

## **Short Version of the Big Five Inventory: Testing for the Factorial Invariance across Parents with Normal and Exceptional Children**

**Keivan Kakabarae, PhD**  
Department of Psychology  
Kermanshah branch, Islamic Azad  
University

**Ali Reza Moradi, PhD**  
Department of Psychology  
University of Tarbiat Moallem

**Ali Akbar Arjmandnia, PhD**  
Department of Psychology  
University of Tehran

**Gholam Ali Afrooz, PhD**  
Department of Psychology  
University of Tehran

**Haidar Ali Hooman, PhD**  
Department of Psychology  
Islamic Azad University

This study aims at testing the factor structure and the invariance measurement of the Short Version of the Big Five Inventory (BFI-SV) between two groups of parents, those with normal children and parents with exceptional ones. Eight hundred parents (400 parents with normal children and 400 parents with exceptional children) responded to the short version of the Big Five Inventory of Personality Index (BFI-SV), Satisfaction with Life Scale (SWLS) and Positive and Negative Affect Schedules (PANAS). To examine the factor structure of BFI-SV, confirmatory factor analysis has been used; to evaluate BFI-SV Invariant factor structure in the two groups of parents, multi-groups confirmatory factor analysis was used, and finally, to evaluate the convergent validity of subscales of BFI-SV, the correlation coefficients among personality factors with Mental Well-Being Scales (SWLS and PANAS) were used. Confirmatory factor analysis fitting indices based on LISREL software, confirmed the existence of five factors, neuroticism, extraversion, conscientiousness, agreeableness and openness in the two groups of parents.

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\* Email: [keivan\\_k76@yahoo.com](mailto:keivan_k76@yahoo.com)

BFI-SV cross-group validity results showed the equivalence of five-factor structure of BFI-SV in the two groups. The correlation coefficients between personality traits in BFI-SV with the mental well-being scales, confirmed the convergent validity of CISS-SF. The results of the present study show the equivalence between factor structure of the list of the short version of the five big factors of personality and the validity of this list to assess personality traits in the two groups of parents.

**Keywords:** personality traits, invariance of factor structure, Short Version of the Big Five, parents.

Due to the abundance of the variables and the time limit the researchers face while assessing different psychological constructs, Rammstedt and John (2007) emphasize accelerating the brief assessment instrument process. A review of the experimental evidence indicates that instruments such as single-item self-esteem scales (Rabins, Hendin and Terzsinosky, 2001), single-item ability rankings (Rammstedt and Ramsayer, 2002) and even a ten-item version of the big five inventory (Gasling, Rentefra and Sovan, 2003) were indicative of this accelerated process of measuring the minimum. Therefore, in line with the relevant research, usability of the above scale among a group of parents with normal and exceptional children, testing psychometric properties of the ten-item version of the big five inventory, seems irrefutable.

On the other hand, valid cross-group studies require comparability of measurement instruments to confirm the equivalence of the constructs in different groups. As a result, Ang, Klassen, Chong, Huan, Wong, Yeo & Krawchuk (2009) assert that at present understanding the importance of test measurement invariance for the comparison of groups is increasing. In addition, other researchers believe that when there is no exact information about measurement invariance, determining the cross-group difference depends on the real difference of the given construct, otherwise different psychometric responses which are different from the scale items, would be ambiguous (Cheung and Rensold, 2002; Spencer, Fitch, Grogan-Kaylor & McBeath, 2005).

Reviewing different empirical evidence shows that researchers who are interested in the core subject of “parenting stress” have emphasized the pivotal role of a wide range of factors within the individuals in order to explain and interpret different levels of experiences causing stress among parents (Pottie & Ingram, 2008; Spratt, Saylor, & Macias, 2007; Bouffard, Roy & Vezeau, 2005; Trute, Worthington & Hiebert-Murphy, 2008; Kristensen & Torgersen, 2001). Accordingly, in line with the results of some field studies about stress causing experiences among parents with exceptional children compared with parents with normal children, the analysis of the role of predictive factors of different levels of parental experiences has a significant importance (Zaidman-Zait, 2008; Wanamaker & Glenwick, 1998; Seltzer, Floyd, Greenberg & hong, 2004).

