## **Original Article**

# Borderline Personality Disorder and Religion: A perspective from a Muslim country

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Sina Hafizi MD Tehran University of Medical Sciences No7, Al-e-Ahmad Highway Tehran, Iran. P.O. Box: 14395-578 Tel: +98(21)88630227 Fax: +98(21)88003539 Email: Sina.Hafizi@gmail.com **Background**: There are still many unanswered questions about psychological and social factors that may affect the development and treatment of borderline personality disorder (BPD). Religion/spirituality (R/S) is a factor that could influence the lives of people with BPD.

**Objective:** The aim of this study was to evaluate the relationship between religiosity, religious attendance and borderline personality traits.

**Method:** Four hundred twenty- nine medical students of Tehran University of medical sciences participated in this study, and their information on demographics, responses to the Duke University Religion Index (DUREL), and the Structured Clinical Interview for DSM-IV Axis II Disorders (the self-administered section on BPD) was obtained .

**Results:** The total score of SCID-II questionnaire and the number of positive borderline personality characteristics on the SCID-II were inversely related with the DUREL total score and individual DUREL items. Those with higher levels of borderline personality traits had lower total DUREL score and lower DUREL subscale scores.

**Conclusion:** Religiosity and religious attendance are negatively correlated with borderline personality traits, especially with anger, instability of mood, feeling of emptiness and self-harming behaviors. These findings are important for understanding the causes of BPD and in developing treatments for this disorder.

**Keywords:** Borderline Personality Traits, Islam, Spirituality

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 $\mathbf{H}_{ ext{igh}}$  rates of suicidal ideation, self-injury behaviors and instability in mood and relationships are significant characteristics of borderline personality disorder (BPD) (1). BPD is a common personality disorder with a low remission rate, and both genetic and environmental factors have been shown to interact in the genesis of this disorder (2, 3). The chronic and severe nature of BPD, along with its relatively high prevalence, result in individuals with BPD frequently presenting for mental health services, i.e., their 'treatment seeking' behavior is one reason for the increasing attention to this disorder (4-6). It is not surprising, then, that of all the evaluation studies in psychiatry, most relate to BPD (7, 8). There are still many unanswered questions about the psychological and social factors that affect the development, treatment and outcome of this disorder

Religion/spirituality (R/S) is a factor that could influence the mental health and well-being of those with BPD, given the growing evidence of a relationship between R/S and mental health (9). The terms "religion" and "spirituality" are sometimes used interchangeably in the literature. In contrast to religion which could be defined as established, organized beliefs and behaviors concerning the sacred, spirituality does not have a precise and established definition, especially in studies of mental health (10, 11). The present study addresses this rather confusing use of terminology by focusing on religiosity and religious attendance.

Studies on relationship between R/S and psychiatric disorders have demonstrated that R/S is related to less depression and anxiety, fewer attempts for selfdestructive behaviors (e.g., self-harm and suicidal behaviors), lower risk of substance abuse and better mental health overall (12-14). However, there are few studies on the relationship between BPD and R/S, although two studies have reported a negative correlation (15, 16). Studies that assessed the relationship between religious attendance and borderline personality traits using structured psychiatric interviews are lacking. In the current study, the SCID-II (Structured Clinical Interview for DSM-IV Axis II personality disorders) questionnaire (self-report version) for BPD was used to assess borderline personality traits.

This survey was conducted in a sample of Iranian medical students. Although recently studies have shown that research on the relationship between R/S and mental health is increasing in Middle East countries (17), most research has been conducted in western countries with mostly Christian populations (18). Due to the important influence that different cultures and religions could have on mental health, such studies are needed to help generalize the results (19).

The studies on R/S and mental health are usually conducted in community-based populations or in medical or psychiatric patients. In psychiatric and medical populations, the results could be influenced by co-morbid psychiatric or medical disorders. Studies of community-dwelling populations have broader generalizability and have the potential to examine the relationship between R/S and psychological traits (short of actual disorder themselves).

