costa reported test-retest reliability coefficients of 0.83, 0.75, 0.80, 0.79 for five factors of neuroticism, extroversion, openness to experience, acceptability, and conscientiousness, respectively (McCrae, Costa, 2004). In Iran, Amanollahi reported Cronbach's alpha coefficient of 0.48-0.85 and Hosseini Lorgani obtained an alpha coefficient of 0.52-0.85 for the factors of this questionnaire (11). To measure the content validity of this test, the correlation among the two forms of the personal report (S) and the observer evaluation form (R) was used, with a maximum correlation of 0.66 in the extroversion factor and a minimum of 0.45 in compatibility factor (Grossi Farshi, 2001).

#### **5) Kobasa Psychological Hardiness Questionnaire**

This questionnaire consists of 50 items with three subscales of commitment (n=16), control (n=17) and challenge (n=17) (Kobasa, 1997). The items are rated on a 3-point Likert scale ranging from 1 (Not true at all) to 3 (absolutely true) (12). in Iran, this questionnaire has been translated and normalized by Yar Ali who obtained the validity coefficients of 0.60, 0.73, and 0.51 for the three subscales, respectively, and this coefficient was 0.27 for the whole hardiness trait.

#### **6) Short form of the Beck Depression Inventory (BDI-13)**

This questionnaire is used for screening the specific symptoms of depression and measures different areas of depression semiotics, such as emotional depression, cognitive, motivational, and physiology. Daneshvar et al. reported Cronbach's alpha coefficient for the questionnaire to be 0.78, the deplorable validity was 0.83, and the test-retest reliability coefficient for a three-week interval was

0.49 (13). To measure the content validity of this test, the correlation was 0.68 in the extroversion factor and the minimum was 0.49 in the adjustment factor.

#### **7) Allport-Ross Religious Orientation Scale (ROS)**

This questionnaire which was developed by Allport and Ross in 1967 measures internal and external religious orientations. It was translated and standardized in Iran in 1998, and its validity and validity were obtained by Kenji and Hosseini (2010) (14). Its internal consistency was confirmed rendering a Cronbach's alpha of 0.71, and its test-retest reliability was calculated at 0.74. In this questionnaire, items 1 to 12 measure extrinsic and items 13-21 assess intrinsic religious orientation. In preliminary studies, it was observed that the correlation between external and internal orientation was 21.21(14)

#### **8) Religious Coping scale (RCOPE)**

This scale was developed by Pargament and consists of 14 items, including positive and negative coping styles. The items are rated on a 4-point Likert scale ranging from "never" to "always." Positive religious coping is a style of exposure to negative life events in which a person welcomes events using positive assessments and interpretations related to God's help. Nonetheless, in a negative religious confrontation style, one establishes an avoidance and uncertain relationship with God. Cronbach's alpha coefficients were obtained at 0.86 and 0.65 for positive and negative religious coping subscale (15). These findings are consistent with the results of a study conducted by Pargament et al. (2000) on families with "autistic" children (Etemadi, 2015)

#### **Research Methodology**

A total of 400 earthquake survivors with PTSD in Kermanshah province in Sarpol-e Zahab were randomly selected and research questionnaires were distributed among them. Before the administration of the research questionnaires, individuals who may have PTSD were evaluated and screened using structured diagnostic interviews based on the Structured Clinical Interview for DSM-5 (SCID-5). Following the diagnosis, other questionnaires were provided to these subjects (the questionnaire was provided in two sessions two weeks apart). This interview was conducted by a PhD student under the supervision of a tutor. Data were analyzed in SPSS software (version 20) using an independent t-test, one-way analysis of variance, path analysis, and Pearson correlation.

They were selected using the multi-stage random sampling method. The sample size was determined

based on the Morgan-Krejcie Table which proposed a sample of 850 cases and in this study, a sample of 403 subjects was selected. Moreover, due to the large population of the city, it was not possible to choose randomly; therefore, we divided the city into four districts; thereafter, at least 12 houses were considered in each district, and those who met the research criteria were selected. This process took place in all four areas and 622 people from each area entered the research, and finally, the research sample included 400 cases that were selected by multi-stage cluster sampling method. Research participants completed the Post Traumatic Stress Disorder, General Mental Health, and the NEO

Personality Inventory test(NEO-PI).