Undoubtedly, the necessity of comprehensive and purposeful study of the role of personality traits in predicting and explaining different levels of stress-causing experiences among parents, and comparing the pattern of psychological results of facing these experiences among parents with normal and exceptional children, demands access to a special tool to make it possible to evaluate the role of multiple factors while facing stress-causing experiences. Therefore, this study, for the first time, aims at studying factorial structure of the Short Version of the Big Five Inventory of personality (Endler & Parker, 1999) and cross-group validity of this instrument between parents with normal and parent’s exceptional children.

### **Description of the Dimensions of the Big Five Inventory (BFI) of Personality**

As an important framework to understand the structure of human behavior, BFI of personality has been the focus of researchers. In other words, we can see a kind of growing consensus about the validity of human personality traits as determining tendencies of his feelings and behavior (Matthews, Deary & Whiteman, 2003). In recent years, in order to describe and explain the five personality traits, different theoretical perspectives have been developed. Based on lexical approach, Goldberg

(1993) has proposed a model. In this approach, the personality dimensions are described through those visible features of individuals which are defined by language. It must be pointed out that the results of the following studies showed that the lexical factors are highly convergent with dimensions obtained from other research methods in the field of five factors (Loehlin, McCrae, Costa & John, 1998). These findings confirm the external validity and predict lexical factors, and at the same time show that personality dimensions do not merely reflect the lexical phenomena. McCrae and Costa (1996) presented a model in which the factors are interpreted as genotypic tendencies. Wiggins and Trapnell (1996) conceptualized five dimensions of personality as the relational constructs. Hogan (1996; quoted by Wilks & Spivey, 2009), in his Socio-Analytic Theory, emphasized the social functions of individuals' perceptions and others perceptions. This view refers to the fact that the characters are formed socially in order to be at the service of interpersonal functions. Evolutionary perspectives on the five factors reminds us that people have different protective mechanisms which are associated with their survival and reproduction and the knowledge of the mechanisms provides necessary background to understand individual differences (Buss, 1996). Buss (1996) sees the personality as an "adaptive landscape" in which the BFI of personality result in the most important and prominent aspects of individual survival needs.

For researchers interested in identifying the underlying individual differences in personality, BFI of personality seems a fundamental discovery (Korotkove & Hannah, 2004). Overall, the pattern of BFI is a comprehensive typology including five relatively stable factors of openness, conscientiousness, extraversion, agreeableness and neuroticism (Korotkove & Hannah, 2004). This model obtained through many studies in which factor analysis of the pivotal personality traits were used (Zhang, 2006). Accordingly, through factor analysis, Costa and McCrae (1985; quoted by Haren & Mitchell, 2003), concluded that to distinguish individual differences in personality characteristics five major aspects can

be considered. It must be pointed out that the structure of BFI of personality does not imply that differences in personality can be reduced to just the five mentioned dimensions. Rather, these dimensions reveal the personality in the most general level of abstraction and each of them includes some specific and distinct personality characteristics (McCrae and Costa, 1996). The following is a brief description of each dimension. Neuroticism (N) stands for the individual's tendency for experiencing anxiety, tension, seeking pity, hostility, pulsed productivity, depression and low self-esteem, while extraversion (E) refers to the individual's tendency for positivity, courage seeking, being energetic and being intimate. Openness (O) is the individual's desire for curiosity, love for art, artistry, flexibility and wisdom, while the agreeableness (A) shows the person's desire for forgiveness, kindness, generosity, empathy and sympathy, altruism and trusting others. Finally, conscientiousness (C) is applied to a person's willingness to be systematic, efficient, reliable, self regulatory, and development oriented, rational and calm.

### **The Big Five Inventory (BFI) of Personality**

John and Srivastava (1999) alluding to the fact that a wide range of measurement tools of personality BFI are available in the English language, reviewing the history of the concept of measurement, emphasized the importance of 3 tools including Trait Description Adjective (TDA) (Goldberg, 1992), Five-Factor Inventory (NEO) (McCrae and Costa, 1992) and Big Five Inventory (BFI) (John, Donahue & Kentle, 1991). All in all, John and Srivastava (1999) noted that in the evaluation process of personality traits the NEO questionnaires have high validity for measuring BFI. Also, TDA has been the most common single-trait scale. Finally, BFI has been frequently used in the studies in which time has been extremely valuable. BFI measures the main features of the five factors through short phrases. In other words, the need to measure the main components of the five inventories of personality through short phrases has encouraged John, Donahue & Kentle (1991) to build BFI.

