

Personality Traits and their Impacts on the Mental Health of Battered Women

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ABSTRACT

Background & aim: Domestic violence is an individual and social damage, which is affected by personality traits and can cause a crisis for the mental health of individuals; thus, the present study aimed to investigating personality traits and its impact on mental health of battered women in Tehran, 2013.

Methods: In this cross-sectional study, 196 married women who referred to Tehran Legal Medicine Center in 2013 were selected based on simple sampling method, and then were studied based on General Health Questionnaire (GHQ-28) and the NEO Five Factor Inventory (NEO-FFI). In this cross-sectional study, the data were analyzed with the Pearson Correlation Test using the SPSS-16.

Results: The present study revealed that statistically mental health has a significant and positive correlation with neuroticism personality trait ($r=0.318$, $P<0.001$), while it has a significant but negative correlation with extraversion personality trait ($r=-0.280$, $P<0.001$), agreeableness ($r=-0.201$, $P=0.002$), and conscientiousness ($r=-0.265$, $P=0.001$).

Conclusion: Although mental disorder on the part of battered women paves the way for violence against them, learning personality traits along with individual and social factors among women can significantly contribute to prevention, screening and necessary treatments by experts and authorities.

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Introduction

The significance of recognizing the risk factors associated with domestic violence (e.g., individual, mental, social, and behavioral factors) has been noted in many previous studies. These factors include demographic characteristics, personality traits, stressors, and social tension (1).

On the other hand, individual differences in handling different circumstances can be due to personal and genetic variations, which greatly impact one's thoughts, emotions, and behaviors including apprehensive and anxious tendencies (2). In fact, personality as a psychological variant can affect all human behaviors at both personal and social levels (3). Costa and McCrae explained individual differences by five major personality traits: neuroticism, extraversion, openness, agreeableness, and conscientiousness (4). Since

domestic violence is a result of inefficient interactions between two individuals cohabiting in a household, characteristics of both the abuser and victim should be noted. Therefore, evaluation of personality traits, as well as other mental health factors involved in violence, is of high significance (5).

Many studies have suggested a negative correlation between mental health and personality traits (6), while numerous studies have shown a correlation between general health subscales and personality traits (7, 8). Since previous research has shown a significant relationship between mental health indices and various personal characteristics (9, 10), awareness of these traits and screening of related issues may help resolve marital conflicts;

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moreover, it can be helpful in the prevention of domestic violence. The present study aimed to determine the personality traits of battered women and evaluate the impacts of these characteristics on women's mental health.

Materials and Methods

This cross-sectional study was carried out during February-April 2013. The study sample included 196 married women, referring to South Forensic Medicine Center in Tehran in 2013. In this study, simple sampling method was applied and initial data were obtained using a demographic questionnaire, General Health Questionnaire-28 (GHQ-28), and NEO Five-Factor Personality Inventory (NEO-FFI).

The samples were entered to the study after observing ethical considerations and obtaining written informed consents. The inclusion criteria were as follows: 1) Iranian nationality; 2) no prior history of chronic mental or physical diseases in women or their spouses; and 3) no psychotropic drug abuse, cigarette smoking, or alcohol consumption in women or their spouses.

The demographic questionnaire elicited information on factors which may be related to spousal violence including age, level of education, and economic status.

The NEO-FFI questionnaire contains 60 items (12 items per domain) and is used for the rapid evaluation of five major personality traits: neuroticism, extraversion, openness, conscientiousness, and agreeableness. The items were graded using a 5-point Likert scale (0=strongly disagree, 1= disagree, 2= neither agree nor disagree, 3= agree, and 4= strongly agree). The score of each domain ranged from 0 to 48, and the total score was calculated by summing the scores.

The validity of NEO-FFI was confirmed by Costa and McCrae and its reliability was reported as follows: neuroticism= 0.90, extraversion= 0.78, openness= 0.76, agreeableness= 0.86, and conscientiousness= 0.90 (11).