### Ethical considerations

Prior to the implementation of the study, permission and code of ethics were obtained from the Ethics Committee of Azad University of Kermanshah. The process of distributing the questionnaire in the city lasted for one month. In order to observe ethical considerations, questionnaires were administered to those who were willing to participate in the study. They were assured that the results of this study had no consequences for them and that their personal information would remain confidential.

## Results

**Table 1. Descriptive findings**

Frequency percentage	Frequency	Gender
51.3	196	Male
48.7	186	Female
100	382	Total

Cumulative Frequency percentage	Frequency percentage	Frequency	Age
18.3	18.3	70	Less than 20
50	31.7	121	Between 20 and 29
81.4	31.4	120	Between 30 and 39
100	18.6	70	Between 40 and 50
	100	382	Total

Cumulative frequency percentage	Frequency percentage	Frequency	Education
7.1	7.1	27	Under Diploma
46.1	39	149	Diploma
60.2	14.1	54	Associate degree
97.4	37.2	142	B. A
100	2.6	10	M.A and higher
	100	382	Total

Table 1 displays the demographic characteristics of the subjects: in terms of gender, 196 (51.3%) subjects were male and 186 (48.7%) cases were female. Regarding age, the lowest frequency (n=70; 18.3%) was related to the age range of under 20

years old. In terms of education, the highest frequency (n=149; 39%) was related to the cases who hold a diploma, while the lowest frequency was related to subjects with a master's degree and higher.

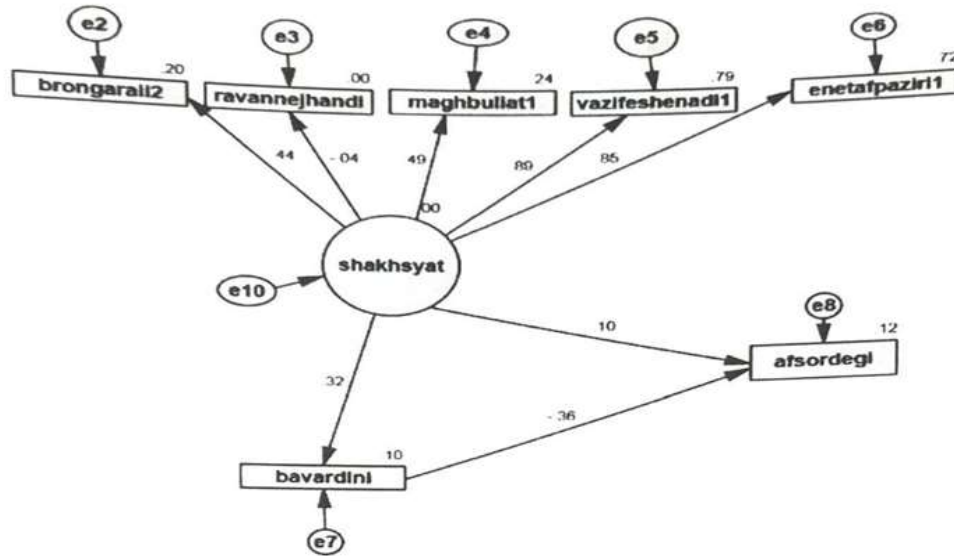
**Table 2. Kolmogorov-Smirnov test to assess the normality of data distribution**

Normal test			Variables
Result	significant level	Z statistics	
Normal	0.088	1.004	Neuroticism
Normal	0.804	0.323	Extroversion
Normal	0.775	0.414	Flexibility
Normal	0.334	0.617	Acceptability
Normal	0.868	0.308	Responsibility
Normal	0.081	1.333	Depression
Normal	0.764	0.522	Religious Beliefs
Normal	0.875	0.313	Commitment
Normal	0.313	0.618	Control
Normal	0.889	0.558	Challenge
Normal	0.219	0.888	Hardiness
Normal	0.8	0.329	Stress disorder

Kolmogorov Smirnov test was used to test the normality or non-normality of the research variables. As depicted in Table 2, the significance level of all the research variables is less than 5%, indicating that the distribution of all variables is normal, and parametric tests can be used.