In this study, we sought to assess the relationship between religious involvement and borderline personality traits in a healthy community-dwelling population of Muslim medical students in Iran. We hypothesized that there would be an inverse relation between borderline personality traits and religious involvement.

## **Material and Methods**

#### Participants

Medical students attending Tehran University of Medical Sciences (TUMS) medical school in Tehran, Iran, participated in this study. The questionnaire was administered to 450 students, with a response rate of 95.3% (n = 429). This study was approved by the institutional review board of TUMS.

#### Procedure:

Information on age, marital status, religious affiliation, training level (years of attendance at medical school) was collected and the following measures were administered.

Duke University Religion Index (DUREL): DUREL is a widely used measure of religiosity and religion attendance (20). It is a 5-item questionnaire that consists of three subscales: Organizational religious activity (ORA), non-organizational religious activity (NORA) and intrinsic religiosity (IR). The DUREL asks the respondents to rate their religiousness and religious attendance from 1 to 6 for ORA (How often do you attend church or other religious meetings?) and NORA (How often do you spend time in private religious activities, such as prayer, meditation or Bible study?) and from 1 to 5 for IR (In my life, I experience the presence of the Divine (i.e., God)./ My religious beliefs are what really lie behind my whole approach to life./ I try hard to carry my religion over into all other dealings in life). The DUREL has a total score of 5 to 27. Previously, studies have shown that the DUREL is a valid measure with satisfactory internal consistency and high test-retest reliability (21, 22). The Cronbach's alpha coefficient was 0.86 for the DUREL items in this study. In this study, we used FDUREL, a translated and culturally validated Farsi version of the DUREL (23).

SCID-II (self-report version): The self-report version of the Structured Clinical Interview for DSM-IV Borderline Personality Disorder translated to Farsi was used in this study. This measure consists of 15 yes/no questions (e.g., "Have you often become frantic when you thought that someone you really cared about was going to leave you? ", "Does your relation with people you really care about have lots of extreme ups and downs?", "Have you ever cut, burned, or scratched yourself on purpose?", and "Do you often feel empty inside?"). These questions measure the nine aspects of Borderline Personality Disorder (BPD) according to DSM-IV criteria (24). The total score for the questionnaire was calculated by counting the number of yes answers to the questions giving an overall score of 0 to 15. Diagnostic criteria of BPD and the corresponding items on SCID-II questionnaire are shown in Table 1. The Cronbach's alpha for the SCID-II in this study was 0.78.

Analyses

Descriptive statistics were utilized to describe the general characteristics of the subjects. Spearman's correlation coefficient was used to evaluate the correlation of FDUREL and SCID-II BPD scores. Independent sample *t* test was used to compare "Yes" and "No" responses to SCID-II BPD items on FDUREL items. SPSS version 17.0 (IBM corporation, Armonk, New York) was utilized to analyze the data in this study.

## Results

A total of 429 medical students (65.3% female) with age range of 18 to 30 (mean = 21.64, SD = 2.20) participated in this study. Most of the participants were single (95.1%) and all of them were Shia Muslim .

The SCID-II BPD section score was significantly and negatively correlated with the training level (r = -0.131 and p < 0.01), age (r = -0.141, p = 0.004), ORA (r = -0.123, p = 0.011), NORA (r = -0.171, p < 0.01), IR (r = -0.176, p < 0.01), and DUREL total score (r = -0.182, p < 0.01). After the stratifying participants by gender, the Spearman's correlation coefficients between SCID-II and ORA (rho = -0.164, p < 0.01), NORA (rho = -0.243, p < 0.01), IR (rho = -0.233, p < 0.01) and DUREL total (rho = -0.247, p < 0.01) were larger in females (n = 280).

Further analyses for the relation between the participants' responses to SCID-II items and their religiosity and religious attendance are shown in Table 2.

