

Comparison of Personality Traits, Strategies of Coping with Stress and Locus of Control Between Mothers with Deaf and Blind Children and Mothers with Normal Children

Elnaz Attaran Miandoab and Gholam Reza Mahmoudi
Psychology and Education of Exceptional Children, Central Tehran Branch,
Islamic Azad University, Tehran, Iran

Abstract: The present research was aimed to compare the personality traits, strategies of coping with stress and locus of control in mothers with deaf and blind children with mothers with normal children. The research method was causal-comparative (after event). The population consisted of all mothers of deaf and blind children and mothers of normal children in Karaj City. Cluster sampling was used in the present research for exceptional and normal schools. Afterwards, all exceptional students including 50 male and 50 female students who had the conditions and specifications of the selected unit of were chosen using purposive sampling method. In addition, 120 students including 60 male and 60 female students were chosen among normal students who were selected using cluster sampling method. Personality type questionnaire of Costa and McCrae, internal-external locus of control questionnaire of Nowicki and Strickland and coping strategies (emotion and problem-oriented) questionnaire of Lazarus and Folkman were employed in order to collect required information. Finally, the collected data was analyzed using statistical methods, standard deviation and variance analysis through SPSS Software. External locus of control in mothers with deaf children was greater than mothers with blind and normal children. There was no difference between mothers with blind and deaf children and mothers with normal children in terms of problem and emotion-oriented coping strategies. Moreover, it can be concluded that neuroticism and extraversion had greater values in mothers with deaf children compared with mothers with deaf and normal children.

Key words: Personality traits, strategies of coping with stress, locus of control, mothers with deaf and blind children, mothers with normal children, questionnaire

INTRODUCTION

It can be deduced that personality is one of the most fundamental issues in psychology, because it's the main core of discussions in the fields of learning, motivation, perception, thought, emotions and feeling, wisdom, etc. (Shamlu, 2005). Psychologists have presented variety of approaches for realizing the complex personality of human beings. According to Ryan's five-factor model, personality consisted of five main characteristics including neuroticism, extraversion, acceptance, agreement and dutiful (McCrae and Costa, 2004). Any individual nowadays experiences stress in his own life in different forms and inevitably tries to make a unique decision in order to be accountable. Stress is a special force which is applied to a person and makes temporary or permanent changes in the structure of that person. The researchers in the field of cognitive evaluation believe that individuals' cognitive evaluation pattern of stressful

life situations is together with variety of emotional and rational responses such as anger, guilt, pride, designing a plan, doing a particular act or an attempt to reduce unpleasant feelings (Zillig *et al.*, 2002). Relative studies indicated that individuals with high levels of neuroticism use passive strategies such as avoidance, self-blaming, wishful thinking and interpersonal practices based on militancy such as hostile reaction and externalizing negative emotions in the face of stressful situations, therefore, high levels of neuroticism intensifies experiences of negative emotions which results in reduction of well-being (Haren and Mitchell, 2003). Locus of control refers to one's believes on the way of environmental control. On other words, it is a system of beliefs that one evaluates his/her success of failure according to strengths and weaknesses. There are two types of orientation in the field of locus of control. Some people tend to internal orientation by considering the belief that expertise, hardworking, prudence and

responsible behavior leads to positive consequences. On the contrary, lack of skills, lack of effort and irresponsible behavior will lead to negative consequences. On the other hand, some people have external orientation by considering the belief that events take place by chance, others' strength and unknown and out of control factors. According to these individuals, behavior and results are independent of each other and thereby the obtained results are out of their personal control (Rotter, 1966). Since, simultaneous control of the five characteristics of personality and coping with stress strategies seems to be necessary in order to identify relationships between them in connection with the psychological health of mothers and according to the fact that mothers have significant role in education and training of family members, especially children, identifying personality traits, locus of control and coping with stress strategies could help mothers to adopt to life stressors and to raise the level of subjective well-being and psychological health. Hence, the present research is going to answer to the following question. Is there any significant difference between mothers with deaf and blind children and mothers with normal children in terms of personality traits, locus of control and coping with stress strategies?

