

# Comparing Religious Orientation and Perception of God in Addicts and Non-Addicts

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## Abstract

**Background:** Through destroying moral, human, and religious values, addiction estranges people from the transcendent human nature. Moreover, drug dependence replaces an addict's healthy and genuine relationships with him/herself, his/her relatives, and God. In this regard, the present study aimed at comparing religious orientation and perception of God in addicts and non-addicts.

**Methods:** This was a causal-comparative study. The statistical population included all self-introduced male and female addicts who referred to addiction treatment centers in Zahedan in 2015. In this study, 308 individuals (154 addicts and 154 non-addicts) were selected using convenience sampling method. To collect data, the religious orientation scale (Allport, 1950) and the perception of God index (Lawrence, 1997) were used. The obtained data were analyzed using the multivariate analysis of variance.

**Results:** The results of data analysis revealed a significant difference between addicts and non-addicts in religious orientation, meaning that religious orientation was more extrinsic in addicts and more intrinsic in non-addicts. Additionally, the findings revealed a significant difference between the 2 groups with regard to the perception of God, such that the mean score of non-addicts was higher than that of the addicts.

**Conclusions:** The intrinsic religiousness and positive perception of God protect people's personality and human dignity; however, drugs deprive people from human personality, moral virtues, and self-esteem. Therefore, promoting and developing intrinsic religious values play a significant role in preventing addiction.

**Keywords:** Religious Orientation, Intrinsic Religiousness, Extrinsic Religiousness, Perception of God

## 1. Background

Addiction is a biological, psychological, and social disease; several factors affect the etiology of drug abuse and addiction, whose interaction with one another can lead to the onset of drug abuse and ultimately addiction (1). Clinical findings indicate that personality characteristics, life style, attitudes, beliefs, feelings, dependencies, emotions, and behaviors formed during an individuals' growth play a key role in the formation of drug dependence (2). Through providing a set of behaviors and a special lifestyle, religion, as a defensive shield, can protect people from harmful factors and environmental stressors (3). In this regard, it seems that using the aid of internal and personal forces is an important factor in dealing with the temptation to relapse (4). Allport believes that religious orientation can be intrinsic or extrinsic. In the intrinsic religious orientation, faith itself is considered as a transcendent value and a pervasive motivational commitment, and not a means to achieve the intended goals. However, in the extrinsic religious orientation, religion is something external used to satisfy people's individual needs such as achieving security and/or a position. People who have such

an orientation apply religion as a means to achieve their objectives (5). In ontology, religion is regarded as a spiritual coping strategy that plays an integral role in dealing with stressful events. In other words, a spiritual coping is an internal source which searches for meaning in times of stress, develops the intimacy with God, and aids people to perceive the meaning of life and to relax (6). Perception of God, from a psychological perspective, is a cognitive-affective pattern that is shaped through a child's first interactions with the important people and caregivers in his/her life, and it repeatedly renews throughout life, consistent with the person's growth and mental maturity. This orientation model guides one's behaviors and feelings towards God. This is why the perception of God is a coherent set of the latest level of one's perception of abstract and metaphysical issues. In addition, people's perception of God and their image of God play key roles when one wants to examine people's mental traits through considering people's perception and their mental structures (7). The concept of God determines the transformation and formation of personal religion (8). It seems that religion and the relationship with God impact people's cog-