GHQ-28 was used to survey the mental health of the study population. This questionnaire was developed by Goldberg and Hillary in 1979 (12) and consisted of four subscales, each containing seven items. The subscales were as follows: somatic symptoms (items 1-7), anxiety (items 8-14), social dysfunction (items 15-21), and severe depression

(items 22-28).

An independent study by Ebrahimi et al. (2007) evaluated and confirmed the reliability and validity of GHQ-28 in 2007 in Iran. In this study, the cut-off point, sensitivity, specificity, and the total classification error were 24, 0.80, 0.99, and 0.10, respectively. The criterion validity, correlation coefficient, and Cronbach's alpha were reported to be 0.78, 0.90, and 0.97, respectively (14).

In this questionnaire, low scores indicated the individual's well-being and high scores represented unhealthiness or feelings of discomfort. After collecting the data, the questionnaires were coded. Simple Likert scale is considered the best scoring method for this questionnaire (0, 1, 2, and 3). The maximum score was 84 and based on similar studies in Iran, the cut-off point for separating healthy individuals from patients was 24; score 5 was defined as the cut-off point in each subscale. Scores higher than 24 indicated psychiatric disorders, while scores lower than 24 showed good psychosocial status (13, 14).

Data analysis was performed, using SPSS version 16. In order to determine the correlation between quantitative variables, Pearson's correlation coefficient was applied. P-value < 0.05 was considered statistically significant.

Results

The personality traits and general health scores of battered women according to their demographic characteristics are presented in Table 1. As indicated in this table, the maximum and minimum ages of participants were 57 and 18 years, respectively; also, the mean and standard deviation were 29.9 and 6.3 years, respectively. The study findings showed that the highest percentage of studied subjects (52.6%) had high school diplomas. Also, the economic status of most subjects was moderate (48.5%).

As shown in Table 1, a significant association was found between general health scores and women's age ($P=0.006$). Moreover, a significant correlation was found between total personality trait scores and economic status ($P=0.018$). Scheffé post-hoc test results demonstrated that general health scores were significantly lower in 40-year-old subjects (or older), in comparison with participants, aged 21-30 or 31-40 years

Table 1. Total personality traits and total general health scores, according to demographic characteristics of battered women

		N (%)	Total Personality Traits mean ±SD	Total General Health scores mean ±SD
Subjects' age (year)	≤ 20	7(3.6)	130.66±13.82	58.44±8.29
	21-30	97(49.5)	132.48±11.14	57.41±14.52
	31-40	77(39.3)	130.19±11.34	58.92±14.02
	41≤	15(7.6)	125.26±12.10	44.67±13.68
P-value			F=1.982 P=0.118	F=4.280 P=0.006
Subjects' educational level (year)	0-5	18(9.7)	128.21±13.41	60.00±13.66
	6-12	103(52.5)	130.77±11.43	57.18±13.44
	12≤	74(37.8)	132.32±11.03	55.89.00±15.98
Test results			F=1.062 P=0.384	F=0.633 P=0.532
Economic status	Weak	52(26.5)	127.28±11.39	55.94±13.48
	Moderate	95(48.5)	131.48±11.41	55.71±14.47
	Good	49(25.0)	134.42±10.89	60.08±15.069
P-value			F=5.156 P=0.018	F=1.636 P=0.197

Table 2. The correlation between personality traits and general health subscales in battered women

	Total Personality traits		Conscientiousness		Agreeableness		Openness		Extroversion		Neuroticism	
	r	P	R	P	R	P	R	P	r	P	R	P
GHQ												
Somatic symptoms	-0.119	0.096	-0.139	0.052	0.189	0.008	0.008	0.909	-0.192	0.007	0.241	0.551
Anxiety symptoms	-0.188	0.008	-0.238	0.001	-0.226	0.001	0.046	0.525	-0.239	0.001	0.253	0.000
Social dysfunction	0.235	0.001	0.215	0.002	0.179	0.012	0.073	0.309	0.232	0.001	-0.164	0.021
Depression symptoms	-0.211	0.003	-0.265	0.000	-0.201	0.005	0.010	0.887	-0.328	0.000	0.312	0.000
Total general health	-0.162	0.023	-0.227	0.001	-0.216	0.002	0.050	0.485	-0.280	0.000	0.318	0.000

