THE ROLE OF PERSONALITY TYPES AND CONFRONTING STRATEGIES IN ANTICIPATION OF DEPRESSION IN INFERTILE WOMEN

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ABSTRACT
Infertility affect some aspects of person’s life. Perhaps it can be said that infertility is the most important stress creator events in the course of individual’s life. The purpose of this study was to investigate the role of personality types and confronting strategies in anticipation of depression in infertile women. This research is descriptive and correlation procedure type. The study sample comprised all infertile women undergoing infertility centres in Kermanshah healthy centres that 60 members of them as available sampling for as statistical samples were selected. Research tools include first standard questionnaires of Depression, Short Form of FFI (Big Five personality) and confronting style of CISS that it is including 21 questions. The results showed that between the Big Five personality variables with depression is significant correlation and there is significant negative relationship between problematic confronting styles with depression. It can be concluded that increases in problematic confronting styles will lead to reducing depression in infertile women. Also, there is a significant positive correlation between duration of infertility and depression. The results showed that meantime regression model, in three variables of neuroticism, extroversion, and the accountability has power of prediction in depression in infertile women. These three variables predict 78.2 of the changes in depression.

Keywords: Depression, Personality Types, Infertility, Confronting Strategies

INTRODUCTION
Women of any society are the main pillars of the family and checking the health has special importance. Women's health, especially mother’s health, are basic concepts of economic and social development and welfare (Qian, 2008).

Desire to have children, is communal want. The grief of infertility is considered as a big criticise in the life. Infertility is defined as not pregnant after one year of sexual intercourse without using a pair of anti-Fertility (Aschas, 2002).

The problem of infertility in today's world became a social concern and is along with social and psychological dilemma. This phenomenon is considered as a traumatic, exotic and fiasco event for couples, special for women. Amount of infertility prevalence in different countries is varied between five till thirty percent. Accordingly, we can say that more than 80 million people in the world are infertile. In Iran it is estimated, more than 2 million couple are faced with infertile problem from 72 million population or 18 million couple (akhondi, 1382). Infertility is not only medical problem. Infertility is not only a medical problem, but it will involve, all aspects of couple lives in criticism. Spouses who have been involved in this critical status, more than others are exposure of depression, anxiety, low self-confidence and dissatisfaction (Khosravi, 1380). According to results of (Normal, 2009), it was represented that infertile women has been more instable than fertile women based on personality aspect. Psychological problems of infertile women has been complicated and affected by factors as sexual differences, reason and lengthy of infertility, specific research and treatment procedures (Andriyoo and
caligis, 1992). In addition, it has been represented that women are more vulnerable than men during problem and they are experienced more psychological trauma. It is considered that different personality types, is effective in the incidence of depression in infertile couples. In addition according to researches that has been conducted by researchers, stable personality factors, are effective in incidence, creating and intensifying of disease. The personality types studding by researchers are 3 types of A, B & C. The classification was performed by Friedman and rosnman, people were divided to personality types A, B, and later C personality type was indexed by Isenberg. The feathers, that Isenberg is mention are: satisfaction desiring, lack of assertiveness, surrendering, defending and repression of emotion (Eysenck, 1990).

Quoted in turn, 1380), Studies done on personality types A and B and Mental Health found that people with type A personality tendency compared to those with type B tendency are having less mental health and also have more stress anxiety, depression and physical pain. Rajabi et al., (1388), in research as the relationship between personality characteristics and coping strategies in parents of children with autism spectrum disorders, were achieved results. These results suggest that in mothers: the personality traits of hypocrisy, emotional stability, accountability and lack of fatigue, serious problem oriented strategies and also between socialization personality characteristics and emotion-focused strategies, there is a significant relationship. Results of a meta-analysis by Littleton, Horsley, John, and Nelson (2007), in the field of psychological coping mechanism and psychological irritation is done, showed that avoidance coping circuit significantly associated with increased mental irritation.

In addition, high levels of social anxiety with avoidance of conflict and more personal independence and low assertiveness behavior is relevant. Vang et al., (2007), in a study with two types of questionnaires named Enrich to assess marital satisfaction and SCL-90 was used to assess mental disorders. They stated that the prevalence of mental disorders and dissatisfaction with sex in groups (infertile people) was higher than the control group. Another case that can be affecting on predict of depression in infertile women is coping strategies, that it mention, efforts to manage and control the dangerous and stressful situations (Lazarus and Folkman, 1984). This definition has three characteristics: (1) indicates that the countering is required to take effort and planning. 2. The end result is not positive assuming coping responses always 3. The deal is considered to be a process that happens over time (Ghadamgahi, 1386).