Participants with instability in interpersonal relationship (according to item number 2 of SCID-II) had significantly lower scores in NORA (p = 0.010) than others without this problem.

#### Table 1: Diagnostic criteria for borderline personality disorder and corresponding items on Structured Clinical Interview for DSM-IV Axis II Disorders

Diagnostic criteria of BPD	SCID-II items	
1 -Frantic efforts to avoid real or imagined abandonment	1	
2 -A pattern of unstable and intense interpersonal relationships characterized by alternating between extremes of idealization and devaluation	2	
3 -Identity disturbance: notably and persistently unstable self-image or sense of self	3, 4, 5, 6	
4 -Impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance misuse, reckless driving, binge eating)	7	
5 -Recurrent suicidal gestures, or threats or self-mutilating behavior	8, 9	
6 -Affective instability caused by a distinct reactivity of mood (e.g., intense episodic		
dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days)	10	
7 -Chronic feelings of emptiness	11	
8 -Inappropriate intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights)	12, 13, 14	
9 -Transient, stress-related paranoid ideation or severe dissociative symptoms	15	

#### Table 2: Relation between Structured Clinical Interview for DSM-IV Axis II Disorders items and Duke University **Religion Index subscales**

SCID –II items	DUREL - subscales	Answer to SCID-II ( <i>SD</i> ) <sup>†</sup>		
		Yes Mean ( <i>SD</i> )	No Mean (SD)	P value
1- Have you often become frantic when you thought that someone	ORA <sup>‡</sup>	2.74(1.55)	2.82(1.66)	.58
you really cared about was going to leave you?	NORA	4.11(2.21)	4.10(2.23)	.98
	ĪR	13.78(3.08)	13.69(3.38)	.76
2- Do your relationships with people you really care about have lots	ORA	2.62(1.54)	2.89(1.64)	.09
of extreme ups and downs?	NORA	3.78(2.24)	4.31(2.18)	.01*
	ĪR	13.45(3.14)	13.91(3.29)	.15
3- Have you all of a sudden changed you sense of who you are and	ORA	2.58(1.50)	2.88(1.65)	.71
where you are headed?	NORA	3.80(2.26)	4.24(2.19)	.05
,	IR	13.40(3.14)	13.89(3.28)	.14
4- Does your sense of who you are often change dramatically?	ORA	2.70(1.51)	2.80(1.63)	.66
	NORA	3.73(2.27)	4.17(2.21)	.12
	IR	13.50(3.01)	13.77(3.29)	.51
5- Are you different with different people or in different situations, so	ORA	2.74(1.72)	2.79(1.58)	.80
that you sometimes don't know who you really are?	NORA	3.73(2.29)	4.20(2.19)	.07
that you contained don't know who you really dro.	IR	12.85(3.31)	13.96(3.19)	.004*
6- Have there been lots of sudden changes in your goals, career	ORA	2.57(1.40)	2.84(1.66)	.13
plans, religious beliefs, and so on?	NORA	3.66(2.20)	4.23(2.21)	.02*
	IR	12.92(3.12)	13.97(3.25)	.004*
7- Have you often done things impulsively?	ORA	2.80(1.64)	2.77(1.60)	.87
	NORA	3.91(2.21)	4.15(2.22)	.36
	IR	13.41(3.09)	13.80(3.28)	.30
8- Have you tried to hurt or kill yourself or threatened to do so?	ORA	2.23(1.32)	2.85(1.63)	.009
	NORA	3.39(2.26)	4.19(2.20)	.009 .015 <sup>*</sup>
	IR	13.00(2.95)	13.82(3.27)	.015
9- Have you ever cut, burned, or scratched yourself on purpose?	ORA	2.84(1.58)	2.77(1.61)	.00
	NORA	3.57(2.33)	4.15(2.21)	.13
	IR	13.57(3.25)	13.74(3.25)	.13
10- Do you have a lot of mood changes?	ORA	2.52(1.47)	2.95(1.68)	.006
	NORA	3.74(2.29)	4.32(2.15)	.008
	IR	13.15(3.19)	14.11(3.24)	.008
11 De vou atten foal amptivingida?	ORA	2.39(1.49)	2.93(1.63)	.003
11- Do you often feel empty inside?	NORA	3.72(2.32)	4.24(2.17)	.002 .029 <sup>*</sup>
	IR	· · ·	· · ·	.029
12- Do you often have temper outbursts or get so angry that lose	ORA	12.78(3.46) 2.80(1.64)	14.09(3.08) 2.76(1.59)	.000
control?	NORA	· · ·	· · ·	
	IR	3.98(2.22) 13.61(3.13)	4.13(2.23) 13.74(3.28)	.53 .71
12. De vou hit needle er throug things when you get engry?	ORA	· · ·	· · ·	.28
13- Do you hit people or throw things when you get angry?		3.11(1.81)	2.76(1.59)	
	NORA	3.80(2.26)	4.12(2.22)	.48
14 De over little things get very engry?	IR	13.80(2.07)	13.72(3.31)	.89
14- Do even little things get you very angry?	ORA	2.58(1.54)	2.93(1.64)	.02
	NORA	3.80(2.25)	4.33(2.18)	.01*
15 When you are under a lat of stress de visu set surs's'surs of	IR	13.16(3.21)	14.15(3.21)	.002
15- When you are under a lot of stress, do you get suspicious of	ORA	2.79(1.57)	2.77(1.65)	.87
to DRA indicates organizational religious activity: NORA pop-organized rel	NORA IR	4.09(2.18)	4.11(2.28)	.92 .26
		13.88(2.85)	13.53(2.65)	.20