nitive process. The faith and belief in God and the fact that everything starts very well when people trust in God and that God controls everything, create a sense of optimism and confidence in an individual's future performance (9). People consider God as an aid in crisis, which can be a bright light for the whys of religious coping theory (10). The results of previous studies conducted on the effect of religion on decreasing distress and turmoil indicated its positive effect on compatibility, promoting mental health, and decreasing symptoms of various diseases and supported the existence of a positive correlation between religion and mental health. Several studies have shown that most people abusing drugs suffer from psychological problems including stress, anxiety, and depression. In other words, addicts apply drug abuse as an avoidant, negative, and inefficient coping strategy to reduce their problems (11). Nonnemaker, McNeely, and Blum (12), in a study, sought to distinguish public/extrinsic religion (attending religious communities and taking part in charities) from private/intrinsic religion (praying and paying attention to religion) and they found that these 2 forms of religion can protect people from using cigarettes, alcohol, and marijuana. Based on these results, while private religiosity was a more reliable preservative factor even against recreational drug abuse, public religiosity only had a negative correlation with continuous drug abuse. The results of Gartner et al. (13), Marsiglia et al. (14), Robinson et al. (15), Wills et al. (16) revealed that having religious attitudes and beliefs was related to reduction of psychological stress and prevention of risk behaviors such as smoking, drinking, and using drugs. Religiosity reduces the effects of the pressures of life on tendency towards drug abuse and it controls the increase in the level of drug abuse over time. In their studies, these researchers mentioned that addicts, compared to non-addicts, might have lower level trends in spiritual intelligence. Moreover, religious beliefs reinforce socially responsible behaviors, prevent misbehaviors, and are associated with lower levels of drug and alcohol abuse, early sexual activities, and delinquency (17). Galanter et al. (18) in a study entitled "Assessment of Spirituality and Its Relevance to Addiction Treatment" through conducting a comprehensive and informative review, concluded that religious orientation considerably overlaps with spiritual intelligence and it is one of the most important aspects of addiction and addiction treatment, which has been seriously neglected. Bradshaw et al. (19) found that a positive mental image of God was negatively correlated with a wide range of behavioral symptoms including depression and anxiety. Kirkpatrick and Shaver (20), in their study, demonstrated that people who had a secure attachment to God, compared to those who had ambivalent attachment to God, had higher life satisfaction and experienced lower

anxiety, depression, and diseases. Moreover, the results of Ellison et al. (21) showed that paying attention to religion and praying can decrease the detrimental effects of diseases and anxiety. Maton (22), in a research report, indicated that spiritual support created due to the relationship with God decreased the effects of fundamental stressful situations and had significant positive impacts on depression and levels of adjustment and self-esteem. Studies have also shown that the quality of the image of God can affect the formation of self-concept and body image. In another study, Ai et al. (23) demonstrated that patients who had stronger religious beliefs and applied more positive coping strategies such as forgiveness and search for a spiritual connection with God in their daily lives recovered more quickly and had a better mental health. People expect religion to convert their unsatisfactory condition into a missing optimal condition and remove the undesirability of the status quo. Religion aids people to deal with their difficulties easily. By accepting religion as an important factor playing a role in people's lives, it can become a source of individuals' behaviors and personality characteristics, and its impacts on moderating stress and mental and physical health can be examined. Professionals working in the field of mental health have paid little attention to the role of religion in preventing diseases and treating them. On the other hand, the acquisition and application of the concept of God in various human groups are of significant importance for most psychologists, researchers, and religious experts. Given the importance of the issue, the present study aimed at examining and comparing religious orientation and perception of God in addicts and non-addicts.

## 2. Methods

This was a descriptive study with a casual-comparative design. The statistical population of this study included all self-introduced addicts in Zahedan. The sample included 154 addicts who referred to the addiction treatment centers in Zahedan in 2015, and selected using convenience sampling method. In this study, 154 normal individuals with no history of drug addiction, whose age, marital status, and level of education were relatively close to those of the addicts, were also selected. After obtaining the participants' consent to take part in this study, they were ensured that their information would be kept confidential and that the obtained data would be analyzed anonymously as a group. To conduct this study, the participants, respectively, completed the Allport religious orientation scale (1950) and the Lawrence perception of God index (1997). These tests were not time-limited. A total of 154 questionnaires were collected and used for the final analysis. The mean

age and standard deviation of addicts were 29.18 and 5.20 and the mean age and standard deviation of non-addicts were 28.21 and 5.13, respectively. The age range was 20 to 40 years.