Accordingly, when the distinctive measuring of individual's aspects is not the aim, BFI makes it possible to measure the five personality dimensions effectively and flexibly (John and Srivastava, 1999). Researchers interested in BFI have used this list in a wide range of studies and in different populations. Therefore, knowing this important matter, researchers of this study aimed to analyze and report the factor structure of the Persian version of BFI as well as its validity and reliability.

Some studies, focusing on studying BFI factor structure and its psychometric properties, have been conducted in different populations (Rammstedt and John, 2007; Denissen, Geenen, Van Aken, Gosling & Potter, 2008; John and Srivastava, 1999; Lang, Ludtke & Asendorpf, 2001; Benet-Martínez and John, 1998). Research results of Denissen, Geenen, Aken, Gosling & Potter, (2008), with the aim of validating the Dutch version of BFI showed that the factor structure of BFI in different age groups (10-20, 20-30, 30-40, 40-50, 50-60) is the same. Also, in this study, the results of analyzing the main components, using varimax rotation, showed that the factor structure of BFI in Dutch version is equivalent to the factor structure of BFI in English, German and Spanish versions. Research results of Rammstedt and John (2007), with the aim of investigating personality traits in one minute or less than one minute through the short versions (10-item) of the English and German BFI, showed that the 10-item scales of BFI indicate meaningful levels of psychometric properties. Rammstedt and John (2007) point out that although reducing the number of questions decreased external validity of BFI, the convergent and divergent validity of the short version of BFI was still substantial and significant. Research results of Benet-Martínez and John (1998), with the aim of analyzing generalization of factor structure of BFI in Latin cultural groups, showed that the Spanish version of BFI is a valid and reliable measurement tool for assessing the five big inventories of personality in Spanish native speakers. Furthermore, the results of this study as reflected in BFI, pointed out that for emphasizing the significant

cultural differences in personality structure in a general level of abstraction, little evidence is available.

In the present study, consistent with the research literature, due to some criticism against the exploratory factor analysis which is essentially done to describe the factor structure of a tool, the confirmatory factor analysis was used to examine the factor structure of BFI-SV (Giles, 2002). In addition, exploratory factor analysis approach, because of insisting on determining the structure of scale scores with an emphasis on statistics rather than theory as well as due to inability in measuring error, faces serious criticism (Henson, Capraro & Capraro, 2004; Thompson & Daniel, 1996). Dickey (1996) believes that exploratory factor analysis cannot be used as a base for determining the underlying factor structure of an instrument by itself. He explained that this method of analysis is designed to maximize the amount of variance within the set of presented variables, while the other analysis with the other data sets cannot reproduce the same factor structure. Accordingly, in this study, considering the necessity of accurate analysis of dimensional structure of BFI-SV, for the first time, BFI-SV factor structure is investigated among a group of parents with normal and exceptional children. Undoubtedly, more definitive results about replicates of factor structure of BFI-SV in two Iranian adult groups provide the necessary evidence to emphasize the absence of significant cultural differences in factor structure of BFI-SV.

## **Method**

### **A) Statistical Population and the Sample**

This study is descriptive and correlational. The statistical population includes families with exceptional children and families with normal children in Kermanshah, Iran in 2010-11. The research sample includes 800 parents (400 with normal and 400 with exceptional children). To select the sample with exceptional children, welfare centers and education offices provided the list of 380 families. Then, the list was checked to see if some names overlap. Finally, through random sampling 200 couples were

chosen. Parent with normal children (200 couples), were chosen through multi-stage sampling. Here, people were chosen hierarchically from different units of society. The selection procedure is as follows: Out of three education districts, districts one and three were chosen; then, ten schools were randomly selected from each district. Finally, exceptional students were chosen with the same cultural, social and economical status. Gender-based means and standard deviations of parents' age are as follows:

**Table 1**  
**Means and Standard Deviations of Parents' Age**

Variables	Parents with normal children		Parents with exceptional children	
	M	SD	M	SD
Fathers' age	42.75	5.29	49.71	9.74
Mothers' age	36.83	5.30	43.87	8.30

N=800

**Procedures and data analysis.** In this study, data analysis was done based on Classic Test Theory (CTT). Retention or removal of the list items was done through relying on statistical characteristics of factor analysis. Reliability coefficient was estimated by Cronbach's alpha coefficient. Validity of the scale was obtained through factor validity (confirmatory factor analysis). Also, to study the cross-group validity of the scale, a multi-group confirmatory factor analysis was used, and finally, to evaluate the convergent validity of the BIF-SV, the correlation coefficients between personality factors and sub-scales of CISS-SF (Coping Inventory for Stressful Situations- Short Form) were used. All instruments were completed individually by the two groups of subjects including parents with normal children and those with exceptional children. The participants were given 20 to 30 minutes to answer the questions. Data analysis was performed using statistical software- SPSS and LISREL.

**Translation and back translation.** In order to use the short version of the big five inventories of personality between the two groups of parents,

back translation method was used. For doing so, first the English version of the questionnaire was translated into Farsi by a bilingual person to be used for Iranian-parents sample. Then, to maintain the linguistic and conceptual equivalence, another bilingual person translated the Farsi version back into English (Marsella & Leong, 1995). Finally, through the "repeated review process", the differences between different versions were reduced to a minimum. Finally, a few members of the faculty board read and approved the content validity and cultural adaptation of the questionnaires.

## **B) Instruments**

*The Short version of the big-five inventory (BFI-SV).* The short version of the Big Five Inventory measures the main traits of five inventories through short phrases (Rammstedt and John, 2007). The short version of the five inventories includes 10 questions with short phrases that are graded on a five-degree scale, from completely disagree=1 to completely agree=5. The questions are selected through the experts' consensus and empirical analysis of the questions in order to arrive at the main traits- which refer to the big five inventories of personality (Rammstedt and John, 2007). Research results of Rammstedt and John (2007), with the aim of investigating personality traits in one minute or less than one minute through the short versions (10-item) of English and German BFI, showed that the 10-item scales of BFI indicate meaningful levels of psychometric properties. In the 10-item scale of the BFI, each of the big inventories is measured through two questions. Rammstedt and John (2007) emphasized that although reducing the number of questions decreased external validity of BFI, the convergent and divergent validity of the short version of the BFI in English and German versions were achieved substantially and significantly. In this study, Cronbach's alpha coefficients for the five factors of neuroticism, extraversion, conscientiousness, agreeableness and openness among parents with normal

children were 0.58, 0.61, 0.58, 0.54 and 0.55 and with exceptional children were 0.55, 0.51, 0.62, 0.56 and 0.60, respectively.

***Satisfaction with the Life Scale (SWLS).*** Emmons, Larsen & Griffin (1985) developed a five-question version of Satisfaction with Life Scale to measure cognitive aspect of individuals' mental well-being. In this scale, participants responds to each question on an eight-degree Likert scale (from 0=completely disagree to 7=completely agree). It must be pointed out that with the increase in the individuals' scores on this scale, their score in holistic factor of satisfaction with life increases. In this scale, the range of individuals' scores obtained is between the lowest (0) and the highest (35). The results of Shukri's study (2008) showed that among Iranian and Swedish students, the results of the exploratory and confirmatory factor analysis of SWLS are similar to the findings of Diener, Emmons, Larsen & Griffin (1985), Pavot, Diener, Colvin & Sandvik (1991) and Neto (1993), supporting the single-factor structure of SWLS. Cronbach's alpha coefficient of satisfaction with life scale in Iranian sample was equal to 0.84; in Swedish sample it was equal to 0.85; and overall in both samples it was equal to 0.83. In the present study, the Cronbach's alpha coefficient of satisfaction with life scale for parents with normal children was equal to 0.80 and for parents with exceptional children was equal to 0.81 and overall coefficient in both samples was equal to 0.84.

