



Examining the relationship between big five personality factors, coping styles and depression in pregnant women

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ABSTRACT

People with different personality traits show different coping styles and different degrees of vulnerability to the experience of traumatic events. Pregnancy is one of the events that may cause stress and depression in some women and put mother and child's health at risk. In this study the relationship between pregnant women's big five personality factors, coping styles and depression has been studied. The population of the study consists of all pregnant women who referred to a specialized center of Obstetrics and Gynecology in Shahid Beheshti Hospital in Iran in the first quarter of 2009. 130 questionnaires (Revised NEO Personality inventory, Multidimensional Coping Inventory (MCI) and depression questionnaires) with multi-stage random cluster sampling were distributed among subjects, 80 of which were completed and analyzed using SPSS16 statistical software. Regression and MANOVA statistical methods were used to analyze the data. The results show that Neuroticism has a significant negative relationship with task-oriented coping style and a significant positive relationship with emotion-oriented coping style and depression. Extraversion has a significant positive relationship with task-oriented coping style. Also, Agreeableness has a significant positive relationship with task-oriented coping style and a significant negative relationship with avoidance-oriented coping style and depression. Conscientiousness has a significant positive relationship with task-oriented coping style. Furthermore, task-oriented coping style has a significant negative relationship with depression and emotion-oriented coping style has a significant positive relationship with depression. Applying pregnant women's personal characteristics enables us to predict their styles of coping with stress and depression. Therefore, stress management meetings and training and treatment courses for mothers are of great importance.

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Introduction

Pregnancy and motherhood which are one of the enjoyable and evolutionary events of women's lives are associated with physiological adaptations and changes and psychological copings and require special attention. Despite this fact, unfortunately, often the physical and physiological aspects are attended rather than psychological dimensions (Lowdermilk and Perry, 2004). Some researchers has proposed the pregnancy experiment as a crisis situation in women's life and they say that pregnancy which often causes significant happiness in parents is sometimes a source of stress and depression for some women (Cunningham et. al. 2005; Bahri Bana Baj, 2000; Brouwers and Van Barr, 2001; Geller, 2005)

Pregnancy is so stressful in some women that might inspire mental illness. This condition may occur as a relapse or exacerbation of pre-existing mental disorder, or it might be a sign for a new problem (Cunningham, 2005). In addition, the degree of depression in pregnancy period varies from 10 to 30% based on the diagnostic criteria and the population under study (Kurki et al, 2000). Pazandeh et al (2008) reported the prevalence of depression to be 45% in 2008 and Karbakhsh and Sedaghat (2002) reported it to be 30.6% in their study. It should

be noted that none the studied women had been under treatment for this disorder.

Depression is one of the most common psychiatric disorders that about 25 percent of women will suffer from in their life (Kaplan and Sadock, 2003). In different cultures the prevalence of depression in women is almost twice that of men (Gelder, Mayou, and Crowen Philip, 2001). The reason for this difference might be differences in hormones, effects of pregnancy, psychosocial stressors which differ for men and women and learned inability behavioral models (Kaplan and Sadock, 2000, 2003). The highest prevalence of major depressive disorder is around the age of 18-44, i.e. around women's childbearing age, though the prevalence of this disorder is probable from childhood to old age (Gelder, Mayou, and Crowen Philip, 2001).

Also, stress can cause muscle contraction, resulting in increased pain, which, in turn, increases stress and anxiety of the mother and makes the fetal heartbeat slower by creating a vicious cycle and makes the second stage of childbirth longer. As a result, a natural birth might be changed to a difficult and troubled delivery or even caesarean operation (Cheung, 1994). In addition, stressful situation by stimulating the secretion of corticosteroids and beta-endorphin in the hypothalamus inhibits

the secretion of oxytocin which makes a delay in delivery (Bolgen, 1991)

The increased attention to the role of stress in one's daily life and its relation to different dimensions of personality and the styles people apply to cope with stress have paved the ground for various studies. For instance, considering coping style, it has been revealed that people of different personal characteristics show different coping strategies (passive vs. active) and different degrees of vulnerability in experiencing traumatic events (Watson and Clark, 1992). McCrae and Costa (1986) have identified personality dimensions as five-factor model or B5. After the discovery of B5 (involving neuroticism, extraversion, conscientiousness, agreeableness and openness to experience) by McCrae and Costa (1986), this model became a valid model in other cultures. Neuroticism points to individual differences in anxiety, depression, anger, shyness, worry and lack of safety. Extraversion shows personal characteristics like being social, staining and active. Agreeableness shows individual differences in temperament, kindness, intimacy and empathy in social interactions with other people. Conscientiousness has been defined as one's reliability (cautious, careful and neat) and will (hard-working, achievement-oriented). The last personality factor is openness to experience which shows individual differences in intelligence, interests and creativity.