### 2.1. Materials

The materials used in the current study included the Allport religious orientation scale and the Lawrence perception of God index.

The Allport religious orientation scale (Intrinsic and Extrinsic): This scale contains 20 items among which 11 relate to the extrinsic and the other 9 associate with the intrinsic religious orientation. In 1963, Feagin (24) designed a 21-item scale that along with all items considered in the Allport Religious Orientation Scale included an additional item, which has a high correlation (0.16) with the extrinsic religious orientation. Since then, this scale has been used more frequently. According to a study conducted by Allport, the correlation between the items related to the intrinsic religious orientation and those associated with the intrinsic religious orientation was 0.21. The scoring was based on a Likert-type scale, ranging from totally disagree (1) to totally agree (5).

The Lawrence perception of God index: This index includes 72 items and 6 subscales (presence, challenge, acceptance, benevolence, impression, and providence). The reliability of the Perception of God Index was evaluated by its designer, which was 0.94, 0.86, 0.91, 0.92, 0.92, and 0.91 for presence, challenge, benevolence, impression, providence and the whole scale, respectively. This index is scored based on a 4-point Likert-type scale, ranging from totally agree to totally disagree. To obtain a participant's test score, the scores related to all items should be added together. The highest score is 288 and the lowest is 72. After obtaining the participants' consent to take part in this study and collecting the data, the obtained data were analyzed using SPSS22. Both descriptive statistics including the mean and standard deviation and inferential statistics including the multivariate analysis of variance used to examine the differences were applied.

### 3. Results

To determine the differences in the religious orientation, the multivariate analysis of variance was used. Considering the religious orientation, these results indicated a significant difference (Wilks' Lambda = 0.676,  $F = 8.625$ ). To examine the patterns of this difference, the analysis of variance was performed (Tables 1 and 2).

As Table 2 demonstrates, considering the religious orientation, there was a significant difference between the 2

**Table 1.** The Studied Descriptive Statistics Demonstrated Separately for Each Group<sup>a</sup>

| Variables                        | Addicts        | Non-Addicts    |
|----------------------------------|----------------|----------------|
| <b>Intrinsic orientation</b>     | 31.43 ± 6.71   | 27.62 ± 6.17   |
| <b>Extrinsic orientation</b>     | 18.54 ± 5.35   | 20.17 ± 5.78   |
| <b>Presence</b>                  | 31.93 ± 3.62   | 32.16 ± 2.51   |
| <b>Challenge</b>                 | 30.47 ± 2.13   | 32.15 ± 4.25   |
| <b>Acceptance</b>                | 31.62 ± 3.72   | 32.14 ± 4.06   |
| <b>Benevolence</b>               | 31.41 ± 3.55   | 32.46 ± 3.21   |
| <b>Impression</b>                | 29.65 ± 2.43   | 30.25 ± 4.56   |
| <b>Providence</b>                | 32.52 ± 3.22   | 31.45 ± 3.28   |
| <b>Overall Perception of God</b> | 187.61 ± 14.23 | 190.32 ± 15.65 |

<sup>a</sup>Values are expressed as mean ± standard deviation.

groups. The descriptive statistics indicated that the addicts gained higher scores on the extrinsic religious orientation; however, the non-addicts obtained higher scores on the intrinsic religious orientation.

Moreover, to determine the differences in the perception of God and its subscales, the multivariate analysis of variance was used. Considering the perception of God, the results revealed a significant difference (Wilks' Lambda = 0.796,  $F = 4.605$ ). To examine the patterns of this difference, the analysis of variance was applied (Table 3).

As the above table demonstrates, considering the perception of God and its subscales, except providence, there were significant differences between the 2 groups. The descriptive statistics indicated that the non-addicts obtained higher scores on the mentioned subscales.