<sup>†</sup> ORA indicates organizational religious activity; NORA non-organized religious activity; IR intrinsic religiosity. <sup>‡</sup> The table presents the results of analyses to assess relationship between religion and BPD scores. The *t* test has been used to compare the mean difference of different religiosity subscales of DUREL of two samples (Yes and No respondents).

Subjects with dissociation and paranoid ideation (according to item number 5 of SCID-II) had significantly lower scores in IR (p = 0.004) than others. Participants with identity problem (according to item number 6 of SCID-II) had significantly lower scores in NORA (p = 0.020) and IR (p = 0.004) than others. Participants with suicidal and self-harm ideation (according to item number 8 of SCID-II) had significantly lower scores in ORA (p = 0.009) and NORA (p = 0.015) than others without this problem. Subjects with mood instability (according to item number 10 of SCID-II) and feeling of emptiness (according to item number 11 of SCID-II) had significantly lower scores on ORA (p = 0.006 and p =0.002, respectively), NORA (p = 0.008 and p = 0.029, respectively) and IR (p = 0.003 and p < 0.01,respectively) and IR than others without this problems. A cut-off of 5 was used to divide the participants into those who met and did not meet diagnostic criteria for BPT (Borderline Personality Traits) (25). Nearly onethird (30.8 %) of the participants met the criteria. The respondents who met the criteria for BPT had significantly higher scores for non-organized religious activity in comparison to those who did not meet the criteria (t = 2.24, p = 0.020).

## Discussion

We assessed the relationship between BPT and religious involvement. The results indicated that the subjects scoring higher on SCID-II borderline personality traits scored significantly lower on religiosity, thus supporting our primary hypothesis. The relationship was stronger for females compared to males. Overall religiosity and religious attendance in particular were negatively correlated with BPT, especially with symptoms of anger, instability of mood, feeling of emptiness and self-harming behaviors.