Table 3. Linear regression for general health predictive factors

	Coefficient	Std. error	t	P-value
Personality traits	.186	.090	2.578	0.011
Subjects' age	-.117	1.448	-1.654	.100
Economic status	0.104	1.504	1.379	.170
Subjects' educational level	-0.147	1.690	-1.988	.048

(P=0.015 and P=0.007, respectively). Also, lower scores of personality traits were significantly associated with low economic status (P=0.007).

The relationship between general health subscales and personality traits is indicated in Table 2. According to the obtained results, the subscale of depression had a significant negative correlation with agreeableness (P<0.01), extroversion (P<0.001), and conscientiousness (P<0.001). On the other hand, depression subscale was positively correlated with neuroticism (P<0.01).

The subscale of somatic symptoms had a significant positive correlation with neuroticism

(P<0.01), whereas it was negatively correlated with extroversion (P<0.07) and agreeableness (P<0.08). The anxiety subscale also had a significant positive correlation with neuroticism (P<0.001), while it had a significant negative association with extroversion (P<0.01), agreeableness (P<0.01), and conscientiousness (P<0.01).

Finally, the social functioning subscale had a significant positive correlation with extroversion (P<0.01), conscientiousness (P<0.01), and agreeableness (P<0.05), while it had a significant negative correlation with neuroticism (P<0.05). As the results indicated, openness had no significant relationship with any of general

health indices ($P=0.485$). Table 3 shows that the score of personality traits ($P=0.011$) and women's educational level ($P=0.048$) can predict the general health of battered women.

Discussion

The aim of the present study was to investigate the personality traits of battered women and evaluate the impacts of these characteristics on women's mental health. The study findings revealed that neuroticism had a significant positive correlation with somatic symptoms ($P<0.01$), anxiety ($P<0.001$), and depression symptoms ($P<0.001$).

In a study by Panaghi et al. (2011), which investigated the role of personality traits and demographic characteristics in spousal abuse, neuroticism had the most significant correlation with violence against women (15). Neuroticism predisposes individuals to negative emotions. In fact, this personality trait includes sensitivity to unrealistic belief, poor impulse control, and tendency to experience psychological distress in form of anxiety, anger, depression, embarrassment, hatred, and a range of negative emotions (16).

Therefore, it is not surprising to find a significant positive correlation between neuroticism and somatic symptoms, anxiety, and depression (lack of mental health in general). These results were confirmed by studies by Emamipour et al. (2010), Chalniabloo and Garousi-Farshi (2010), Hosseini-nasab et al. (2009), and Heis and Joseph (2003) (17-20).

The findings of our study revealed that extraversion had a significant negative correlation with somatic symptoms ($P<0.01$), anxiety ($P<0.01$) and depression symptoms ($P<0.001$), while it had a significant positive correlation with social functioning ($P<0.01$). Apparently, extroverted individuals find warm and intimate social relations as a passive way to deal with stress and tension (21). Therefore, they can apply this method to prevent or reduce stress in their marital life and eventually experience less anxiety. Extroverted women with such positive thoughts can think of stressful situations as a challenge; as a result, they experience less domestic violence.

Therefore, based on the abovementioned findings, extraversion is expected to have a

negative correlation with physical health, anxiety, and depression symptoms. Considering the extroverted personality of these individuals, extraversion had a positive correlation with social functioning subscale.

In this regard, Bernard et al. (2005) showed that extraversion is considered as one of the major factors for health (22). As Garousi-Farshi and Soufiani (2008) demonstrated in their studies, extroverted individuals naturally enjoy social support in their intimate relations, communications, and socialization; thus, it appears that these individuals take steps to reduce their anxiety and mental stress and finally improve their own mental, social, and physical health (23).