**Study of hypotheses**

**Hypothesis 1:** The relationship between personality traits and symptoms of PTSD based the intermediary role of religious beliefs in casualties of earthquake in Kermanshah area..



**Figure 2- Schematic model based on the significant relationship of personality characteristics and religious beliefs with stress disorder**

As illustrated in Table 3, the values obtained from Incremental Fit Index (IFI), relative fit index (RFI), Normed Fit Index (NFI), comparative fit index (CFI), Tucker Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA) indices indicated a suitable fit (Table 5). This means that the indirect effects of personality traits on stress disorder

through the belief religion variable (0.44) are more pronounced than the direct effects of personality traits on stress disorder (B=0.32). Considering the negative effects of religious belief on stress disorder (B=0.34B), Religiosity is inversely related to stress disorder and reduces stress.

**Table3: Correlation coefficient between personality traits and post-traumatic stress disorder in earthquake victims in Kermanshah province**

Model	RMSEA	NFI	RFI	IFI	TLI	CFI
Default Model	0.403	0.752	0.9	0.966	0.91	0.967

Incremental Fit Index (IFI), relative fit index (RFI), Normed Fit Index (NFI), comparative fit index (CFI), Tucker Lewis Index (TLI) and Root Mean Square Error of Approximation (RMSEA)

Furthermore, schematic diagram data show that conscientiousness had the highest effect (P=0.90) and then flexibility (P=0.90) had the greatest effect on stress disorder. In general, the results suggested that religious beliefs in earthquake victims of Kermanshah province had a minor mediating role

between personality traits and PTSD. **Hypothesis 2:** There is a relationship between hardiness and PTSD with the intermediary role of religious beliefs in casualties of earthquake in Kermanshah area.

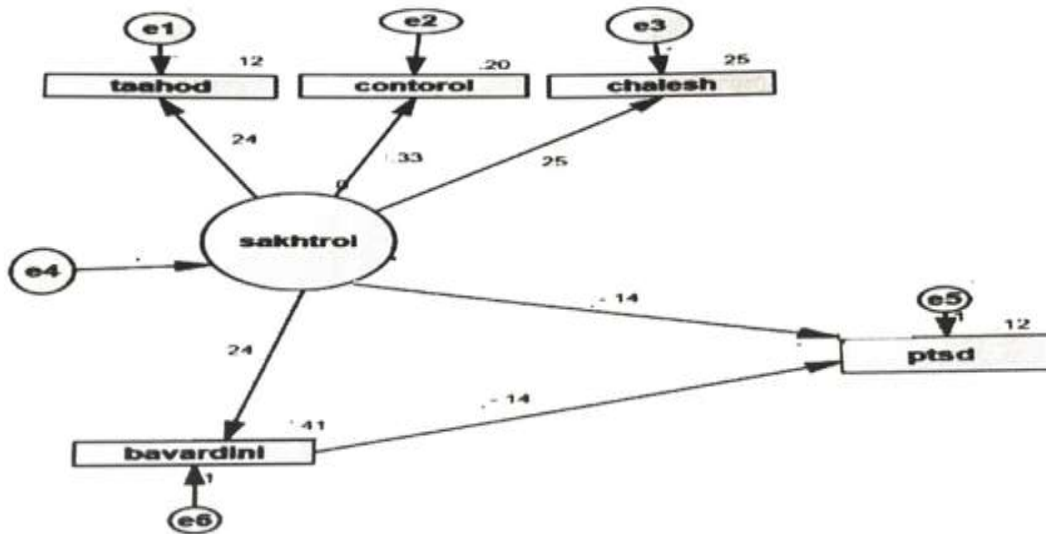


Figure 3. Schematic model based on the meaningful relationship of hardiness and religious beliefs with stress disorder

As illustrated in Table 3, the values obtained from IFI, RFI, NFI, CFI, TLI, and RMSEA indices are suggestive of a suitable fit (Table 3). This means that the indirect effects of hardiness on Kermanshah earthquake stress disorder through the religion belief variable ( $=45.0$ ) are more pronounced than the direct effects of hardiness on Kermanshah earthquake stress disorder ( $B=0.14$ ). Due to the negative effects of religious belief on stress disorder of earthquake

victims in Kermanshah province ( $B=B-14.0$ ), religious belief had an inverse relationship with stress disorder and reduces the stress of earthquake victims.