***Positive and negative affect schedule (PANAS).*** In order to evaluate the emotional aspect of well-being, based on the Positive and Negative Affect Schedule (Watson, Clark, and Tellegen, 1988), twenty-temperamental traits were used. PANAS questions describe different emotions and feelings and each of them is grouped into a positive affect scale or a negative affect scale. Participants answer all questions on a five-degree Likert scale. In this spectrum, number 1 represents lack of emotional experience and number 5 represents a very high emotional experience. The overall positive affect score for each subject was calculated through adding participant's scores in each of the ten

descriptive traits of positive emotions (interested, excited, strong, enthusiastic, proud, alert, inspired, determined, attentive, active) and the overall negative affect score for each subject was calculated through adding participant's scores in each of the ten descriptive traits of negative emotions (distressed, upset, guilty, scared, hostile, irritable, ashamed, nervous, jittery, afraid). The Shukri's study (2008) showed that among Iranian and Swedish students, the results of exploratory and confirmatory factor analyses of PANAS, are consistent with the findings of Watson, Clark & Tellegen (1988), supporting the two-factor structure of the PANAS. In the Iranian sample the Cronbach's alpha coefficients for positive and negative affect scales were 0.80 and 0.70, respectively; in Swedish sample they were 0.76 and 0.76, and overall in both samples, Cronbach's alpha coefficients for positive and negative affect scales were 0.78 and 0.81, respectively. In the present study, the Cronbach's alpha coefficients for positive and negative affect scales for parents with normal children were 0.76 and 0.81 respectively, for parents with exceptional children 0.75 and 0.77, and overall in both samples the coefficients were 0.78 and 0.81.

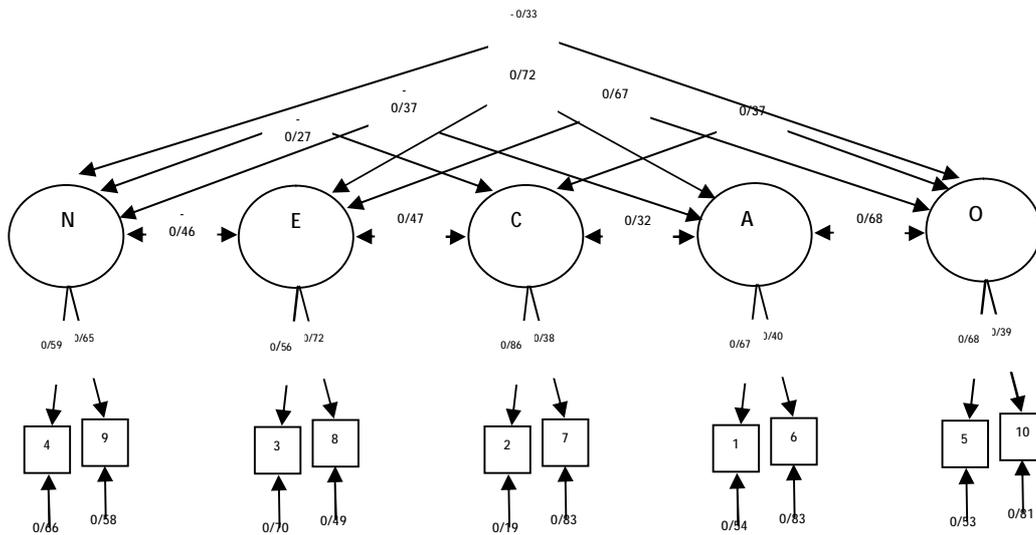
### Results

Table 2 reveals the measures of personality-traits means and standard deviations for the normal and exceptional children's parents.

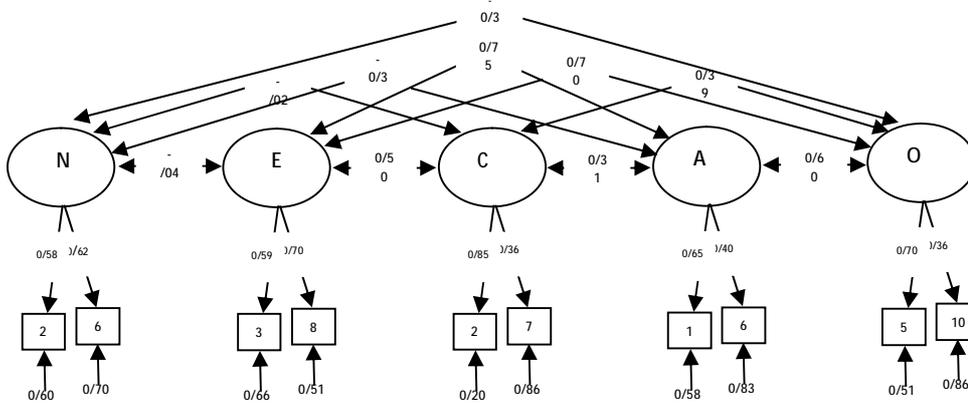
**Table 2**  
**Personality-Trait Means and Standard Deviations among Parents with Normal and Exceptional Children**