MATERIALS AND METHODS

The research method was causal-comparative (after event). The population consisted of all mothers of deaf and blind children and mothers of normal children in Karaj City. Cluster sampling was used in the present research for exceptional and normal schools. Afterwards, all exceptional students including 50 male and 50 female students who had the conditions and specifications of the selected unit of were chosen using purposive sampling method. In addition, 120 students including 60 male and 60 female students were chosen among normal students who were selected using cluster sampling method. Personality type questionnaire by McCrae and Costa (1989), internal-external locus of control questionnaire by Nowicki and Strickland and coping strategies (emotion and problem-oriented) questionnaire of Folkman *et al.* (1986) were employed in order to collect required information. Finally, the collected data was analyzed using statistical methods, standard deviation and variance analysis through SPSS Software.

Research instruments

NEO-FFI personality questionnaire: This questionnaire firstly published by the name of NEO with 185 questions by Costa and McCrae. The 240 and 50 question forms of the questionnaire were developed by the same

researchers afterwards. This questionnaire is one of the instruments which have a great contribution in measurement of the five-factor personality traits (Zillig *et al.*, 2002) and evaluates five factors of neuroticism, extraversion, acceptance, agreement and dutiful. McCrae and Costa (2004) conducted a study on 1492 individuals and found the reliability of the questionnaire for the five mentioned factors using Cronbach's alpha method to be 0.86, 0.8, 0.75, 0.69 and 0.79, respectively. Using re-rest method, Elahi Fard (2005) found the reliability coefficients to be 0.87, 0.84, 0.79, 0.80 and 0.82 for the factors of A, O, E, N and C, respectively.

Questionnaire of coping strategies: In order to study coping strategies, coping strategies questionnaire by Folkman *et al.* (1986) was employed. This questionnaire consisted of 66 questions and evaluates eight coping strategies. These eight factors consisted of two types of problem oriented methods (seeking social support, accountability, strategic problem solving and positive reappraisal) and emotion oriented methods (confront agreement, distance, self-controlling, escape and avoidance). This 66 question questionnaire is based on 4-point Likert scale (from "I have not used" to "I have used too much") (Yousefi, 2001). Agha Yousefi reported the reliability of the questionnaire to be 0.80.

Rotter's locus of control scale: This scale was developed by Rotter in 1966. Moreover, it consisted of 29 pair sentences which are specified by A/B. The 23 questions of these 29 pairs are selective-mandatory which the participant should select one out of each question, thereby 6 questions are neutral. These 6 questions are used in order to enhance ambiguity of the test. In addition, scores range is from 0-23. This scale has a high level of validity and it has been used in many investigations. For instance, Narimani obtained a value equal to 78% for the Rotter's locus of control scale.

RESULTS AND DISCUSSION

According to Table 1, it can be deduced that problem oriented coping strategies related to mothers with blind children and mothers with normal students have the maximum average and minimum average, respectively. In fact, mothers with blind students use problem oriented coping strategies more frequently than mothers with normal students use.

The results of Table 2 show that mothers with blind students have the maximum average scores (37.00) and mothers with normal students have the minimum average scores (35.25). In fact, mothers with blind students who

Table 1: Comparison of the scores of subscales related to coping strategies of Lazarus in three groups of mothers with male or female deaf, blind and normal students

Groups	Gender	No.	Average (problem oriented)	Standard deviation	Average (emotion oriented)	Standard deviation
Normal	Female	60	35.14	5.96	39.66	6.22
	Male	60	35.37	6.64	39.60	6.79
	Total	120	35.25	6.28	39.63	6.48
Deaf	Female	25	38.40	8.52	41.76	6.06
	Male	25	34.56	6.90	41.00	5.19
	Total	50	34.48	7.92	41.38	5.59
Blind	Female	25	37.16	5.50	43.40	6.29
	Male	25	36.84	5.78	38.48	7.15
	Total	50	37.00	5.58	40.94	7.12
	Female	110	36.35	6.62	41.00	6.34
	Male	110	35.52	6.50	39.66	6.55
	Total	220	35.93	6.56	40.33	6.46