**Hypothesis 3:** There is a relation among characteristics traits and depression with the intermediary role of religious beliefs in casualties of earthquake in Kermanshah area.

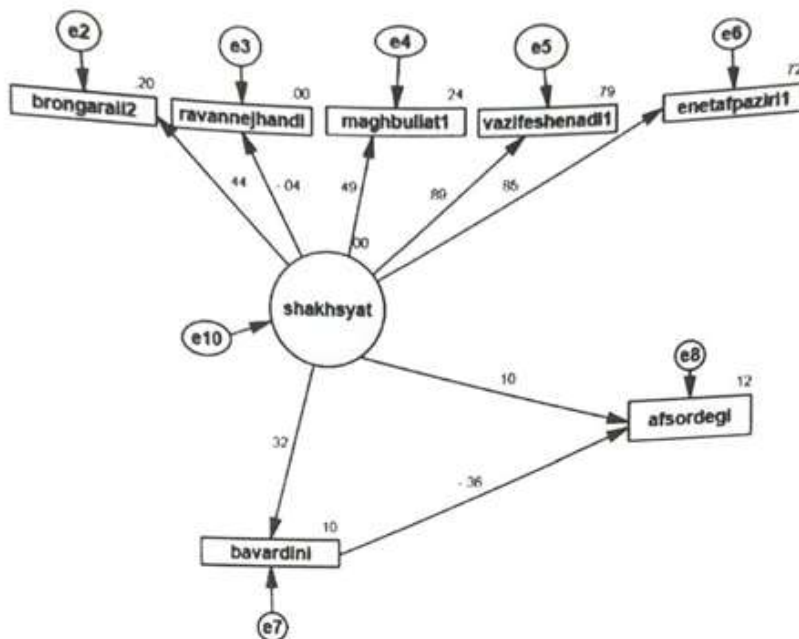


Figure 4. Schematic model based on the significant relationship of personality traits and religious beliefs with depression

Table 4 demonstrates that the values obtained from IFI, RFI, NFI, CFI, TLI, and RMSEA indices indicated a suitable fit (Table 4). That is to say, the indirect effects of personality traits on depression of Kermanshah earthquake victims through the variable of religious belief (0.52) are more pronounced than the direct effects of personality traits on depression

in Kermanshah earthquake victims ( $B=0.10$ ) due to the negative effects of religious belief on depression in Kermanshah province earthquake victims ( $B=0.36$ ). The belief religion had an inverse relationship with depression, reducing it in earthquake victims.

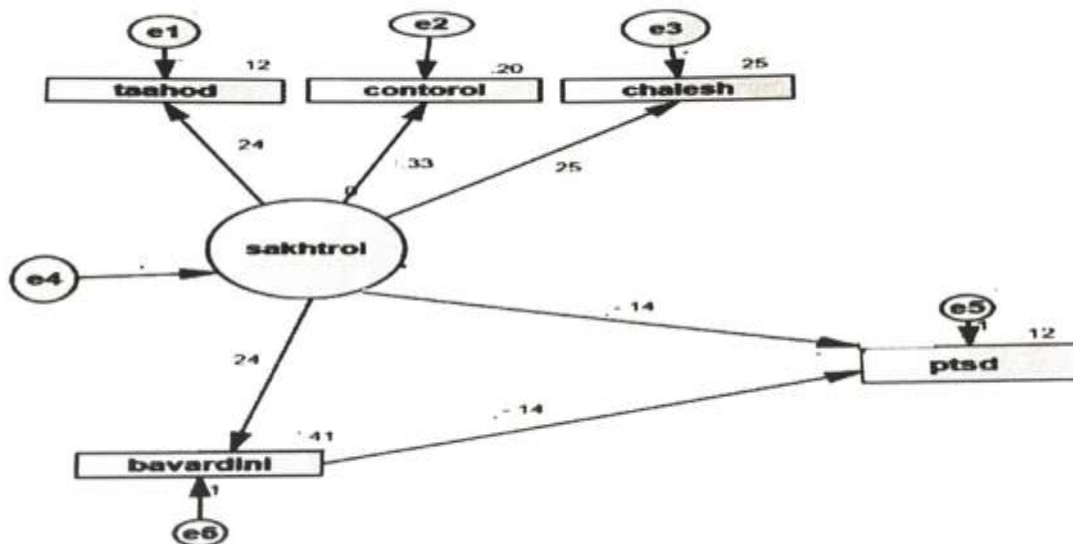
**Table 4: Correlation coefficient between personality traits and post-traumatic depression in earthquake victims in Kermanshah province**