### 4. Discussion

This study aimed at comparing religious orientation and perception of God in addicts and non-addicts. The results of the current study revealed a significant difference between addicts and non-addicts in religious orientation. The addicts had more extrinsic and the non-addicts had more intrinsic religious orientation. The results of this study are in line with those of Navara and James (25), who demonstrated that people who gained higher scores on the extrinsic religious orientation experienced higher levels of stress; however, those who obtained higher scores on the intrinsic religious orientation, experienced lower levels of stress. Some other studies revealed the deterrent effects of religion on drug abuse and enhancing mental health (26-30). Religious indicators (as an instance, being a member of a religious sect and participating in religious rituals) were inversely related to addictive drugs and alcohol abuse (31). Utilizing spiritual beliefs that are

**Table 2.** The Results of Analysis of Variance Conducted to Compare Religious Orientation in the 2 Groups

| Variables             | Sum of Squares | df | Mean of Squares | F     | Sig   |
|-----------------------|----------------|----|-----------------|-------|-------|
| Intrinsic Orientation | 96.23          | 1  | 96.23           | 11.39 | 0.000 |
| Extrinsic Orientation | 72.04          | 1  | 72.04           | 9.33  | 0.000 |

**Table 3.** The Results of Analysis of Variance Conducted to Compare the Perception of God in the 2 Groups

| Variables         | Sum of Squares | df | Mean of Squares | F     | Sig   |
|-------------------|----------------|----|-----------------|-------|-------|
| Presence          | 46.32          | 1  | 46.32           | 3.45  | 0.031 |
| Challenge         | 143.81         | 1  | 143.81          | 8.45  | 0.004 |
| Acceptance        | 79.013         | 1  | 79.013          | 5.14  | 0.020 |
| Benevolence       | 122.67         | 1  | 122.67          | 9.22  | 0.002 |
| Impression        | 174.21         | 1  | 174.21          | 12.41 | 0.000 |
| Providence        | 55.17          | 1  | 55.17           | 3.02  | 0.083 |
| Perception of God | 1240.013       | 1  | 1240.013        | 5.83  | 0.019 |

the main core of a religion is highly important in decreasing tendency towards drug abuse (32, 33). Additionally, with regard to the perception of God and subscales of presence, challenge, acceptance, benevolence, and impression, the results revealed significant differences between the 2 groups. However, considering the subscale of providence, no significant difference was found between the 2 groups. These findings demonstrated that addicts, compared to non-addicts, had a stronger perception of God. These results are consistent with the results of Flannelly, Galek, Ellison, and Koenig (34), who concluded that people with a positive mental image of God obtained lower scores on various damages compared to others. It seems that secure perception of God gives people confidence in encountering the current and future challenges (35). People who have such a perception of God value themselves and believe that God loves them despite their mistakes and that God is the acceptor of repentance, available, and helpful and answers their wishes and prayers (36). The effective mental therapies in which the religious and spiritual issues are considered showed that along with improving patients' mental problems, their image of God converted into a more positive image. In addition, after psychotherapy, the patients regarded God as someone benevolent, friendly and supportive (37). People can decide on everything and there are practically no limits in life for anyone. That is why people are responsible for their actions. Addiction puts some distance between addicts and the universe. The addicts make decisions and behave in a way that they practically close the door of comfort to themselves. In general, it can be stated that people with internal religious orienta-

tion are more flexible, have a high level of self-awareness, are able to deal with problems and pains, and can overcome their issues. Through providing a set of behaviors and a special lifestyle, religion, as a defensive shield, can protect people from harmful factors and environmental stressors. Religious people have features including inner peace, joy, constructive hope, and positive energy. In this line, people who have intrinsic religious orientation are eager to explore the world through which they can find God. Therefore, those who are more religious are more resistant to drug abuse. In other words, the weakness of religious values can make people more vulnerable to drug addiction. Human understanding of God and people's life style play a role in individual and social deportments. People who have a positive perception of God do not get confused with failures, and whenever they have to deal with a failure, their inner peace remains unchanged. In fact, it can be noted that tendency towards drug abuse suggest a kind of predicament and one of the main causes of this type of predicament is ignorance of God. People are looking for ways to link their lives with spirituality and this link with spirituality aids them to connect with God in all aspects of their lives. Aimlessness in life underlies addiction. People who lost their purpose in life cannot find the right path and they, consequently, take refuge in addiction as a method to escape this confusion. According to existential psychologists, when dealing with questions related to the meaning of life, everyone finds unique answers. When such questions create turmoil and concerns in humans, these concerns create a sense of emptiness in humans' life. A person who reached emptiness deals with extreme lev-