In addition, coping styles refer to cognitive and behavioral efforts to prevent, manage and reduce stress (Lazarus and Folkman, 1984). Endler and Parker (1990) make a distinction between people based on three basic coping styles: task-oriented coping style, emotion-oriented coping style and avoidance-oriented coping strategy. Task-oriented coping style defines strategies based on which the individual should calculate tasks that must be done to reduce or eliminate stress. Task-oriented behaviors involve searching for information about the problem, cognitive restructuring of the problem, and prioritizing steps for addressing the issue. Emotion-oriented coping style defines strategies based on which the individual focuses on himself and all his efforts are focused on reducing the uncomfortable feeling that he has. Emotion-oriented coping behaviors involve crying, becoming angry and sad, having the censorious behavior, preoccupation and fantasy. Avoidance-oriented coping strategies involve activities and cognitive changes which are aimed at avoiding the stressful situation. Avoidance-oriented coping behaviors may appear as turning to or engaging in a new activity or turning to the community and others (Haren and Mitchell, 2003).

Also, Lazarus and Folkman (Lazarus and Folkman, 1984) point to adaptive coping styles. Adaptive responses are those which might reduce stress and bring the system back to equilibrium and maladaptive responses are those which increase stress keep the system in an unstable state. Based on Lazarus and Folkman's exchange theory, depression is a consequence of stresses that have been deprived of an appropriate and successful confrontation (Nourbala et al, 1998).

Structural approach is one of the approaches which have been formed in response to whether the methods of coping with stressful situations are mainly determined by personality characteristics, types of stressful situations or their transactions. In the structural approach framework, where the change of stressful situations is of less importance, coping is conceptualized according to relatively constant individual differences. Especially, coping style will be determined based on individual differences and the stability within individual. While

the nature and the impact of the stressful situation is less important. In this approach, there are two hypotheses regarding the impact of individual differences on coping styles. Some authors (McCrae and Costa, 1986) believed that preferred coping styles can be directly related to personality characteristics such as extroversion and neuroticism. There is empirical evidence that stability of the situation and coping trials are under the effect of personal characteristics (McCrae and Costa, 1986; Nourbala et al, 1998; Scheier and Carver, 1985). McCrae and Costa (1986) showed that neurosis (neuroticism) has a significant relationship with maladaptive responses, thought to escape from reality, self-blaming, taking tranquilizers, withdrawal, wishful thinking, indifference and hesitation. These authors call this type of coping strategy, neurotic or immature coping style. On the other hand, extraversion has a significant relationship with coping style which consists of logical action, positive thinking, replacement and continence and it is called task-oriented coping style. Moreover, Parker (1986) proposed that extraversion has a positive significant relationship with being active and having task-oriented coping style, while neuroticism has a significant relationship with a less efficient coping style. Kardum and Hudek-Knezevic (1996) showed that extraversion has a positive relationship with emotion-oriented coping style and neuroticism with avoidance-oriented coping strategy, while neuroticism has negative relationship with emotion-oriented and task-oriented coping strategies and positive relationship with avoidance-oriented coping style. Hooker, Frazier and Monahan (1987) in a study on spouses with dementia found that a high score in neuroticism has a negative correlation with task-oriented coping strategy and a positive correlation with emotion-oriented coping style.

Jafarnejhad et al (Jafarnejhad et al, 2004) in a study entitled "Investigating the relationship between big 5 personality factors, coping styles and mental health of Graduate students" showed that there is a positive relationship between openness to experience, conscientiousness, extraversion and agreeableness with task-oriented coping strategy.