Model	RMSEA	NFI	RFI	IFI	TLI	CFI
Default model	0.403	0.947	0.952	0.96	0.009	0.957

In addition, schematic diagram data show that conscientiousness had the highest effect ( $P=0.89$ ) and then flexibility ( $P=0.85$ ) had the greatest effect on depression disorder. In general, based on the results, religious beliefs in earthquake victims of Kermanshah province had a minor mediating role between personality traits and earthquake-affected people in

Kermanshah province.

**Hypothesis 4:** There is a significant relationship between hardiness and PTSD with the intermediary role of religious beliefs in casualties of earthquake in Kermanshah area.



**Figure 5. Schematic model based on the significant association of hardiness and religious beliefs with depression**

As depicted in Table 5, the values obtained from IFI, RFI, NFI, CFI, TLI, and RMSEA indices indicated a suitable fit (Table 5). This means that the indirect effects of hardiness on depression of Kermanshah earthquake victims through religious belief variable ( $P=0.46$ ) are more pronounced than the direct effects of hardiness on depression in Kermanshah

earthquake victims ( $B=0.36$ ). Due to the negative effects of religious belief on the depression of earthquake victims in Kermanshah province ( $-0.04$ ), religious belief has an inverse relationship with depression and reduces the depression of earthquake victims.



**Table 5. Correlation coefficient of hardiness and religious belief with post-traumatic depression in earthquake victims in Kermanshah province**

Model	RMSEA	NFI	RFI	IFI	TLI	CFI
Default model	0.394	0.733	0.916	0.922	0.91	0.933

Furthermore, schematic diagram data show that the components of control and commitment had the highest ( $P=44.0$ ) and lowest ( $B=24.0$ ) effects on depression disorder. In general, the results demonstrated that religious beliefs in earthquake victims of Kermanshah province had a minor mediating role between the hardiness and depression of earthquake victims in Kermanshah province.

### Discussion

The present study aimed to assess the Relation of Personality characteristics and tenacity with signs of gloom and post-traumatic stress based on religious opinions in casualties of earthquake in Kermanshah area. The first hypothesis stated that there is a relationship between personality traits and PTSD with the intermediary role of religious beliefs in casualties of earthquake in Kermanshah area. The results of statistical analysis showed that religious beliefs in earthquake victims of Kermanshah province had a minor mediating role between personality traits and PTSD; moreover, due to the negative effects of religious belief on stress disorder, belief had an inverse relationship with stress disorder and reduces stress. In addition, consistent with this finding, the results of a study by Hassan Shahi and Dara'i (2005) (2005) showed that personality traits and characteristics can affect the response to stressful events and predict post-traumatic stress levels. In explaining these results, It can be said that personality characteristics are sustainability patterns of perception, communication, thinking about the environment and self that appear in a wide range of social and personal contexts. Moreover, psychological spaces of life are an unavoidable part of life and all people are more or less exposed to this experience.