els of pleasure seeking, which creates a great tendency towards drug addiction. Indeed, one aims to compensate for an unsatisfied need with indulging in another need.

#### 4.1. Conclusions

People who have an intrinsic religious orientation and a positive perception of God are more resistant to drug addiction. In other words, there is an extraordinary force in faith and truth in God, which gives people a special spiritual strength and aids them to bear daily life difficulties.

#### 4.2. Limitations

A large number of questions related to the perception of God index may affect the answers provided by the addicts. Moreover, the statistical population and participants of this study were limited to Zahedan; therefore, when generalizing the obtained results to other cities in Iran, caution should be taken.

#### 4.3. Recommendations

Addicts do not have strong characters to face the real world. The dreams with which addicts encounter leads them to deny the real cause of their addiction and to falsely try to fill the void they feel. As soon as the emptiness is resolved, the person can move in the right path and give a meaning to his/her life. Therefore, not only should detoxification and renunciation of drugs be considered, but also a variety of psychotherapeutic techniques including family therapy and spiritual and religious therapy should be applied.

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### References

- Galanter M. Innovations: alcohol & drug abuse: spirituality in Alcoholics Anonymous: a valuable adjunct to psychiatric services. *Psychiatr Serv*. 2006;**57**(3):307-9. doi: [10.1176/appi.ps.57.3.307](https://doi.org/10.1176/appi.ps.57.3.307). [PubMed: [16524986](https://pubmed.ncbi.nlm.nih.gov/16524986/)].
- Siegel LJ, Senna JJ. Juvenile delinquency: Theory, practice, and law. HeinOnline; 1981.
- Koenig HG. Religion and older men in prison. *Int J Geriatric Psychiatry*. 1995;**10**(3):219-30. doi: [10.1002/gps.930100308](https://doi.org/10.1002/gps.930100308).
- Boudreaux E, Catz S, Ryan L, Amaral-Melendez M, Brantley PJ. The Ways of Religious Coping Scale: Reliability, Validity, and Scale Development. *Assessment*. 2016;**2**(3):233-44. doi: [10.1177/1073191195002003004](https://doi.org/10.1177/1073191195002003004).
- Allport GW, Ross JM. Personal religious orientation and prejudice. *J Pers Soc Psychol*. 1967;**5**(4):432.
- Gu X, Backman B, Coates PJ, Cullman I, Hellman U, Lind L, et al. Exclusion of p63 as a candidate gene for autosomal-dominant amelogenesis imperfecta. *Acta Odontol Scand*. 2006;**64**(2):111-4. doi: [10.1080/00016350500443206](https://doi.org/10.1080/00016350500443206). [PubMed: [16546853](https://pubmed.ncbi.nlm.nih.gov/16546853/)].
- Lawrence RT. Measuring the image of God: The God image inventory and the God image scales. *J Psychol Theol*. 1997;**25**(2):214-26.
- Hyde KE. Religion in childhood and adolescence: A comprehensive review of the research. Religious Education Press; 1991.
- Spilka B, Shaver P, Kirkpatrick LA. A General Attribution Theory for the Psychology of Religion. *J Sci Stud Religion*. 1985;**24**(1):1. doi: [10.2307/1386272](https://doi.org/10.2307/1386272).
- Granqvist P. Building a bridge between attachment and religious coping: tests of moderators and mediators. *Ment Health Religion Culture*. 2005;**8**(1):35-47. doi: [10.1080/13674670410001666598](https://doi.org/10.1080/13674670410001666598).
- Carver CS, Scheier MF, Weintraub JK. Assessing coping strategies: a theoretically based approach. *J Pers Soc Psychol*. 1989;**56**(2):267-83. [PubMed: [2926629](https://pubmed.ncbi.nlm.nih.gov/2926629/)].