This traits of definition of confront is so important, because it will facilities us to assess styles and confronting strategies. Due to the need to deal with depression in infertile women assessing personality types and coping strategies in infertile women is so important dues in this research, we are considering the role of personality types and coping strategies in predicting depression in infertile women.

**MATERIALS AND METHODS**

**Research Hypotheses**
1. There is relationship between types of Personality and depression in infertile women.
2. There is relationship between coping styles and depression in infertile women there
3. There is relationship between the duration of infertility among infertile women with depression are related
4. Personality types have the ability to predict depression in infertile women.
5. Coping styles can predict depression in women is infertile.

**Tools and Methods**

The present research is a descriptive study, in which, the role of personality types and coping strategies to predict depression in infertile women has considered. Statistical population are all infertile women undergoing infertility centers in Kermanshah (Motazedi hospital 200, private offices, 200) that of which, 60 members were selected by an obtainable sampling method. A questionnaire was used to collect data.
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Research Tool:
(1). NEO Five Factor Questionnaire: this questionnaire is a personality tests that by Costa and McRae was introduced in 1985.
   In Iran a long form was validated, by Gross et al., (2001). The results of validating were simulation with results validated in main language test.
   A short form has not been validated in Iran but the results obtained by Costa and McRae (1986) showed the relationship between 5 scale short form with long form 0.77 to 0.92.
   The reliability of the questionnaire in research of Shafie et al., (1385) using Cronbach's alpha coefficient was calculated as follows: 0.87 neuroticism, extraversion 0.76, openness 0.84, agreeableness 0.73 and responsibilities of 0.78.
(2). the questionnaire of Coping Scale Stressful situations (CISS): Endler and Parker (1990) described questionnaire to assess the types of coping styles used by people in positions of Stressful, findings raised and Parker and some of the country such as Zada (1376), demonstrated that reliability of the test is desired.
   In this study, the coefficient of validity for each style of problem oriented, emotion and avoidance, are 0.85, 0.79 and 0.76 respectively.
(3). Beck Depression Inventory (BDI) is a short and easy tool for measuring depression in clinical research
   Different Researches in the field of determining the internal consistency of this test, the coefficient of 0.73 to 0.92 with average 0.86 has reported.

Findings

Table 1: Descriptive indexes of variable of age, duration of infertility

<table>
<thead>
<tr>
<th>N</th>
<th>Age Deviation</th>
<th>Standard Average</th>
<th>Index Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>21.7</td>
<td>4.36</td>
<td>60</td>
</tr>
<tr>
<td>60</td>
<td>22.4</td>
<td>63.9</td>
<td>60</td>
</tr>
</tbody>
</table>

Table 1 show the mean of infertile women age is 36.4 and standard deviation of them is 21.7 years, and mean duration of infertility in them is 9.63 years with a standard deviation of 22.4 years.

Table 2: Descriptive indicators of depression and coping styles

<table>
<thead>
<tr>
<th>N</th>
<th>Depression Standard deviation</th>
<th>Depression Average</th>
<th>Index Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>66.7</td>
<td>07.27</td>
<td>depression</td>
</tr>
<tr>
<td>60</td>
<td>01.4</td>
<td>65.45</td>
<td>Problematic</td>
</tr>
<tr>
<td>60</td>
<td>25.4</td>
<td>43.49</td>
<td>emotion-oriented</td>
</tr>
<tr>
<td>60</td>
<td>30.4</td>
<td>63.37</td>
<td>avoidance</td>
</tr>
</tbody>
</table>

Table 2 shows the mean of depression in infertile women is 27.7 and standard deviation (SD) is 7.66 and thus could be said that infertile women suffering from moderate depression.
Also the table shows that emotion-oriented coping style mean in infertile women is 49.3 and standard deviation of 4.25 that this amount is more than the amount of Coping Styles of problematic and avoidance.

Table 3: Description index of personality types

<table>
<thead>
<tr>
<th>N</th>
<th>Neuroticism Standard deviation</th>
<th>Neuroticism Average</th>
<th>Index Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>86.10</td>
<td>85.27</td>
<td>Neuroticism</td>
</tr>
</tbody>
</table>

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Table 3 shows the status of personality types in infertile women. As it can be seen the mean and standard deviation of neuroticism in this group with a score of 86.10, 85.27 is higher than other personality types.

**Inferential Findings**

First Hypothesis: there is relationship between the type of personality and depression in infertile women.

