Prediction of attitude toward extramarital relationships based on impulsivity and personality traits
Abolghasem Mehrinejad¹, Farideh Shahabi²

Abstract
Impulsivity is the fundamental aspect of human behavior that has been reflected in principal theories of personality in concepts of traits and sub-trait and considered as a different structure in every person. The aim of this study was to predict the attitude toward infidelity based on impulsivity and personality traits. The research method was correlational. The study population consisted of all those who had referred to family courts, counseling centers and welfare organization of Babolsar city whom 150 participants were selected. Participants responded to NEO personality inventory, attitudes toward infidelity scale, and dickman impulsivity inventory. The results showed that the attitude toward infidelity was correlated negatively with agreeableness, while it was correlated positively with conscientiousness, openness to experience, extraversion, and neuroticism. Results also showed that there was a significant positive correlation between attitude toward infidelity and impulsivity. It was also found that personality traits were significant predictors of attitude toward infidelity and the obtained model gave 0.52 of the variance. The results of this study demonstrated the importance of personality traits for counselors and psychotherapists to evaluate these factors and do all their efforts in order to identify the influencing factors and obstacles.

Keywords: Attitude, Impulsive Behavior, Personality

Introduction
Despite the social and cultural constraints on the relationship with the opposite sex, evidence suggests that this kind of relationship is increasing in the major cities which has given rise the possibility of divorce and consequently has caused to breakdown of the marital relationship [1]. Social pathologists believe that extra-marital relations have increased in recent years, and realizing the fact that one or both spouses have sexual or emotional relationships outside of marriage, creates a backwater of thoughts, feelings and behaviors which can bring the people on the edge of an abyss. Unfortunately, there is no actual statistic regarding couples with extra-marital relations crisis and related issues. Thus, addressing to the issue of infidelity and its role in social and family problems by different domains of knowledge has become a necessity more than ever. Extra-marital relations could stem from personal problems such as addiction to sex, the need for excitement and arousal, personality disorders, psychological trauma,
and midlife crisis [2]. Research has also shown that personality styles play an important role in predicting marital relationships [3-7]. Drigotas and Barta [8] have defined the extra-marital relations as passing of the border of marital relationships by entering into physical or emotional intimacy with someone outside the marital relationship.

Recent researches in the field of extra-marital behaviors show that personality traits and impulsivity are among the most important factors which cause committing this kind of behavior and studies conducted by Lalasz and Weigel [9], Barta and Kane [10], and Buss and Shackelford [11] confirm this claim. Studies have also shown that some characteristics such as extraversion, conscientiousness, and adaptability of gender can be predictors of extra-marital relations [12,13]. While some research has suggested the relationship between extra-marital relationships and neuroticism [14], some others have stated that neuroticism could not be considered as a predictor for extra-marital relationships [15].

The term called Impulsivity refers to "tendency to make hasty behavior, lack of prediction or planning, or as behaving or acting without enough thought" [11]. Impulsivity is the fundamental aspect of human behavior that has been reflected in principal theories of personality in concepts of traits and sub-traits and considered as a different structure in every person. While most people are in challenge with impulsive behaviors at certain times, it is assumed that impulsivity as a personality trait enjoys relative stability [11]. Moreover, impulsivity is associated with many behavioral problems and risky behaviors. For example, personal accounts of impulsivity have been associated with excessive drinking of alcohol, smoking, and drug use and have predicted them [16]. Other behavioral problems that seem to be associated with impulsivity are risky sexual behaviors [17].

Considering what was mentioned, the main question of the current study was whether personality traits and impulsivity have predictive effects on attitude towards infidelity or not.

**Method**

This was a analytical study. The study population comprised 150 people (both men and women) who were selected by convenience sampling method from those who had referred to family courts, counseling centers and welfare organization of Babolsar city, the north of Iran, 2015. Due to the correlation type (regression) of the present study, the sample size consisted of at least 10 participants per each predictor variable [17]. The study inclusion criteria were: referring to family courts, welfare organizations, and counseling centers, and spending a year after the marriage; while the exclusion criteria of the study was presenting incomplete and invalid information.