- Nonnemaker JM, McNeely CA, Blum RW, National Longitudinal Study of Adolescent H. Public and private domains of religiosity and adolescent health risk behaviors: evidence from the National Longitudinal Study of Adolescent Health. *Soc Sci Med*. 2003;**57**(11):2049-54. [PubMed: [14512236](https://pubmed.ncbi.nlm.nih.gov/14512236/)].
- Gartner J, Larson DB, Allen GD. Religious commitment and mental health: A review of the empirical literature. *J Psychol Theol*. 1991.
- Marsiglia FF, Kulis S, Nieri T, Parsai M. God forbid! Substance use among religious and non-religious youth. *Am J Orthopsychiatry*. 2005;**75**(4):585-98. doi: [10.1037/0002-9432.75.4.585](https://doi.org/10.1037/0002-9432.75.4.585). [PubMed: [16262516](https://pubmed.ncbi.nlm.nih.gov/16262516/)].
- Robinson EAR, Cranford JA, Webb JR, Brower KJ. Six-month changes in spirituality, religiousness, and heavy drinking in a treatment-seeking sample. *J Stud Alcohol Drugs*. 2007;**68**(2):282-90.
- Wills TA, Yaeger AM, Sandy JM. Buffering effect of religiosity for adolescent substance use. *Psychol Addict Behav*. 2003;**17**(1):24-31. [PubMed: [12665078](https://pubmed.ncbi.nlm.nih.gov/12665078/)].
- Regnerus MD, Elder GH. Religion and vulnerability among low-risk adolescents. *Soc Sci Res*. 2003;**32**(4):633-58.
- Galanter M, Dermatis H, Bunt G, Williams C, Trujillo M, Steinke P. Assessment of spirituality and its relevance to addiction treatment. *J Subst Abuse Treat*. 2007;**33**(3):257-64. doi: [10.1016/j.jsat.2006.06.014](https://doi.org/10.1016/j.jsat.2006.06.014). [PubMed: [17574800](https://pubmed.ncbi.nlm.nih.gov/17574800/)].
- Bradshaw M, Ellison CG, Flannelly KJ. Prayer, God imagery, and symptoms of psychopathology. *J Sci Stud Religion*. 2008;**47**(4):644-59.
- Kirkpatrick LA, Shaver PR. An Attachment-Theoretical Approach to Romantic Love and Religious Belief. *Pers Soc Psychol Bull*. 2016;**18**(3):266-75. doi: [10.1177/0146167292183002](https://doi.org/10.1177/0146167292183002).
- Ellison CG, Burdette AM, Hill TD. Blessed assurance: Religion, anxiety, and tranquility among US adults. *Soc Sci Res*. 2009;**38**(3):656-67.
- Maton KI. The Stress-Buffering Role of Spiritual Support: Cross-Sectional and Prospective Investigations. *J Sci Stud Religion*. 1989;**28**(3):310. doi: [10.2307/1386742](https://doi.org/10.2307/1386742).
- Ai AL, Park CL, Huang B, Rodgers W, Tice TN. Psychosocial mediation of religious coping styles: a study of short-term psychological distress following cardiac surgery. *Pers Soc Psychol Bull*. 2007;**33**(6):867-82. doi: [10.1177/0146167207301008](https://doi.org/10.1177/0146167207301008). [PubMed: [17483394](https://pubmed.ncbi.nlm.nih.gov/17483394/)].
- Feagin JR. Prejudice and Religious Types: A Focused Study of Southern Fundamentalists. *J Sci Stud Religion*. 1964;**4**(1):3. doi: [10.2307/1385200](https://doi.org/10.2307/1385200).
- Navara GS, James S. Acculturative stress of missionaries: Does religious orientation affect religious coping and adjustment? *Int J Inter-cultur Relat*. 2005;**29**(1):39-58.
- Brown TL, Parks GS, Zimmerman RS, Phillips CM. The role of religion in predicting adolescent alcohol use and problem drinking. *J Stud Alcohol*. 2001;**62**(5):696-705. [PubMed: [11702809](https://pubmed.ncbi.nlm.nih.gov/11702809/)].
- Wallace JJ, Forman TA. Religion's role in promoting health and reducing risk among American youth. *Health Educ Behav*. 1998;**25**(6):721-41. doi: [10.1177/109019819802500604](https://doi.org/10.1177/109019819802500604). [PubMed: [9813744](https://pubmed.ncbi.nlm.nih.gov/9813744/)].