Table 2: Comparison of the scores of problem oriented strategies in three groups of mothers with male or female deaf, blind and normal students

Groups	Gender	No.	Average	Standard deviation
Normal	Female	60	35.14	5.96
	Male	60	35.37	6.64
	Total	120	35.25	6.28
Deaf	Female	25	37.16	5.50
	Male	25	36.84	5.78
	Total	50	37.00	5.58
Blind	Female	25	38.40	8.52
	Male	25	34.56	6.90
	Total	50	34.48	7.92

Table 3: Comparison of the scores of emotion oriented strategies in three groups of mothers with male or female deaf, blind and normal students

Groups	Gender	No.	Average	Standard deviation
Normal	Female	60	39.66	6.22
	Male	60	39.60	6.79
	Total	120	39.63	6.48
Blind	Female	25	43.40	6.29
	Male	25	38.48	7.15
	Total	50	40.94	7.12
Deaf	Female	25	41.76	6.06
	Male	25	41.00	5.19
	Total	50	41.38	5.59

Table 4: Summary of two-way ANOVA for problem oriented strategies in three groups of mothers with male or female deaf, blind and normal students

Locus of changes	SS	df	Mean square	F-value	Significance level
Group	121.178	2	60.589	1.426	0.243
Gender	83.173	1	83.173	1.957	0.163
Interaction between group and gender	145.252	2	72.262	1.709	0.183
Error	9092.997	214	42.491		
Total	9400.450	219			

SS = Sum of Squares; df = degree of freedom

were 25 subjects in each group (25 male and 25 female in total) have the maximum average scores (37.00) compare with other groups in terms of using problem oriented coping strategies.

Table 5: Summary of two-way ANOVA for emotion oriented strategies in three groups of mothers with male or female deaf, blind and normal students

Locus of changes	SS	df	Mean square	F-values	Significance level
Group	133.361	2	66.681	1.646	0.195
Interaction and between group gender	214.307	2	107.153	2.646	0.073
Error	8666.850	214	40.499		
Total	9110.086	214			

SS = Sum of Squares; df = degree of freedom

According to Table 3, mothers with deaf students have the maximum average scores (41.38) and mothers with normal students have the minimum average scores (39.63). On other words, mothers with deaf students have the maximum average score in terms of using emotion oriented coping strategies.

The results of Table 4 indicate that the difference between the average scores of subscales of problem oriented coping strategies in three groups of mothers with blind students, mothers with deaf students and mothers with normal students according to the factor of gender (male and female), factor of group and of interaction between the factors of group and gender is not significant at 0.05 level. In fact, F = 1.426 in factor of group, F = 1.957 in factor of gender and F = 1.709 in factor of gender. On other words, it can be expressed with 0.95 confidence level that there is no relationship between the factors of gender and group and interaction between the factors of group and gender and the correlation is not significant at 0.05 level. Moreover, there is not a difference between problem oriented coping strategies in mothers with male and female blind, deaf and normal children.

The results of Table 5 show that the calculated F in the factor of group (mothers with blind, deaf and normal children) at 0.195 significance level is equal to 1.164 and it is not significant at the level <0.05. On other words, it can be expressed at 0.95 confidence that there is no relationship between the scores of emotion oriented strategies with three groups of mothers with blind, deaf and normal children. Moreover, the calculated F in interaction between the factors of group and gender is equal to 2.646 at 0.073 significance level and it is not significant at the level <0.05. On other words, it can be expressed at 0.95 confidence level that there is no relationship between the scores of emotion oriented strategies in interaction between the factors of group and gender.