As our study results indicated, agreeableness had a significant positive correlation with social functioning ($P<0.05$), while it had a significant but negative correlation with somatic symptoms ($P=0.008$), depression symptoms ($P<0.01$), and anxiety ($P<0.01$). Among the most common characteristics of individuals with agreeableness, one can refer to modesty, warmth, empathy, and good will. Individuals with such personal characteristics are agreeable and flexible in dealing with life events (24).

In a study by Ahadi (2008), it was revealed that agreeableness is a great predictor of marital relationship, and as an intrapersonal process, can have significant effects on the quality of marital life (25). These results were congruous with Shakerian's study in 2012, which investigated the role of personality traits and gender in predicting marital adaptability (16).

Moreover, in the present study, conscientiousness was positively correlated with social functioning ($P<0.01$), while it had a significant but negative correlation with depression ($P<0.001$) and anxiety symptoms ($P<0.01$). A study by Jafarnejad et al. (2004) did not indicate a significant relationship between conscientiousness and mental health (26). Overall, individuals with higher scores in conscientiousness are expected to behave more effectively and appropriately in social circumstances (20); these people tend to be orderly, meticulous, efficient, reliable, and logical (21).

Based on the results of the present study and the personality traits of conscientious individuals, one can draw this conclusion that in

facing problems that cause anxiety, depression, and tension in marital life, these people can assess their ability in dealing with problems and fulfill their responsibilities. In society, these individuals are efficient and conscientious while doing their assignments and have a sense of responsibility (24); they build confidence in others and eventually reach their goals.

Nonetheless, the results of this study led us to accept criticisms against personality theories, which claim that personality traits are often poor predictors of behavior. For instance, although an individual may obtain a high score in a certain trait, he/she may not always behave accordingly.

In the present research, a few other limitations were encountered. One limitation was that we could not determine the cause and effect relationship between the evaluated factors. Moreover, the study was restricted to a legal medicine center in south of Tehran. Thus, it is suggested that similar studies be conducted in other legal medicine centers across Tehran and other cities to compare and generalize the findings of this study.

Conclusion

The results of the present study showed that personality traits can be related to the mental and general health of battered women. Therefore, it seems that these traits should be considered in preventive, screening, and management programs.