Table 4: The correlation between the Big Five factors of personality variables and depression

<table>
<thead>
<tr>
<th>Accountability</th>
<th>Agreeableness</th>
<th>Openness</th>
<th>Extraversion</th>
<th>Neuroticism</th>
<th>R</th>
<th>Significant level</th>
<th>depression</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>-0.545</strong></td>
<td><strong>-0.258</strong></td>
<td><strong>-0.366</strong></td>
<td><strong>-0.642</strong></td>
<td><strong>-0.788</strong></td>
<td>R</td>
<td><strong>Correlation is significant at 0.01.</strong></td>
<td></td>
</tr>
<tr>
<td>0.0001</td>
<td>0.047</td>
<td>0.004</td>
<td>0.0001</td>
<td>0.0001</td>
<td></td>
<td><strong>Correlation is significant at 0.05.</strong></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>N</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 shows there is significant associated between each one of the Big Five personality variables with depression.

As we can see there is significant and positive relationship between neuroticism and depression.\((r=0.788, p<0.001)\)

There is significant and negative relationship between extraversion and depression \((r=0.642, p<0.001)\)

There is significant and negative relationship between openness and depression \((r=0.366, p<0.001)\)

There is significant and negative relationship between agreeableness and depression \((r= -0.258, p<0.001)\)

There is significant and negative relationship between accountability and depression \((r=0.545, p<0.001)\)

Therefore the null hypothesis based on no relationship between personality types and depression in infertile women is rejected and the hypothesis is proven by 95 percent confidence.

Also, it can be concluded with an increase in the type of personality of neuroticism, depression in infertile women is increased and with increasing each one of personality types of extraversion, openness, agreeableness and accountability, depression in infertile women will decrease.

The Second Hypothesis: There is relationship between coping style and depression in infertile women.

Table 5: The correlation coefficient between variables Coping Styles of problematic, emotion and avoiding depression

<table>
<thead>
<tr>
<th>Avoiding</th>
<th>Emotion</th>
<th>Problematic</th>
<th>R</th>
<th>Significant level</th>
<th>depression</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.052</td>
<td>0.140</td>
<td><strong>-0.529</strong></td>
<td>R</td>
<td><strong>Correlation is significant at 0.01</strong></td>
<td></td>
</tr>
<tr>
<td>0.695</td>
<td>0.286</td>
<td>0.0001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>60</td>
<td>60</td>
<td>N</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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Table 5 shows the problem-oriented coping style and depression there is a significant negative correlation (r=-0.529, p<0.001), so the null hypothesis based on no relationship between problem-oriented coping style and depression has been rejected and the assumption of research with 99% confidence is proved and it can be concluded with an increase in problem-oriented coping style, depression in infertile women is reduced.

However, there was no significant relationship between the coping style of emotion-oriented and avoidance with depression, as can be seen significant level of emotion-oriented coping style (p= 0.286) and in avoidant coping style (p=0.695) that were both more than 0.05, thus the null hypothesis based on no relationship between the variables of emotion – oriented and avoidant style Coping with depression, is confirmed.

The Third Hypothesis: There is relationship between the duration of infertility associated with depression in infertile women.

Table 6: The correlation coefficient between depression variable and during of infertility

<table>
<thead>
<tr>
<th>Variable</th>
<th>During of infertility</th>
<th>R</th>
<th>Significant level</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td><strong>0.487</strong></td>
<td>0.0001</td>
<td><strong>Correlation is significant at 0.01 level</strong></td>
<td>60</td>
</tr>
<tr>
<td>R**</td>
<td>0.487</td>
<td><strong>0.0001</strong></td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

The table 6 shows that between during of infertility and depression there is significant and positive relationship (r=0.487, p<0.001). Thus the null hypothesis based on no relationship between depression and during the infertility is rejected and research hypothesis with 99% confidence will be accepted.

Also it can be conclude considering positive correlation, there is a direct relationship between depression and during of infertility. In the other words it can be told that with increasing during of infertility, depression in infertile woman will be increased.

Forth Hypothesis: Personality types can be convenience predictor for depression in infertile women.

For confirming or rejecting this hypothesis it was used multiple regression analysis method simultaneously.

Regression analysis is summarized in table 7.

Table 7: Regression method as simultaneously

<table>
<thead>
<tr>
<th>Model</th>
<th>P</th>
<th>F</th>
<th>R**</th>
<th>R2</th>
<th>0.884</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.0001</td>
<td>66.8</td>
<td>0.782</td>
<td>0.884</td>
<td>1</td>
</tr>
</tbody>
</table>

As it is considered in table 7, F=66.8 that is significant statistically and thus personality variables will have the convenience power of the prediction.