The results of Table 6 show that the average scores of internal and external locus of control in mothers with deaf students (15.16) is considerably less than mothers with blind students (18.62) and mothers with normal students (18.45) while there is not a considerable

Table 6: Average scores for internal-external locus of control in three groups of mothers with male or female deaf, blind and normal students

Groups	Gender	No.	Average	Standard deviation
Normal	Female	60	19.53	4.32
	Male	60	17.40	5.35
	Total	120	18.48	4.96
Blind	Female	25	20.08	5.34
	Male	25	17.16	3.83
	Total	50	18.62	4.83
Deaf	Female	25	16.12	7.14
	Male	25	14.20	4.96
	Total	50	15.16	6.16

Table 7: Summary of two-way ANOVA for internal-external locus of control in three groups of mothers with male or female deaf, blind and normal students

Locus of changes	SS	df	Mean square	F-value	Significance level
Group	439.217	2	219.609	8.346	0.0001

SS = Sum of Squares; df = degree of freedom

Table 8: Comparison between average of personality traits of mothers with male or female deaf, blind and normal students

Personality traits	Deaf	Normal	Blind
Neuroticism	29.02	27.44	25.56
Extraversion	30.98	29.24	27.92
Flexibility	30.06	26.66	25.48
Amiability	29.78	26.83	28.18
Accountability	27.02	27.67	24.30

Table 9: Summary of one-way ANOVA for scores related to personality trait, coping strategies and locus of control

Variables	Locus of changes	Sum of squares	df	Mean square	F-values	Significance level
Locus of control	Inter group	51.145	4	12.786	0.435	0.783
	Intra group	6314.564	215	29.370		
	total	6365.709	219			
Problem oriented strategies	Inter group	306.235	4	76.559	1.810	0.128
	Intragroup	9094.215	215	42.299		
	total	6400.450	219			
Emotion oriented strategies	Inter group	335.521	4	83.880	2.055	0.088
	Intragroup	8774.566	215	40.812		
	total	9110.086	219			
Neuroticism	Inter group	198.256	4	49.564	1.681	0.155
	Intragroup	6339.471	215	29.486		
	total	6537.827	219			
Extraversion	Inter group	123.168	4	30.792	1.151	0.334
	Intragroup	5751.178	215	26.750		
	total	5874.345	219			
Flexibility	Inter group	153.345	4	38.331	1.384	0.240
	Intragroup	5953.307	215	27.690		
	total	6106.632	219			
Amiability	Inter group	49.535	4	12.384	0.374	0.827
	Intragroup	7118.211	215	33.108		
	total	7167.745	219			
Accountability	Inter group	40.810	4	10.202	0.379	0.823
	Intragroup	5784.368	215	26.904		
	total	5825.177	219			

difference between the average scores related to mothers with normal students and mothers with blind students. On other words, it could be said that there are equal to each other.

The results of Table 7 indicate that the calculated F in relation to the factor of group (mothers with blind, deaf and normal students) is significant at 0.01 level. On other words, it can be said at 0.99 confidence level that there is a relationship between the three groups and it is significant at 0.01 level.

According to the results of Table 8, the average scores of accountability in mothers with blind students, mothers with deaf students and mothers with normal students are equal to 24.30, 27.02 and 27.67, respectively. On other words, the score related to the personality trait of accountability is greater in mothers with normal students compared with the other two groups.

The results of Table 9 show that the calculated values for F using one way variance analysis for the scores of personality traits (neuroticism, extraversion,

flexibility, amiability and accountability), locus of control (internal-external) and coping strategies (problem oriented and emotion oriented) in relation to the factor of education (diploma, high school, bachelor, master and PhD degree) are not significant at 0.05 level. On other words, it can be expressed that there is no relationship between the factor of education and scores of personality traits, coping strategies and locus of control.