Shahmiri and Momtazi (2006) in a study on the prevalence of depression and its relation to personal characteristics of pregnant women found that experience of first pregnancy, lack of employment outside the home, poor emotional relationship with husband, having more than 3 pregnancies and poor economic conditions have significant relationship with the prevalence of depression in pregnant women.

Lolae and Khashanizadeh (2007) in their study entitled "Determining the rate of depression among pregnant women attending clinics for the care of pregnancy" showed that debilitating effects of depression in pregnant women, which can cause complications for the fetus, make the relationship between mother and child difficult.

Field et al (2010) in their study entitled "Comorbid depression and anxiety effects on pregnancy and neonatal outcome" showed that at the prenatal period the comorbid and depressed groups had higher scores than the other groups on the depression measure. But, the comorbid group had higher anxiety, anger and daily hassles scores than the other groups, and they had lower dopamine levels. As compared to the non-depressed group, they also reported more sleep disturbances and relationship problems.

Pluess et al (2010) in a study entitled "Maternal trait anxiety, emotional distress, and salivary cortisol in pregnancy" found that maternal trait anxiety had a relation with all stress-related psychological measures and maternal trait anxiety is

related to both psychological and biological stress measures during pregnancy. Moreover, they stated that prenatal maternal stress and negative child development have been discerned repeatedly in human studies.

Since, pregnancy is an event that might cause depression and stress in some women which put mother and child's health at risk and considering the importance of the issue, this study aims to investigate the relationship between big 5 personality factors, stress coping styles and depression of pregnant women. The hypotheses of this study are as follows:

1. There is a relationship between neuroticism, coping styles (task-oriented, emotion-oriented and avoidance-oriented) and pregnant women's depression.
2. There is a relationship between extraversion, coping styles (task-oriented, emotion-oriented and avoidance-oriented) and pregnant women's depression.
3. There is a relationship between agreeableness, coping styles (task-oriented, emotion-oriented and avoidance-oriented) and pregnant women's depression.
4. There is a relationship between openness to experience, coping styles (task-oriented, emotion-oriented and avoidance-oriented) and pregnant women's depression.
5. There is a relationship between conscientiousness, coping styles (task-oriented, emotion-oriented and avoidance-oriented) and pregnant women's depression.
6. There is a relationship between coping styles (task-oriented, emotion-oriented and avoidance-oriented) and depression.

Method of conducting research

Considering these aims, the present study is descriptive of the relationship type (Gall, Borg and Gall, 2006) The population of the study consists of all pregnant women who referred to a specialized center of Obstetrics and Gynecology in Shahid Beheshti Hospital in the first quarter of 2009. 130 questionnaires (Revised NEO Personality inventory, Multidimensional Coping Inventory (MCI) and depression questionnaires) with multi-stage random cluster sampling were distributed among subjects, 80 of which were completed and analyzed. Regression and MANOVA statistical methods were used to analyze the data. The sufficiency of sample size was confirmed based on statistical power (Molavi, 2007).

Instruments

1. *Revised NEO Personality inventory*: NEPI-R is a personality questionnaire which is constructed based on factor analysis and was developed by Costa and McCrae in 1985 with the name NEO personality questionnaire. The new form of the questionnaire was constructed by the same authors and was called the revised NEO Personality inventory. The long form of the inventory is a 240-item measure of the five factor model: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience. The short version, the NEO-Five Factor Inventory (NEO-FFI), has 60 items (12 items per domain). This inventory has been normalized by Garousi (1998) in Iran and is used to analyze the five big personality factors; the reliability of the test was estimated to be 0.80.

2. *Multidimensional Coping Inventory (MCI)*: Endler and Parker (1990) proposed this inventory for assessing different types of coping styles (task-oriented, emotion-oriented, and avoidance-oriented coping) that a person use in stressful situations. This inventory has 48-item each answered on a 4-point likert scale (0 = never to 4 = most of the times). Then person's coping strategy will be determined based on the score he obtains; i.e. the strategy with the highest score in the inventory would be considered as the individual's coping strategy. Endler and

Parker's (1990) and a number of studies in Iran confirm the reliability of the test. In the current study the reliability coefficient of task-oriented coping strategy was estimated to be 0.87, emotion-oriented 0.78 and avoidance-oriented 0.68.