The measurement instruments of this study were:

**Big Five Personality Inventory (NEO):** NEO-PI-R Personality Inventory that was provided by McCrae and Costa became the successor of the Neo-test (NEO) [18]. It has five subscales of extraversion, neuroticism, openness to experience, conscientiousness, and consistency that each subscale consists of 12 items, and the items are scored on a five-point Likert scale ranging from strongly agree to strongly disagree. The questionnaire also has a short form called (NEO-FFI) which is a 60-item questionnaire to evaluate the big five personality traits [18]. In the validation of Neo-test conducted by Garusi Farshi [19], the correlation coefficient for each of the big five-aspects of personality was reported in range of 0.56 to 0.87. Cronbach's alpha coefficient for each of the factors of neuroticism, extraversion, openness to experience, conscientiousness, and consistency that each subscale consists of 12 items, and the items are scored on a five-point Likert scale ranging from strongly agree to strongly disagree. The questionnaire also has a short form called (NEO-FFI) which is a 60-item questionnaire to evaluate the big five personality traits [18]. In the validation of Neo-test conducted by Garusi Farshi [19], the correlation coefficient for each of the factors was reported as 0.86, 0.73, 0.56, 0.68, and 0.87, respectively. [19].

**DII:** It is a self-report questionnaire that has been made to assess both functional and dysfunctional impulsivity. The questionnaire includes 23 questions that will be answered by yes or no [20]. Dickman [21] has reported the Cronbach's alpha for functional impulsivity as 0.83 and for dysfunctional impulsivity as 0.86 [22]. According to reliability analyses,
Extramarital relationships, impulsivity and personality

Table 1 Descriptive statistics of participants according to the gender factor

| Variables/Gender           | Men   | Women  |
|----------------------------|-------|--------|
|                            | M     | SD     | M     | SD    |
| Agreeableness              | 6.32  | 2.20   | 6.60  | 5.49  |
| Openness to experience     | 4.15  | 2.52   | 4.20  | 2.37  |
| Extroversion               | 4.18  | 2.85   | 3.97  | 2.51  |
| Neuroticism                | 6.87  | 1.37   | 4.74  | 1.41  |
| Conscientiousness          | 4.78  | 1.30   | 5.51  | 2.54  |
| Attitudes toward Infidelity| 11.50 | 5.54   | 7.83  | 3.48  |
| Impulsivity                | 12.64 | 3.41   | 11.72 | 2.67  |

Levine's test results showed that none of the variables of the five-factor personality and attitude toward extra-marital relations were significant (p>0.05), as the variances were homogenous. As can be seen from Table 2, in the five...
personality factors, all variables showed a significant relationship with attitude toward infidelity. Of these, attitude toward infidelity was correlated negatively with agreeableness (p<0.05) and conscientiousness (p<0.01). Negative correlation between the two variables was indicative of the reverse relationship. Each of the factors of openness to experience (p<0.05), extroversion (p<0.01) and neuroticism (p<0.01) also had a significant positive relationship with the attitude toward infidelity.

Table 2 Pearson correlation matrix between the five factors of personality and attitude toward extra-marital relationships

|           | 1       | 2       | 3       | 4       | 5       | 6       | 7       |
|-----------|---------|---------|---------|---------|---------|---------|---------|
| Agreeableness | 1       |         |         |         |         |         |         |
| Openness to experience | 0.57** | 1       |         |         |         |         |         |
| Extroversion | 0.27** | 0.10    | 1       |         |         |         |         |
| Neuroticism | -0.25*  | 0.32**  | 0.21*   | 1       |         |         |         |
| Conscientiousness | 0.35*   | -0.21*  | -0.28** | -0.34** | 1       |         |         |
| Attitude toward Infidelity | -0.28*  | 0.24*   | 0.57**  | 0.45**  | -0.55** | 1       |         |
| Impulsivity | -0.20*  | 0.17*   | 0.36**  | 0.41**  | 0.55**  | 0.59**  | 1       |

Using the enter method, the obtained model was significant (Adj R²=0.52 and F=61.28). Table 3 provides detailed information of predictor variables which have been included in the model. Extroversion (Beta=0.34) and conscientiousness (Beta=-0.33) at p<0.01 and neuroticism (Beta=0.17) and agreeableness (Beta=-0.17) at p<0.05 were significant predictors. This model explained 52.7% of the variance (Adj R²=0.52).