The results of this study could be interpreted in a variety of ways. The inverse relation between R/S and BPT scores may be due to the potential role that lack of religious beliefs play in the development of BPD. It is well established that religious beliefs are associated with comfort and relief from stress (26), and prior research has shown an important role for early major stress and traumatic events in the development of BPD (27). Religious socialization of children in religious families could help adapting to stress or traumatic events. Another possibility is the role that identity problems play in BPD. Identity is a multi-dimensional concept that includes notions such as role commitment and consistency in behavior (28). Studies have shown that identity problems are more likely to be present in BPD compared to other personality disorders (29). The inverse relationship between R/S and BPD, then, may be due to identity disturbances that could result from a lack of commitment to pro-religious values and norms. Our results show a significant inverse correlation between identity problems and all three dimensions of religiosity (i.e. ORA, NORA, and IR). An alternative explanation for our finding is that BPT may lead to a lessening of religiosity or an exclusion from religious groups because those with such traits fail to conform to conventional behaviors and have turbulent interpersonal relationships that make group involvement difficult.

In a recent similar study (15), researchers found a negative correlation between BPD symptoms and score on the Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being Scale (FACIT-Sp-12). The latter instrument, however, may be confounded with BPD symptoms themselves so these results are difficult to interpret (10).

Suicidal ideation, depression and substance abuse are common characteristics of borderline personality (1, 2). Studies have also found that higher level of R/S is associated with less suicidal ideation and attempts (30), less depression (13, 31) and better treatment outcome for addiction (32). These findings, along with results from the present study, suggest that religious involvement could be an important factor in the etiology, treatment, and prognosis of BPD. Evaluation of the role of R/S in longitudinal studies, and assessment of the attitude of BPD patients toward R/S before and after treatment, and implementing religionbased psychotherapies in the management of BPD could be a useful focus of future research on R/S and BPD (13).

The limitations of this study are its cross-sectional nature, which limits the interpretation of the results in terms of causal relationships. Second, the self-report nature of this study conducted in a highly religious country makes the results subject to social desirability bias. Third, a major limitation of this study is its reliance on self-report. Personality disorder traits are best evaluated using structured interview techniques. Fourth, its failure to measure other personality traits for there is often an overlap and co-morbidity between personality disorders. Our study sample involved medical students, and these results should only be generalized with caution beyond this population.

## Conclusion

Religious involvement is negatively related to a number of the core symptoms of BPD. Further research is needed to understand how this relationship comes about and what it means for the etiology and treatment of BPD.

## References

- Gunderson JG. Clinical practice. Borderline personality disorder. N Engl J Med 2011; 364: 2037-2042.
- Leichsenring F, Leibing E, Kruse J, New AS, Leweke F. Borderline personality disorder. Lancet 2011; 377: 74-84.

- Dereboy C, Güzel HS, Dereboy F, Okyay P, Eskin M. Personality disorders in a community sample in Turkey: Prevalence, associated risk factors, temperament and character dimensions. International Journal of Social Psychiatry. 2013.
- Coid J, Yang M, Tyrer P, Roberts A, Ullrich S. Prevalence and correlates of personality disorder in Great Britain. Br J Psychiatry 2006; 188: 423-431.
- Tyrer P, Mitchard S, Methuen C, Ranger M. Treatment rejecting and treatment seeking personality disorders: Type R and Type S. J Pers Disord 2003; 17: 263-268.
- Borschmann R , Moran P. Crisis management in borderline personality disorder. Int J Soc Psychiatry 2011; 57: 18-20.
- Duggan C, Huband N, Smailagic N, Ferriter M, Adams C. The use of pharmacological treatments for people with personality disorder: a systematic review of randomized controlled trials. Personality and Mental Health. 2008;2(3):119-70.
- 8. Hafizi S. Sleep and borderline personality disorder: A review. Asian Journal of Psychiatry 2013; 6: 452–459.
- Koenig HG. Commentary: why do research on spirituality and health, and what do the results mean? J Relig Health 2012; 51: 460-467.
- Koenig HG. Concerns about measuring "spirituality" in research. J Nerv Ment Dis 2008; 196: 349-355.
- 11. Hafizi S, Rosmarin DH, Koenig HG. Brief Trust/Mistrust in God Scale: psychometric properties of the Farsi version in Muslims. Mental Health, Religion & Culture 2014; 17: 415-420.
- 12. Koenig HG. Research on religion, spirituality, and mental health: a review. Can J Psychiatry 2009; 54: 283-291.
- Koenig HG. Religious versus Conventional Psychotherapy for Major Depression in Patients with Chronic Medical Illness: Rationale, Methods, and Preliminary Results. Depress Res Treat 2012; 2012: 460419.
- 14. Ediund MJ, Harris KM, Koenig HG, Han X, Sullivan G, Mattox R, et al. Religiosity and decreased risk of substance use disorders: is the effect mediated by social support or mental health status? Soc Psychiatry Psychiatr Epidemiol 2010; 45: 827-836.
- Sansone RA, Kelley AR, Forbis JS. Religion/spirituality status and borderline personality symptomatology among outpatients in an internal medicine clinic. Int J Psychiatry Clin Pract 2012; 16: 48-52.
- Snyder S. Demography of psychiatric patients with borderline personality traits. Psychopathology. 1985.
- Hafizi S, Koenig HG, Arbabi M, Pakrah M, Saghazadeh A. Attitudes of Muslim Physicians and Nurses Toward Religious Issues. J Relig Health 2014; 53: 1374-1381.
- 18. Koenig HG, Zaben FA, Khalifa DA. Religion, spirituality and mental health in the West and the Middle East. Asian J Psychiatr 2012; 5: 180-182.