Table 8: Coefficients table

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Beta</th>
<th>B</th>
<th>T</th>
<th>Df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>0.849*</td>
<td>0.598</td>
<td>9.13</td>
<td>58</td>
<td>0.0001</td>
</tr>
<tr>
<td>extraversion</td>
<td>-0.487*</td>
<td>-0.828</td>
<td>-6.34</td>
<td>57</td>
<td>0.0001</td>
</tr>
<tr>
<td>accountability</td>
<td>0.367*</td>
<td>356.0</td>
<td>3.56</td>
<td>56</td>
<td>0.001</td>
</tr>
<tr>
<td>constant</td>
<td>0.21</td>
<td>-</td>
<td>4.66</td>
<td>-</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

The table 8 shows that the regression model simultaneously in personality variables has the prediction power in depression in infertile women and by and larg it predicts 78.2% of variations of depressions (R^2=0.782).
Considering coefficient table we see that neuroticism, extraversion and accountability variables are significant in power of predicting.

The depression predicting formula based on personality styles has come below:

\[
\text{Depression} = \text{neuroticism} + \text{extraversion} + \text{accountability} = 0.598 + 0.828 + 0.356 + 21
\]

Fifth Hypothesis: Copied styles are convenience predictor for depression in infertile women.

In order to confirming or rejection of this hypothesis it has used multiple regression analytical method simultaneously.

The regression findings has summarized in table 9.

Table 9: Regression model as simultaneously

<table>
<thead>
<tr>
<th>F</th>
<th>R²</th>
<th>R</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>53.22</td>
<td>28.0</td>
<td>529.0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 10: The result of regression analysis simultaneously based on predictor variables

<table>
<thead>
<tr>
<th>P</th>
<th>Df</th>
<th>T</th>
<th>Beta</th>
<th>B</th>
<th>Predictor variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0001</td>
<td>58</td>
<td>-4.74</td>
<td>*-0.529</td>
<td>-1.01</td>
<td>Copied style</td>
</tr>
<tr>
<td>0.0001</td>
<td>-</td>
<td>-</td>
<td></td>
<td>73.19</td>
<td>Problem-oriented stable</td>
</tr>
</tbody>
</table>

*p<0.001

Table 10 shows that the regression model as simultaneously is significant based on predicting power and generally 28% of depression variation is predicted by copied style variable and in coefficient table it can be seen that only problematic copied style variable has predicting power in infertile women.

Effect Coefficient of problematic copied style is obtained -1.01 that this coefficient has negative affection and it means if add one unit to problematic copied style then depressions will decrease as 1.01

The predicting of depression formula base on copied style is come below:

\[
\text{Depression} = (-1.01) \times \text{problematic copied style} + 73.19
\]

RESULTS AND DISCUSSION

This study aimed to investigate the role of personality types and coping strategies to predict depression in women were infertile

The first Hypothesis: There is significant relationship between personality types and depression in infertile women there.

The results showed that between each one of the Big Five personality variables is significant correlation with depression. Find placed between neurosis and depression, positive relationship, between extraversion and depression, negative relationship, between openness and depression, negative relationship between agreeableness and depression, negative relationship between accountability and depression there is a negative relationship. Results of this study are extrusion with studies of ahadi et al., (1388); Domari et al., (1990); Wang et al., (2007).

Considering personality traits, it can be said that people who are highly neurosis, by and larg they are anxious people who are not always emotional stability and always their living is with depression, anxiety, anger has mixed so stating direct relationship between neuroticism and depression is logical.

Extraversion people are socialistic, active with high positive energy. These people seem to have new experience and be exited social and physical.

They seem to have new experiences and excitement even is with some degree of physical and social risks, and are curious and eager and pluck (Zuckerman, 1950) and conscientiousness is a dimension of character that is characterized by Confidence, determination, hard work, objectivity, thoroughness. For people with high agreeableness personality, it can say that those others are very important for them and others enjoy being with them, thus considering positive personality traits of each one of personality types of extraversion, agreeableness, conscientiousness, the negative relationship between each one of this variables and depression is logical.
Second Hypothesis: There is significant relationship between Copied styles and depression. The results showed that there is negative and significant correlation between problem-focused coping style and depression. It can be conclude with the increasing problem-oriented coping style, depression in infertile women decreases. However, the coping style of emotion-oriented and avoidance coping with depression, there was no significant relationship. The results are in line with studies of grace, joy and achieve Tahir (1380); Damavandi et al., (1388); Lytlyvn et al., 2007). The explanation can be problem-focused coping is focused on the problems and crises of life to taking steps to avoid, avoid, scape, or eliminate of effects of crisis and it can be the convenience reason for decreasing depression. Therefore it can be inferred that increasing problem oriented coping style, depression in women infertile is reduced