personality trait	Parent with normal children		Parent with exceptional children	
	M	SD	M	SD
Neuroticism	5.75	2.08	6.32	2.05
Extraversion	8.36	1.70	7.10	1.97
Conscientiousness	8.47	1.74	7.86	1.99
Agreeableness	8	1.65	7.25	1.89
Openness	7.58	1.88	6.50	2.01

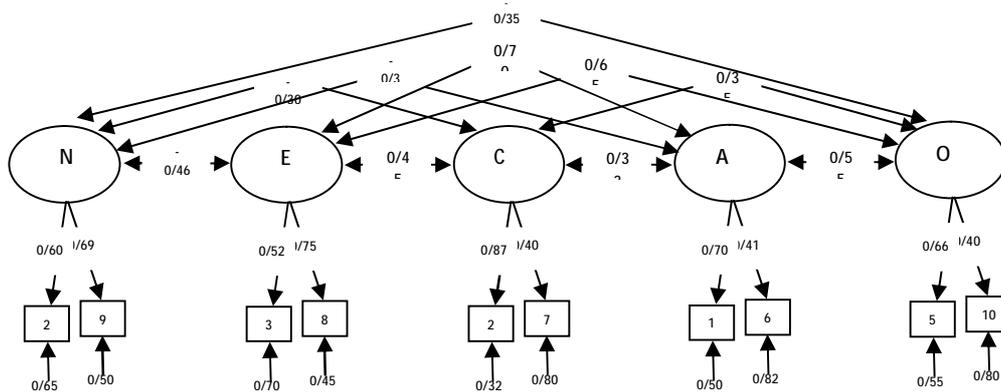
**The confirmatory factor analysis.** In this section, first, the factor structure of the short version of the big five inventory was tested in the whole sample of parents-parents with normal children and those with exceptional ones. So, based on the results of Rammstedt and John (2007), the first confirmatory factor analysis of BFI- SV was performed on a five-factor model in the whole sample of parents with normal and exceptional children (Figure 1). Then, the five-factor structure of BFI-SV was tested for parents with normal children and parents with exceptional children separately (Figures 2 and 3). In the Five-Factor Model, the five factors of neuroticism, extraversion, openness, agreeableness and conscientiousness were identified. In this model, the correlations between the latent factors were identified.



**Figure 1**  
**Five Factor Structure of BFI-SV among Parents with Normal and Exceptional Children**



**Figure 2**  
**Five Factor Structure of BFI-SV among Parents with Normal Children**



**Figure 3**  
**Five Factor Structure of BFI-SV among Parents with Exceptional Children**

Based on the Byrne's suggestion (2001), since the five-factor model for each group separately and for the total sample produced GFI and CFI indices which are greater than 0.90, RMSEA smaller than 0.08, and the ratio of Chi-Square to degree of freedom less than 2, it shows an acceptable fit with the data (Table 3). Figures 1, 2 and 3, show the graph and Standardized Coefficients of the path for the five-factor model- for the

entire sample, the group of parents with normal children and the group of parents with exceptional children, respectively.

In Figure 1, factor loadings of the items of the short version of the big five inventories for the two groups of parents- those with normal and those with exceptional children-were between 0.28 to 0.74, for the group of parents with normal children were between 0.24 to 0.78, and finally, for the group of parents with exceptional children were between 0.35 to 0.74. The results show that all of the reported factor loadings are statistically significant ( $p < 0.05$ ).