CONCLUSION

The results of the present research indicated that there was no significant difference between mothers with blind, deaf and normal children in the field of internal-external locus of control. Moreover, external locus of control was greater in mothers with deaf students compared with mothers with blind and normal students. Ronen *et al.* (2007) conducted a research on students between 8-11 years old in primary schools and concluded that students who have high levels of self-control skills show less aggressive and inappropriate behaviors. In addition, Lefcourt (1992)'s study indicated that students with lower levels of external control have higher levels of social, occupational and educational problems and give up soon in competitive situations. Moreover, they have more problems in social interactions and are aggressive and irritable against social issues. The results of the present research demonstrated that there was no difference between mothers with blind and deaf children and mothers with normal children.

However, there was a significant difference between mothers with deaf and blind children and mothers with normal children in the field of "five-factor model of personality traits". On other word, there were differences between mothers with deaf, blind and normal children according to the components of "neuroticism" and "extraversion". Furthermore, the mentioned components had a greater values in mothers with deaf children compared with mothers with blind and normal children. Lee-Bagglely *et al.* (2005) reported in their study entitled "coping with interpersonal stress: role of big five traits" that extroverted people use problem oriented coping strategies such as social support, positive thinking and positive reappraisal more frequently while neurotic people use passive strategies such as avoidance, wishful thinking and procedure based on militancy in stressful situations. Boyers found in an investigation entitled "big five personality and relationship construct marital adjustment" that there is a positive and significant relationship between problem oriented coping strategies (positive reappraisal and religious support) which are

efficient coping strategies and subjective well-being. Moreover, the results indicated that there is a negative significant relationship between the neuroticism and subjective well-being.

REFERENCES

- Elahi Fard, A.A., 2005. Study of the relationship of personality traits and individual and familial factors with marital status among administrative office personnel in Ahwaz city. M.A. Thesis, Shahid Chamran University, Tehran, Iran.
- Folkman, S., R.S. Lazarus, R.J. Gruen and A. DeLongis, 1986. Appraisal, coping, health status and psychological symptoms. *J. Personality Soc. Psychol.*, 50: 571-579.
- Haren, E.G. and C.W. Mitchell, 2003. Relationships between the five-factor personality model and coping styles. *Psychol. Educ.: Interdisciplinary J.*, 4: 38-49.
- Lee-Bagglely, D., M. Preece and A. DeLongis, 2005. Coping with interpersonal stress: Role of Big Five traits. *J. Personality*, 73: 1141-1180.
- Lefcourt, H.M., 1992. Durability and impact of the locus of control construct. *Psychol. Bull.*, 112: 411-414.
- McCrae, R.R. and P.T. Costa, 1989. The structure of interpersonal traits: Wiggins's circumplex and the five-factor model. *J. Personality Soc. Psychol.*, 56: 586-595.
- McCrae, R.R. and P.T. Costa, 2004. A contemplated revision of the NEO five-factor inventory. *Personality Ind. Differences*, 36: 587-596.
- Ronen, T., G. Rahav and A. Moldawsky, 2007. Aggressive behavior among Israeli elementary school students and associated emotional/behavioral problems and self-control. *School Psychol. Quarterly*, 22: 407-431.
- Rotter, J.B., 1966. Generalized expectancies for internal versus external control of reinforcement. *Psychol. Monographs: Gen. Applied*, 80: 1-28.
- Shamlu, S., 2005. Schools and Theories in Personality Psychology. University of Tehran Press, Tehran, Iran.
- Yousefi, A.A., 2001. The role of personality factors on coping strategies and the impact of coping therapy on personality factors and depression. Ph.D. Thesis, Tarbiat Modares University, Tehran, Iran.
- Zillig, L.M.P., S.H. Hemenover and R.A. Dienstbier, 2002. What do we assess when we assess a Big 5 trait? A content analysis of the affective, behavioral and cognitive processes represented in Big 5 personality inventories. *Personality Soc. Psychol. Bull.*, 28: 847-858.