3. *Short form of Beck depression inventory*: this inventory is one of the most suitable self-report instruments intended to assess the existence and severity of symptoms of depression in individuals. Based on empirical data and clinical observations, this inventory has been relatively a valid measure of depression. Beck, Rial and Ricketts (1974) have invented this test for clinical and research situations. In this study the 13-item measure was used and the reliability coefficient was found to be 0.91.

Data obtained from the study were analyzed using SPSS15 Regression and MANOVA statistical methods were used to analyze them.

Findings

Descriptive statistics in the sample group have been presented in Table1, based on demographic variables.

As can be observed in Table 1, in job demographic variable the highest frequency is for housewives and in the education variable the highest frequency is for those who have diploma. In addition, the minimum of age was 18 and the maximum 38. Data provided in Table 2 shows that the highest mean is that of Conscientiousness and the lowest mean is for depression variable. Moreover, task-oriented coping style variable has the highest standard deviation and agreeableness has the lowest.

According to Table 4, neuroticism has a significant negative relationship with task-oriented coping style and a significant positive relationship with emotion-oriented coping style and depression. Extraversion has a significant positive relationship with task-oriented coping style. Also, Agreeableness has a significant positive relationship with task-oriented coping style and a significant negative relationship with avoidance-oriented coping style and depression. Conscientiousness has a significant positive relationship with task-oriented coping style. Furthermore, task-oriented coping style has a significant negative relationship with depression and emotion-oriented coping style has a significant positive relationship with depression.

Discussion and Conclusion

As shown in the findings section, neuroticism has a significant negative relationship with task-oriented coping style and a significant positive relationship with emotion-oriented coping style. This finding is in line with McCrae and Casta [16], Parker (1986) and Hooker, Frazier and Monahan (1987). They showed that neurosis (neuroticism) has a significant relationship with maladaptive responses, thought to escape from reality, self-blaming, taking tranquilizers, withdrawal, wishful thinking, indifference and hesitation. Moreover, the result of the current study showed that extraversion has a significant positive relationship with task-oriented coping style which is agrees with McCrae and Casta (1986) and Parker (1990) Extraversion has a significant relationship with a coping style which consists of logical action, positive thinking, replacement and continence and it is called task-oriented coping style. Moreover, Parker (1990) proposed that extraversion has a positive significant relationship with being active and having task-oriented coping style, while neuroticism has a significant relationship with a less efficient coping style. Kardum and Hudek-Knezevic (1996) showed that extraversion has a positive relationship with emotion-oriented coping style and neuroticism with avoidance-oriented coping strategy, while neuroticism has negative relationship with emotion-oriented and task-oriented coping strategies and

positive relationship with avoidance-oriented coping style. In addition, Hooker, Frazier and Monahan (1987) found that a high score in neuroticism has a negative correlation with task-oriented coping strategy and a positive correlation with emotion-oriented coping style. Extraverts tend to cope and interact seeking social support, rather than using emotion-oriented strategies.

Moreover, the results of the present study showed that agreeableness has a significant positive relationship with task-oriented coping style and a significant negative relationship with avoidance-oriented coping style and conscientiousness has a significant positive relationship with task-oriented coping style. Findings on the relationship between agreeableness and task-oriented coping style are in accordance with Penley and Tomaka's (2002). Also, an accordance exists for findings regarding conscientiousness. Conscientious perceived them as able to meet situational demands and assess their abilities as soon as they confront a difficulty.

In another part of the study coping styles and the degree of pregnant women's depression was investigated. As the findings show there is a significant negative relationship between task-oriented coping style and depression. In other words, pregnant women of lower depression levels are those who significantly use task-oriented coping strategies such as active coping, planning, seeking social support and positive interpretation of events.

Moreover, results showed that depression has a significant positive relationship with emotion-oriented coping strategy. Based on Lazarus and Folkman's exchange theory, depression is a consequence of stresses that have been deprived of an appropriate and successful confrontation (Nourbala et al, 1998). Furthermore, researchers found that individuals who use emotion-oriented coping strategies more are more prone to becoming depressed and recovery from depression is associated with changes in coping style, i.e. less use of emotion-oriented coping style (Bombardier, Damico and Jordan, 1990; Clomba, Santiago and Rossello). Felsten (1998) in a study on gender and use of distinct strategies showed that those who apply task-oriented coping strategy are less likely to become depressed.