Table 3 Regression total score of attitude toward infidelity based on personality traits and impulsivity

| Variable          | B    | S.E. | Beta | t     | P    | R    | Adj R² | F     | p value |
|-------------------|------|------|------|-------|------|------|--------|-------|---------|
| The constant value | 1.06 | 0.47 | -    | 2.32  | 0.02 |      |        |       |         |
| Openness to experience | 0.02 | 0.01 | 0.11 | 1.64  | 0.10 |      |        |       |         |
| Agreeableness     | -0.03| 0.01 | -0.17| -2.48 | 0.01 | 0.74 | 0.52   | 28.61 | 0.0001  |
| Neuroticism       | 0.05 | 0.02 | 0.17 | 2.01  | 0.04 |      |        |       |         |
| Extroversion      | 0.13 | 0.03 | 0.34 | 4.25  | 0.0001 |      |        |       |         |
| Conscientiousness | -0.01| 0.00 | -0.33| -5.40 | 0.0001 |      |        |       |         |
| Impulsivity       | 0.03 | 0.02 | 0.15 | 1.47  | 0.14 |      |        |       |         |

Discussion

The aim of this study was to predict the attitude toward infidelity based on impulsivity and personality traits among married persons. The results showed that there was a relationship between impulsivity and attitude toward infidelity. As the results showed, the relationship between impulsivity and attitude toward infidelity was positive and significant which was in line with the study of Shackelford [26] but it was not in consistency with the study of Levine and Jackson [27].

One of the reasons that can justify the finding is that the theoretical principles related to impulsivity and extra-marital relations remind us that abnormal lack of foresight (acting without thinking) can be a predictor of extra-marital relations, even if people have reported that the behaviors associated with marital infidelity is not preferred by them; because according to the theory of planned behavior [28], it has been predicted that people with low self-control of behavior are less likely to comply with their attitudes and their behaviors. In addition, it is anticipated that the functional impulsivity with low levels of previous thinking, if is under such a condition which leads to favorable results, could not be a predictor of the extra-marital relationship [21]. However, the present study showed an association between extra-marital relationships and impulsivity. An explanation for this finding could be that the mere act without previous thinking, as much as it can
lead to behaviors outside of anyone's control, can push a person to come into the extra-marital relations.

As the results showed, the relationship between personality traits and attitude toward extra-marital relationship was significant and this finding was consistent with those obtained by Lalasz and Weigel [9], Barta and Kane [10], and Bass and Shackelford [11]. The results showed that those who were extroverted had more permissive attitude toward infidelity. In the analysis of the relationship between attitude toward extra-marital relations and openness to experience, a significant positive correlation was observed which was consistent with the findings of researches conducted by Lalasz and Weigel [9] and Rezai [30]. People who have an open spirit, autonomy, curiosity, liberal feedback, and intellectual orientation emphasize to not follow the customs and develop non-partisan attitudes, and they have the need for diversity and broad interests [31]. Thus, it is not surprising that such features make them to adopt more permissive attitude regarding extra-marital relationships.

On the other hand, based on the results of the current survey, there was a significant negative relationship between agreeableness and attitude toward extra-marital relationships which is consistent with the researches of Lalasz and Weigel [9], and Rezai [30]. Also, a significant negative correlation was observed between attitude toward extra-marital relationships and conscientiousness factor which is consistent with the research of Rezai [30]. It means that whatever a character has higher conscientiousness, the likelihood of his/her entrance into the extra-marital relations is lower. As it is known, people with lower conscientiousness are chaotic, have less sense of responsibility, and do not follow certain principles as well as they cannot be prevented from normal impulse. In contrast, those who are conscientious orderly and with perseverance accept their responsibility and try to create a positive and lasting married life [32]. So, they are less looking for problem-solving and if they are encountered problems in the marital relationship, they try to fix it through other methods [33]; thus, people with this personality trait can be potentially in conflict and post-marital relations. Finally, the current study showed that people with the personality trait of neuroticism, who achieved higher scores in terms of such trait, had more permissive attitude toward extra-marital relationships. This finding is consistent with researches of Lalasz and Weigel [6] and Rezai [30]. Previous studies regarding relationships between the extra-marital relations and the big five personality traits have shown that having high levels of neuroticism or continuous experience of negative feelings by couples towards each other plays very important role in disrupting the couple's marital adjustment [30] and thus paves the way for having such relationships.