- Dein S, Cook CC, Koenig H. Religion, spirituality, and mental health: current controversies and future directions. J Nerv Ment Dis 2012; 200: 852-855.
- Koenig HG, Büssing A. The duke university religion index (DUREL): A five-item measure for use in epidemiological studies. Religions 2010; 1: 78-85.
- Storch EA, Roberti J W, Heidgerken AD, Storch JB, Lewin AB, Killiany EM, et al. The duke religion index: A psychometric investigation. Pastoral Psychology. 2004; 53:175-81.
- 22. Storch EA, Strawser MS, Storch JB. Two-week test-retest reliability of the Duke Religion Index. Psychol Rep 2004; 94: 993-994.
- 23. Hafizi S, Memari AH, Pakrah M, Mohebi F, Saghazadeh A, Koenig HG. The Duke University Religion Index (DUREL): validation and reliability of the Farsi version. Psychol Rep 2013; 112: 151-159.
- 24. First MB, Gibbon M. User's guide for the structured clinical interview for DSM-IV axis II personality disorders: SCID-II: Amer Psychiatric Pub Incorporated; 1997.
- Benazzi F. Borderline personality-bipolar spectrum relationship. Prog Neuropsychopharmacol Biol Psychiatry 2006; 30: 68-74.
- Koenig HG. Spirituality and depression: a look at the evidence. South Med J 2007; 100: 737-739.
- Van der Kolk BA, Hostetler A, Herron N, Fisler RE. Trauma and the development of borderline personality disorder. Psychiatr Clin North Am 1994; 17: 715-730.
- 28. Erikson EH. Identity: Youth and crisis: WW Norton & Company; 1994.
- 29. Wilkinson-Ryan T, Westen D. Identity disturbance in borderline personality disorder: an empirical investigation. Am J Psychiatry 2000; 157: 528-541.
- Spencer RJ, Ray A, Pirl WF, Prigerson HG. Clinical correlates of suicidal thoughts in patients with advanced cancer. Am J Geriatr Psychiatry 2012; 20: 327-336.
- Miller L, Wickramaratne P, Gameroff MJ, Sage M, Tenke CE, Weissman MM. Religiosity and major depression in adults at high risk: a tenyear prospective study. Am J Psychiatry 2012; 169: 89-94.
- Kelly JF, Pagano ME, Stout RL , Johnson SM. Influence of religiosity on 12-step participation and treatment response among substancedependent adolescents. J Stud Alcohol Drugs 2011; 72: 1000-1011.