28. Takyi BK. Religion and women's health in Ghana: Insights into HIV/AIDS preventive and protective behavior. *Soc Sci Med.* 2003;**56**(6):1221-34.
29. Ball J, Armistead L, Austin B. The relationship between religiosity and adjustment among African-American, female, urban adolescents. *J Adolescence.* 2003;**26**(4):431-46. doi: [10.1016/S0140-1971\(03\)00037-X](https://doi.org/10.1016/S0140-1971(03)00037-X).
30. Maselko J, Kubzansky LD. Gender differences in religious practices, spiritual experiences and health: results from the US General Social Survey. *Soc Sci Med.* 2006;**62**(11):2848-60. doi: [10.1016/j.socscimed.2005.11.008](https://doi.org/10.1016/j.socscimed.2005.11.008). [PubMed: [16359765](https://pubmed.ncbi.nlm.nih.gov/16359765/)].
31. Miller L, Davies M, Greenwald S. Religiosity and substance use and abuse among adolescents in the National Comorbidity Survey. *J Am Acad Child Adolesc Psychiatry.* 2000;**39**(9):1190-7. doi: [10.1097/00004583-200009000-00020](https://doi.org/10.1097/00004583-200009000-00020). [PubMed: [10986817](https://pubmed.ncbi.nlm.nih.gov/10986817/)].
32. George LK, Larson DB, Koenig HG, McCullough ME. Spirituality and Health: What We Know, What We Need to Know. *J Soc Clin Psychol.* 2000;**19**(1):102-16. doi: [10.1521/jscp.2000.19.1.102](https://doi.org/10.1521/jscp.2000.19.1.102).
33. Markstrom CA. Religious involvement and adolescent psychosocial development. *J Adolesc.* 1999;**22**(2):205-21. doi: [10.1006/jado.1999.0211](https://doi.org/10.1006/jado.1999.0211). [PubMed: [10089120](https://pubmed.ncbi.nlm.nih.gov/10089120/)].
34. Flannelly KJ, Galek K, Ellison CG, Koenig HG. Beliefs about God, psychiatric symptoms, and evolutionary psychiatry. *J Religion Health.* 2010;**49**(2):246-61.
35. Sim TN, Loh BSM. Attachment to God: Measurement and Dynamics. *J Soc Pers Relat.* 2016;**20**(3):373-89. doi: [10.1177/0265407503020003006](https://doi.org/10.1177/0265407503020003006).
36. Kirkpatrick LA. In: Handbook of attachment: Theory, research, and clinical applications. Cassidy Shaver J, editor. ; 1999. pp. 803-22. Attachment and religious representations and behavior.
37. Tisdale TC, Key TL, Edwards KJ, Brokaw BF. Impact of treatment on God image and personal adjustment, and correlations of God image to personal adjustment and object relations development. *J Psychol Theol.* 1997.