Due to cultural and social issues of our country, the study was conducted on a very small sample size, because the people involved in the extra-marital relations were providing false information or they conceal the issue in question due to the concerns regarding possible consequences and lack of trust in the researcher. The study was performed in the city of Babolsar on married men and women. Therefore, the results should be generalized with caution. If possible, it is recommended to repeat such study in the general population, not just in a specific class of the society. It is suggested that to further clarifying the role of personality in the extra-marital relationships, other scales in the field of personality also be implemented. This research was conducted through closed-response questionnaires, while it seems that for obtaining further information regarding individuals’ experiences in the field of extra-marital relations, applying other tools such as interview can be helpful. Use of the findings of this study can be helpful in developing and implementing effective preventive and therapeutic interventions for extra-marital relations.

**Conclusion**

The results of this study showed that the personality factors can predict attitude toward
infidelity, whereas impulsivity cannot predict it. This means that whatever the man personality has lower degrees of agreeableness, probably he/she has equally, more permissive attitude toward extra-marital relationships. In explaining why people who have low agreeableness, at least think to someone other than their spouse without having any sexual relationship with him/her in spite of the desire to have such a relation, possibly we can say that it could be due to the lack of morale and confidence and having a high flexibility which leads to conflict in their marital relationship and thus they feel less commitment toward their marriage. Since they have no sympathy with others, and act according to their wishes, they only want to meet the self-centered sexual impulses, and enter to multiple sexual relationships without being engaged in emotional relationships with that person. Usually, those who have multiple sexual relationships are not involved in any emotional feelings and are far from any sense of responsibility and commitment that has originated from the traits of their incompatible personality.

Acknowledgements
The authors appreciate all persons who participated in this study. This research received no financial support from any organization.

Contribution
Study design: FSH, AM
Data collection and analysis: FSH
Manuscript preparation: FSH, AM

Conflict of Interest
"The authors declare that they have no competing interests."

Funding
The authors received no financial support for the research, authorship and/or publication of this manuscript.

References
1- Mark KP, Janssen E, Milhausen RR. Infidelity in heterosexual couples: Demographic, interpersonal, and personality-related predictors of extra- Marital sex. Arch Sex Behav201;40(5):971-82.
2- Allen ES, Baucom DH. Adult attachment and patterns of extradyadic involvement. Fam Process2004; 43(4): 467-88.
3- Thornton V, Nagourney A. What is infidelity? Perceptions based on biological sex and personality. Psychol Res Behav Manag2011; 4: 51–8.
4- Lalasz CB, Weigel DJ. Understanding the relationship between gender and extradyadic relations: The mediating role of sensation seeking on intentions to engage in sexual infidelity. Pers Individ Di2011; 50(7): 1079-83.
5- McKibbin WF, Miner EJ, Shackelford TK, Ehrke AD, Weekes-Shackelford VA. Men’s mate retention varies with men’s personality and their partner’s personality. Pers Individ Di2014;56:62-7.
6- Hughes S. Affairs of the heart: gender, personality, religiosity and parental relationship history as predictors of infidelity. Dublin Business School2013
7- Harris LE. Personality Characteristics and Attitudes towards Infidelity In Gay and Lesbian Individuals. Garden City, NY: Adelphi University; 2012.
8- Drigotas SM, Barta W. The cheating heart: scientific explorations of infidelity. Curr Dir Psychol Sci2001; 10(5): 177-80.
9- Lalasz CB, Weigel DJ. Understanding the relationship between gender and extradyadic relations: The mediating role of sensation seeking on intentions to engage in sexual infidelity. Pers Individ Di2011; 50(7): 1079-83.
10- Barta WD, Kiene SM. Motivations for infidelity in heterosexual dating couples: the roles of gender, personality differences, and sociosexual orientation. J Soc Pers Relat2005; 22(3): 339-60.
11- Buss DM, Shackelford TK. From vigilance to violence: mate retention tactics in married couples. J Pers Soc Psychol1997;72(2):346-61.
12- Pinkerton SD, Abramson PR. Implications of increased infectivity in early-stage HIV infection application of a Bernoulli-process model of HIV transmission. Eval Rev1996;20(5):516-40.
13- Wiggins JD, Lederer DA. Differential antecedents of infidelity in marriage. American Mental Health Counselors Association Journal1984; 6(4): 152-61.
14- Schmitt DP. Are sexual promiscuity and relationship infidelity linked to different personality traits across cultures? Findings from the International Sexuality Description Project. Online Readings in Psychology and Culture2002; 4(4).
15- Shaye A. Infidelity in dating relationships: Do big five personality traits and gender influence infidelity?. Cincinnati: Proquest; 2010. pp: 7-69
16- Messina BG, Silvestri MM, Diulio AR, Murphy JG, Garza KB, Correia C J. Alcohol use, impulsivity, and the non-medical use of prescription stimulants among
Extramarital relationships, impulsivity and personality