The second hypothesis stated that there is a relationship between hardiness and PTSD with the mediating role of religious opinions in casualties of earthquake in Kermanshah area.. The results of statistical analysis indicated that the indirect effects of hardiness on stress disorder of Kermanshah earthquake victims through religion are more than the direct effects of hardiness on Kermanshah earthquake stress disorder. Moreover, the results indicated that religious beliefs in earthquake victims of Kermanshah province had a minor mediating role between hardiness and stress disorder of earthquake victims in Kermanshah province. Spiritual well-being and hardiness directly and through emotional regulation significantly predict the post-traumatic

growth of divorced women. The results of this hypothesis are in line with those obtained by Khalili et al. (2010), (18) and Zaharakar (2004) (19).

Regarding this finding, it can be stated that the indirect path of hardiness to post-traumatic stress is directly significant through the mediation of religious beliefs with a direct standard coefficient. Hardiness describes a general style of performance characterized by a strong sense of commitment (the ability to see the world in an interesting and meaningful way), control (the belief that one's own ability affects events), and challenges (seeing new experiences as new opportunities for personal growth). Therefore, religious beliefs can affect these factors and also the relation among hardiness and post-traumatic stress.

The third hypothesis stated that there is a relationship between personality traits and depression with the intermediary role of religious beliefs in casualties of earthquake in Kermanshah area . The results of the statistical analysis demonstrated that due to the negative effects of religious belief on depression in earthquake victims of Kermanshah province, religious belief had an inverse relationship with depression, reducing it in earthquake victims. Moreover, in general, the results pointed out that religious beliefs in earthquake victims of Kermanshah province had a minor mediating role between personality traits and earthquake-stricken people in Kermanshah province. This finding is in agreement with those reported by Sharifi (2002) (20), as well as Bonesian and Yasemi (21).

In explaining the findings of the study, it can be argued that people with high extroversion have higher social performance due to their high tendency to establish social interaction and enjoy this interaction more than those with low extroversion. In people with stronger neuroticism, anxiety, anger, and stress, feelings of immunity are more in interpersonal relationships, leading to their poor social functioning and creating depressed moods.

The fourth hypothesis stated that there is a relationship between hardiness and depression with the intermediary role of religious beliefs in casualties of earthquake in Kermanshah area . The results of statistical analysis illustrated that religious beliefs in earthquake victims of Kermanshah province played a minor mediating role between the hardiness and depression of earthquake victims in Kermanshah province. Moreover, the components of control and commitment had the greatest and least effect on

depression disorder. The findings are in line with the results obtained by Pourseyed Aghaie (2010) (22) and Dost Mohammadi (2006) (23).

In explaining this finding, it can be said that some factors, such as rapid mobility and reorganization within the family, social support, and changes in effective assessments and coping strategies that are regarded as factors of mental state improvement, apparently had a function similar to Three components of the hardiness variable, motivating the family to refer to others to receive and dynamically deal with stressful events.

One of the limitations of the present study is the use of questionnaires as the only tool to collect information which results in the possibility of bias, as well as time and human cost to fill out the questionnaire. The main limitation of this study was that there was no new localized tool appropriate to the community and culture, and to assess the symptoms of PTSD, a new foreign questionnaire according to DSM-5 criteria was translated and standardized. On the other hand, among the strengths of this study, we can refer to the provision of a better understanding of the relationship of religious beliefs with spontaneous and controlled processes.

### Conclusion

As evidenced by the results of the present study, hardiness and personality traits were significantly correlated with depression and PTSD based on the mediating role of religious beliefs among earthquake victims in Kermanshah province. This helps to better understand the relationship of religious beliefs with spontaneous and controlled processes in a more systematic way and helps people to create a more accurate view.

Based on multiple studies, PTSD is one of the psychological complications that appear in people after injuries and natural disasters. The symptoms of PTSD include difficulty concentrating, severe panic reaction, derealization, loss of personality, loss of environmental awareness, inability to recall various aspects of the injury, physical reactions, poor concentration, and memory problems.

### Ethical Considerations

#### Adherence to the principles of research ethics

All ethical principles were observed in this article. Participants were allowed to leave the study whenever they wished. Moreover, all participants were aware of the research process. Their information was kept confidential. In this study, while obtaining written consent from the participants, all ethical points were observed by the researchers.

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