Considering that human behavior is the result of the interaction of personality characteristics and social conditions (Atkinson, Atkinson and Hilgard, 1983), personality characteristics are very important in individual differences and human character and behavior and identifying these features are very important in intervention programs are essential for the prevention or treatment of stress and depression among pregnant women.

The findings of this study can have significant and practical implications. Among those, we can point to performing tests of personality and coping styles before pregnancy, screening to identify mothers in need of education, early intervention programs to identify and correct faulty cognitive assessment, reforming and strengthening effective and active coping strategies, behavior management training in stressful situations, psychotherapy, and finally helping mothers to receive psychological services. Thus, intervention programs should be a way of challenging maladaptive coping styles and more adaptive coping styles associated with common and good cognitive therapy should be followed. We can teach more efficient coping styles to these people by training coping skills in order to help those better control stressful situations and prevent them from becoming depressed.

One of the suggestions for further research is having some interventions such as problem solving skills, assertiveness and stress management to increase ability to cope with stress in pregnancy which might be helpful in preventing stress and depression.

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References

1. Lowdermilk F, Perry S. (2004). *Maternity & women health care*. 8th ed. Washington: mosby, 398-402.
2. Cunningham F, Leveno K, Bloom S, Hauth J, Gilstrap L, Wenstrom K. (2005). *Williams Obstetrics*. 22th Ed. New York: McGraw-Hill, 5-100.
3. Bahri Bana Baj, N. (2000). Investigating the effect of psychosocial, educational and physical support on the pregnant women's pain intensity during first childbirth. MA thesis. Nursing and Midwifery Faculty. Mashhad: Mashhad University of Medical Sciences.
4. Brouwers E, Van Barr A. (2001). Maternal anxiety during Pregnancy and Subsequent infant development. *J Infant behav Development*, 24:95-106.
5. Geller P.A. (2005). Pregnancy as a stressful life event. *CNS spectr*, 9(3): 97-188.
6. Cunningham FG. (2005). *Kenneth KJ, Hauth JC, et al. Williams obstetrics*, 22th Edition. New York: McGraw-Hill.
7. Kurki T, Hiilesmaa V, Jankowski KR, et al. (2000). Depression and anxiety in early pregnancy and risk for preeclampsia. *Obstet Gynecol*, 95(4):487-490.
8. Pazandeh F., Toomians Zh., Afshar F. Valaee, N. (2008). Investigating prevalence of depression and related factors in pregnant women referring to teaching hospitals of Shahid Beheshti University of Medical Sciences. *Feyz Journal*, Kashan University of Medical Sciences, 21: 66-70.
9. Karbakhsh, M. Sedaghat M. (2002). Depression during pregnancy and the need for integrating patient finding in the care of pregnant women. *Payesh, Journal of Medical Sciences Research Center of Jahad Daneshgahi*, 4 (1): 49-55.
10. Kaplan, IH. Sadock, JB. (2003). *Synopsis of psychiatry, Behavioral Science/Clinical Psychiatry*. 8th ed, Philadelphia, Williams & Wilkins, 534-558.
11. Gelder, M., Mayou, R., Crowen Philip. (2001). *Shorter Oxford Textbook of Psychiatry*, 4th ed, Oxford, Oxford University Press, 204-247.
12. Kaplan, IH. , Sadock, JB. (2000). *Comprehensive Textbook of Psychiatry* .7th ed. Philadelphia, Williams & Wilkins.
13. Cheung, N. F. (1994). Pain in normal labor. *Midwives*, 107(277):212-6.
14. Bolgy, JI. (1991). Stress and delivery. *Ann Med*, 23(50):227-37.
15. Watson, D., & Clark, L.A. (1992). On traits and temperament: General and specific factors of emotional experience and their relation to the five-factor model. *Journal of Personality*, 60:441-476.
16. McCrae, R.B., & Casta, P.T. (1986). Personality, coping, and coping effectiveness in an adult sample. *Journal of Personality*, 54:385-405.
17. Lazarus, R.S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.