Third Hypothesis: During of infertility has a significant correlation with depression in infertile women. The results of this study showed that there is significant and positive relationship between infertility and depression. The results are in line with studies of Damavandi Rajabi et al., (1388); Sellers (1384); Wang (2004), Domari et al., (1990); Locke (2002) and Wang et al., is in line. These results can be explained as infertility can be putative as a personal crisis as psychological stress, which can cause a lot of mental health in different ways threat the couple health. It can also impair the quality of the marital relationship, loss of intimacy and fear of ending the relationship, separation and divorce, and loss of self-esteem and feelings of rejection from family and community that these factors may predispose patients to mental disorders such as depression and anxiety and the joy of marriage. The direct relationship of depression and during infertility seems be logical.

Fourth Hypothesis: Personality types have power of predicting depression in infertile women. The results showed that regression model predicted the Big Five personality factors of depression in infertile women, the results also showed that these variables together 27/8 percent of depression predict the results of this research stems No similar studies et al., (1388); Domari et al., (1990); Wang et al., (20,078) extrusion. Considering personality traits can be said that those people who are high neurosis overall they don’t have emotional stability, and they generally do not enjoy life enough and in this case they are equal to depressed people. Thus it can be said that this depression variable can effect on neuroticism. On the other hand extraversion people are active and with high positive energy. Also conscientiousness usually associated with high activity and thoroughness, so perhaps this is one reason that these variables have reverse influence on depression. Considering revers relationship of these variables can be expected to extraversion and accountability is convenience predictors for depression.

Fifth Hypothesis: Coping styles have ability of predicting depression in infertile women. Results showed that simultaneously regression model results are significant and predicts 28% of variations. Considering coefficient table it was shown that only in problem-oriented style there is the ability to predicting depression of infertile women. Results are in line with studies of Damavandi Rajabi et al., (1388) and Horsley, Vnslyvn (2007). Confrontation focused on problem is mentioned to person efforts to change the status and direct facing to problems. (Paris, 1991 sacred translated 1375), so we can say that the best way to deal with stress is problem oriented coping style and on the other hand those who are having this coping style since they can compromise the life problems very good. Thus it can be expected that these people have lower anxiety and depression than others. Tues it can be saying that problem-oriented coping style is convenience predictor for depression in infertile women. Personality types, including the risk factors of depression in infertile couples in the development and
Exacerbation of the disease are effective. As the findings of the study showed there is a direct relationship between the type of personality neurosis and depression in infertile women. And there is inverse relation between the personality types of extroversion, openness, agreeableness and accountability with depression in infertile women. So identify personality type’s infertile women who may face a variety of harm reduction are very important points. Other items that can be effective in predicting depression in infertile women is coping strategies that recognizing coping strategies in infertile women and discovering how they can be related to depression we can be achieved with strategies to reduce stress in infertile women to a satisfactory level. May be we can say infertility is one of more major factors that is cause of depression in infertile women. Since the stressful experience of infertility is along with a wide range of psychological harms including reduction of self-esteem, increasing in tensioning, stressful, depression, anger, feeling of humiliation, feeling of ineffectiveness, Sexual Dysfunction, and sexual problems, so Pathology of situations that infertile person is faced and provide Strategies to eliminate stressful atmosphere at work surrounding and his life can be effective in order to improve the quality of life, reduce the length of infertility and the subsequently reduction of stress and mental harms. Finally, we can conclude that the problem of infertility in the today world has become a social concern and is along with psychological problems, social, cultural and economic and often it criticize infertile couples life in all aspects that it represent need for increased attention to the issue of infertility and reduction harms conclude of it.

REFERENCES
Akbarzada Nasrin (1376). The Transition from Adolescence to Old Age (Psychological Development). (Tehran: Print home university).
Research Article


Gross carpet Myrtyq (1380). *New Approaches in Evaluating Character*, (Tabriz publishing research community).


Repellent Mary (1376). The relationship between coping styles, mental health personal Bavyzhgyhay couples Yazd, Thesis, School of Medical Sciences, Tarbiat Modarres University.


Stoffer ES (2000). The effect of discussion and self focusing on interpersonal