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References

- Masoudnia E. Relationship between type D personality and its components and general health among students. *Journal of Behavioral Sciences*. 2011; 5(2): 143-149.[Persian].
- Donnellan B, Burt A, Levensky A, Klump L. Genes, personality, and attachment in adults: A multivariate behavioral genetic analysis. *Personality and Social Psychology Bulletin*. 2008; 34(1): 3-16.
- Mahmodaliloo M, Nemati F, Samadirad B. The relationship between personality traits and demographic factors with spouse abuse in men. *Journal of Legal Medicine*. 2010; 16(1): 40-46.[Persian].
- Tiliopoulos N, Pallier G, Coxon A. A circle of traits: A perceptual mapping of the NEO-PI-R. *Personality and Individual Differences*. 2010; 48(1): 34-39.
- Panaghi L, Pirouzi D, Shirinbayan M, Ahmadabadi Z. The Role of Personality and Demographic Traits in Spouse Abuse. *Iranian Journal of Psychiatry and Clinical Psychology*. 2011; 17(2): 126-135.[Persian].
- Lckenhoff E, Sutin R, Ferrucci L, Costa T. Personality traits and subjective health in the later years: The association between NEO-PI-R and SF-36 in advanced age is influenced by health status. *Journal of Research in Personality*. 2008;42(5):1334-1336.
- Baghiani-Moghaddam M, Motlagh Z, Sabzemakan L, Gharlipour- Gharghani Z, Tavassoli E , Shahbazi H. The relationship between personality traits and general health in the students of Yazd University of Medical Science, Yazd, Iran, 2010. *Zahedan Journal of Research in Medicin Sciences*. 2012; 13(10): 38.[Persian].
- Hoseininasab D, Moheb N, Bakhshvar V. The relationship between personality traits with mental health of the pregnant women Tabriz. *Women and Family Studies*.2009; 1(3): 61-73.[Persian].
- Terracciano A, Costa T. Smoking and the five-factor model of personality. *Addiction*. 2004; 99(4): 472-481.
- Moor C, Zimprich D, Schmitt M, Kliegel M. Personality, aging, self-perceptions and subjective health: A mediation model. *International Journal Aging Human Development*. 2006; 63(3):241-257.
- Mahmodaliloo M, Nenati Sogolitape F, Samadirad B. The relationship between personality characteristics and demographic factors with wife abuse in men. *Scientific Journal of Forensic Medicine*. 2010; 16 (1) :40-46.[Persian].
- Goldberg D, Hillier V. A scaled version of the General Health Questionnaire. *Psychological Medicine*. 1979; 9(1): 139-145.
- Behjati Ardekani, Z. Akhondi M, Kamali K, Fazlikhalaf Z, Eskandari S, Ghorbani B. Mental Health Status of Patients Attending Avicenna Infertility Clinic. *Journal of Reproduction & Infertility*. 2010; 11(4): 350. [persian].
- Ebrahimi A, Molavi H, Moosavi G, Bornamanesh A, Yaghobi M. Psychometric Properties and Factor Structure of General Health Questionnaire 28 (GHQ-28) in Iranian Psychiatric Patients. *Journal of Research in Behavioral Sciences*. 2007; 5(1): 5-12. [Persian].
- Panaghi L, Pirouzi D, Shirinbayan M, Ahmadabadi Z. The Role of Personality and Demographic Traits in Spouse Abuse. *Iranian Journal of Psychiatry and Clinical Psychology*. 2011; 17(2): 126-135.[Persian].

16. Shakerian A. The role of personality trait dimensions and gender on predicting marital adjustment. *Journal of Kermanshah University of Medical Sciences*. 2011; 16(1):16-22.[Persian].
17. Emamipur S, Koshki SH, Sabzmejdani P. The relation between personality characteristics and perfectionism with general health of university students. *Journal of Psychological Researches*. 2010; 2(5):95-106.[Persian].
18. Chalabianloo Gh, Garoosi Farshi M. Relation of NEO-PI-R personality inventory and SCL-90-R: Ability of NEO inventory in mental health evaluation. *Journal of Behavioral Sciences*. 2010; 4(1):51-58.[Persian].
19. Hosseini nasab D, Moheb N, Bakhshvar V. The relationship between personality characteristics and mental health of pregnant women in Tabriz. *Woman & study of family*. 2009; 1(3); 61-73.[Persian].
20. Hayes N, Joseph S . Big 5 correlate of three measures of subjective well-being. *Personality and Individual differences*. 2003; 34(4):723- 727.
21. Haren E, Mitchell C. Relationship between the five-factor personality model and coping style. *Psychology and Education Journal*. 2003; 40(1):38-49.
22. Gonzalez Gauthierrez J, Jimenez B, Hernandez E, Puente C. Personality and subjective well-being: big five correlates and demographic variables. *Personality and Individual Differences*. 2005; 38(7): 1561-1569.
23. Groosi farshi M, Sofiyani H. Evaluation of relationship between personality Dimension and general health student of Tabriz university. *Educational and Psychological Studies*. 2009; 9(2):47-64.[Persian].
24. Bakhshayesh A. The Relationship Between Personality Types And General Health With Job Satisfaction Of Yazd Health Center Staffs. *payavard*. 2013; 7(1):42-55.[Persian].
25. Ahadi B. The relationship between personality and marital satisfaction. *Journal Contemporary psychology*. 2008; 2(2):31-36.[Persian].
26. Jafarnejad P, Farzad V, Moradi A, Shokri O. A study of the relationship between the big five factors of personality, coping styles and mental health in undergraduate students. *Journal of psychology and education*. 2005; 35(1):51-74.[Persian].