18. Endler ND, Parker JDA. (1990). Multidimensional assessment of coping: A critical evaluation. *Journal of Personality and Social Psychology*, 54: 466-475.
19. Haren, E., & Mitchell, C.W. (2003). Relationship between the five-factor personality model and coping style. *Psychology & Education*, 401:38-49.
20. Nourbala A., Defeei M., Faghihzadeh S., & Dehghani A. (1998). Investigating the relationship between methods of coping with individual characteristics and mental health in infertile couples referring to infertility center of Yazd. *Hakim research Journal*, 1 (3): 197-205.
21. Bolger, N., & Schilling, E.A. (1991). Personality and the problems of everyday life: The role of neuroticism in exposure and reactivity to daily stressors. *Journal of Personality*, 59:355-386.
22. Scheier, M.F., & Carver, C.S. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, 4:219-247.
23. Parkes, K. P. (1986). Coping with stressful episodes: The role of individual differences, environmental factors, and situational characteristics. *Journal of Personality and Social Psychology*; 51: 1277-1292.
24. Kardum, I., & Hudek-Knezevic, J. (1996). The relationship between Eysenck's personality traits, coping styles and moods. *Personality and Individual Differences*, 20:341-350.
25. Hooker, K., Frazier, L.D. & Monahan, D.J. (1987). Personality and coping among caregivers of spouses with dementia. *Gerontologist*, Jun, 34(3):386-392.
26. Jafarnejhad P., Farzad V., Moradi A. & Shokri A. (2004). Investigating the relationship between big 5 personality factors, coping styles and mental health of Graduate students. *Journal of psychology and educational sciences*, 1: 51-74.
27. Shahmiri H. & Momtazi S. (2006). The prevalence of depression and its relation to personal characteristics of pregnant women. *Medical Journal of Tabriz University of Medical Sciences*, 28 (2): 83-86.
28. Lolaee A. & Kashanizadeh N. (2007). Determining the rate of depression among pregnant women attending clinics for the care of pregnancy. *Journal of Medical Council of Islamic Republic of Iran*, 26 (3): 317-323.
29. Field, T., Diego, M., Hernandez-Reif, M., Figueiredo, B., Deeds, O., Ascencio, A., Schanberg, S., & Kuhn, C. (2010). Comorbid depression and anxiety effects on pregnancy and neonatal outcome. *Infant Behavior and Development*, 33:23-29.
30. Pluess, M., Bolten, M., Pirke, K.M., & Hellhammer, D. (2010). Maternal trait anxiety, emotional distress, and salivary cortisol in pregnancy. *Biological Psychology*, 83:169-175.
31. Gall MD., Borg, WR. & Gall, JP. (2006). The methods of quantitative and qualitative research in education sciences and psychology. Trans. Nasr, Abolghasemi, M., Bagheri, KH. Pakseresht, MJ., Khosravi, Z., & Shahni Yeilagh, M. 2nd ed. Tehran: Samt Publications.
32. Molavi H. (2007). The SPSS practical guide for behavioral sciences. Puyesh Andisheh Pub, Isfahan, p 27.
33. Garousi Farshchi M. (1998). Normalization of the NEO Personality Inventory. PhD Thesis in Psychology, Faculty of psychology, Tarbiat Modarres university.
34. Soltani Amroabadi M. (2002). Relationship of creativity and coping styles in high school students. MA dissertation, Faculty of psychology, Isfahan university.
35. Beck, AT, Rial WY, Rickets K. (1974). Short form of depression inventory: cross-validation. *Psychol Rep*. Jun; 34(3):1184-6
36. Penley JA, Tomaka J. (2002). Association among the big five, emotional response, and coping with acute stress. *Personality and individual differences* 32: 1215-1228.
37. Bombardier, C.H., Damico, C., Jordan, J.S. (1990). The relationship of appraisal and coping to chronic illness adjustment. *Behave Res Ther*, 28(4):297-304.
38. Clomba MV., Santiago ES., Rossello J. (1999). Coping strategies and depression in Puerto Rican adolescents: an exploratory study. *Culture Divers Ethnic Minor Psychol*, 5(1):65-75.
39. Felsten, G. (1998). Gender and coping: Use of distinct strategies and associations with stress and depression. *Anxiety, Stress, and Coping*, 11:289-309.
40. Atkinson R.L, Atkinson R.C., & Hilgard E. (1983). *Introduction to Psychology*. 8th edition, New York: Harcourt, Brace, Jovanovich.