7- Deckman T, DeWall CN. Negative urgency and risky sexual behaviors: A clarification of the relationship between impulsivity and risky sexual behavior. Pers Individ Diff 2011; 51(5): 674-8.
18- Costa PT, McCrae RR. The NEO personality inventory manual. Odessa, FL: Psychological Assessment Resources; 1985.
19- Garusi Farshi M. New approaches in personality assessment. Tabriz: Jame’eh Pajouh publication; 2001.
20- Glass SP, Wright TL. Sex differences in type of extramarital involvement and marital dissatisfaction. Sex Roles 1985;12(9-10): 1101-20.
21- Dickman SJ. Functional and dysfunctional impulsivity: personality and cognitive correlates. J Pers Soc Psychol 1990; 58(1): 95-102.
22- Whiteside SP, Lynam DR. The five factor model and impulsivity: Using a structural model of personality to understand impulsivity. Pers Individ Diff 2000; 30(4): 669-89.
23- Claes L, Vertommen H, Braspenning N. Psychometric properties of the Dickman impulsivity inventory. Pers Individ Diff 2000; 29(1): 27-35
24- Whatley MA. Belief in a just world scale: unidimensional or multidimensional? J Soc Psychol 1993; 133(4): 547-51.
25- Habibi, M, Sayed Alitabar SH, Pouravari M. Investigating reliability, validity and factor structure of the attitudes toward Infidelity scale. Journal of Research and Health. [In Press].
26- Shackelford TK, Besser A, Goetz AT. Personality, marital satisfaction, and probability of marital infidelity. Individ Differ Res 2008; 6(1): 13-25.
27- Levine SZ, Jackson CJ. Eysenck's theory of crime revisited: Factors or primary scales? Legal Criminol Psychol 2004; 9(1): 135-52.
28- Eaves LJ, Eysenck HJ, Martin NG. Genes, culture and personality: An empirical approach. San Diego, CA, US: Academic press; 1989.
29- Eysenck SBG, Eysenck HJ. Personality differences between prisoners and controls. Psychol Rep 1977; 40: 1023-8.
30- Rezaei M. The relationship between personality traits and attachment style with a desire to marital Infidelity. [Thesis]. Tehran: Tarbiat Modares University. 2011.
31- Barelds DP. Self and partner personality in intimate relationships. Eur J Pers 2005;19(6): 501-18.
32- Karney BR, Bradbury TN. The longitudinal course of marital quality and stability: a review of theory, methods, and research. Psychol Bull 1995; 118(1): 3-34.
33- Shiota MN, Levenson RW. Birds of a feather don't always fly farthest: similarity in Big Five personality predicts more negative marital satisfaction trajectories in long-term marriages. Psychol Aging 2007; 22(4): 666-75.

Copyright © 2016 ASP Ins. This open-access article is published under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License which permits Share (copy and redistribute the material in any medium or format) and Adapt (remix, transform, and build upon the material) under the Attribution-NonCommercial terms.