Table 1: Range, Frequency and Percentage of Research Demographic Variables

Occupation	Frequency	Percentage	Education	Frequency	Percentage
Housewife	69	86.2	Primary School	8	10
employee	5	6.2	Secondary School	15	18.8
unemployed	5	6.2	Diploma	40	50
Others	1	1.2	Technician	7	8.8
Total	80	100	BA/BS	7	8.8
Age range	Maximum	Minimum	MA/MS	3	3.8
18-38	38	18	Total	80	100

Table 2. Mean and Standard deviation of Research Variables and Demographic Variable of Age

Research Variables	Mean	Standard Deviation
Neuroticism	37.13	4.43
Extraversion	40.32	4.46
Agreeableness	39.15	3.71
Openness to experience	36.52	4.46
Conscientiousness	40.98	3.98
task-oriented coping style	38.78	8.10
emotion-oriented coping style	31.37	7.92
Avoidance-oriented coping style	28.60	6.27
Depression	7.30	7.20
Age	27	4.72

Table3. The correlation between research dependent and independent variables

Research variables	Neuroticism	extraversion	agreeableness	Openness to experience	Conscientiousness	Task-oriented coping strategy	Emotion-oriented coping strategy	Avoidance-oriented coping strategy	Depression
Neuroticism	-----								
extraversion	-0.39**	-----							
agreeableness	-0.35**	0.36**	-----						
Openness to experience	0.14	0.21*	0.08	-----					
Conscientiousness	-0.29**	0.45**	0.44**	-0.06	-----				
Task-oriented coping strategy	-0.27*	0.37*	0.33*	0.15	0.46**	-----			
Emotion-oriented coping strategy	0.37**	0.13	-0.13	-0.14	-0.12	-0.004	-----		
Avoidance-oriented coping strategy	0.06	-0.02	-0.27*	0.17	-0.11	-0.34**	0.25*	-----	
Depression	0.44**	0.14	-0.25*	0.28	-0.05	-0.38**	0.28**	0.12	----

P < 0.01 ** p < 0.05*

Table 4. Results of one-group MANPVA for independent and dependent variables

Variables		df	Sum of squares	Mean squares of	F value	Sig level	Observed power	Partial Squared	Eta	β coefficient
Neuroticism	Task-oriented	1	223.10	223.10	4.34	0.04	0.68	0.11		-0.32
	Emotion-oriented	1	350.42	350.42	6.64	0.01	0.72	0.14		0.38
	Avoidance-oriented	1	47.13	47.13	1.17	0.28	0.19	0.03		0.06
	Depression	1	617.29	617.29	14.98	0.00	0.97	0.18		0.46
extraversion	Task-oriented	1	35.80	35.80	0.70	0.04	0.58	0.14		0.39
	Emotion-oriented	1	28.57	28.57	0.54	0.30	0.11	0.03		-0.12
	Avoidance-oriented	1	2.22	2.22	0.05	0.53	0.10	0.05		-0.03
	Depression	1	45.58	45.58	1.11	0.29	0.18	0.01		0.16
Openness to experience	Task-oriented	1	80.37	80.37	1.57	0.22	0.23	0.02		0.15
	Emotion-oriented	1	257.37	257.37	4.88	0.10	0.32	0.04		0.13
	Avoidance-oriented	1	4.91	4.91	0.12	0.72	0.60	0.02		0.19
	Depression	1	81.53	81.53	1.98	0.16	0.28	0.03		0.30
agreeableness	Task-oriented	1	1.52	1.52	0.03	0.03	0.57	0.12		0.32
	Emotion-oriented	1	90.35	90.35	1.71	0.19	0.25	0.02		-0.14
	Avoidance-oriented	1	28.01	28.01	0.39	0.05	0.52	0.09		-0.27
	Depression	1	98.85	98.85	2.40	0.05	0.33	0.10		-0.23
Conscientiousness	Task-oriented	1	595.78	595.78	11.54	0.00	0.92	0.18		0.48
	Emotion-oriented	1	40.01	40.01	0.76	0.38	0.14	0.01		-0.13
	Avoidance-oriented	1	22.51	22.51	0.56	0.45	0.11	0.01		-0.12
	Depression	1	92.77	92.77	2.25	0.13	0.32	0.03		-0.07