**Table 3**  
**The Comparison of the Patterns of Confirmatory Factor**  
**Analysis of BFI-SV: Statistics of Goodness of Fit**

pattern	group	df	Eigen values	$c^2$	GFI	CFI	RMSEA
five-factor model	parents with normal children	399	232.1	1.31	.96	.93	.074
	parents with exceptional children	399	335.8	1.50	.95	.92	.078
	total sample	798	154.8	1.40	.95	.93	.071

Results of Table 3 show that the five-factor structure of BFI-SV shows an acceptable fit with the data. Furthermore, the results of the confirmatory factor analysis of BFI-SV show that the five-factor structure in the two groups of parents—those with normal children and those with exceptional children—is repeatable. Therefore, in order to have the invariance factor structure test of BFI-SV in the two groups, using a multi-group confirmatory factor analysis plan, the ability of comparing factor loadings and correlation values between these two groups of parents were studied. To do so, an unrestricted model-in which all of the factor loadings and correlation values in the two subgroups were unlimited-was compared

with a restricted model-in which factor loadings and correlation values in the two subgroups were considered equal. The results of this comparison showed that the restricted model and the unrestricted one had no statistically significant difference  $\chi^2 [\Delta (5) = 7.50, p > 0.05]$ .

### **Convergent Validity**

In order to study the convergent validity of BFI-SV, the correlations between the five big inventories and Satisfaction with Life Scale and Positive and Negative Affect were calculated. There were negative significant correlations between neuroticism and both Satisfaction with Life Scale and positive affect, positive significant correlations between neuroticism and negative affect; positive significant correlations between extraversion, conscientiousness, agreeableness and openness, and Satisfaction with Life and positive affect and negative significant correlations between extraversion, conscientiousness, agreeableness and openness and negative affect, all of which show that BFI-SV has convergent validity (Table 4).

**Table 4**  
**Correlation Matrix of Personality Traits and Mental Well-being Scales**

variables	Satisfaction with Life	Positive Affect	Negative Affect
N	-0.13	-0.13	0.31
E	0.26	0.39	-0.23
C	0.16	0.31	-0.16
A	0.11	0.27	-0.15
O	0.14	0.32	0.14

\*\*  $p < 0.01$

### **Discussion**

This study aimed at determining the validity and reliability of the Short Version of the Big Five Inventory of personality between two groups of parents - parents with normal children and those with exceptional ones. Fit-

indices of confirmatory factor analysis confirmed the existence of Five Factors. The results of the comparison of the short version of the big five inventories in these two groups of parents revealed that the factor structure of the short version of the list in dealing with situations causing stress was equivalent in the two groups. Therefore, the results of this study, complying with the findings of Rammstedt and John (2007), support appropriately the multi-dimensional nature of the personality components.

The similarity of the factor structure of BFI-S, in this study and that of Rammstedt and John (2007), shows that the main underlying structure and the causal-theoretical mechanisms of personality traits among different groups and in different cultural contexts follow general principles. However, comparing the different levels of enjoyment of personality traits in different cultural groups indicate that the enjoyment level of personality traits in different contexts and groups is distinct. Thus, considering the similarity of measurement pattern in the two groups of parents, those with normal children and those with exceptional children, analyzing the distinctive pattern of enjoyment of these personality factors in different cultural and sexual groups is considered an important research priority.

Moreover, through the psychology perspective of characteristics, the invariability of factor structure of the short version of the big five inventories of personality, can be explained in predicting the stability of behavioral patterns of individuals in different contexts. The main assumption of characteristics theory is that there are relatively fixed and stable trait-characteristics which predict individuals' behaviors over time and in different situations (Johnson, 1997; Church, Harumi, Prado, Curtis, Tanaka-Matsumi, and Valdez-Medina, 2008). For example, in the five big inventories of personality theory, McCrae and Costa (2008) have suggested that dimensions of the big five inventories of personality are universal and hereditary characteristics predict trait-related behaviors in all cultures.

Reviewing empirical evidence shows that the distinctive pattern of relations between personality traits and emotional and cognitive results of facing events causing stress can be explained through four mechanisms.

Accordingly, based on their personality traits, individuals 1) have different possibilities to face events causing tension; 2) consider special aspects of a situation less or more stressful; 3) even with controlling the intensity of stress evaluation, have different reactions toward situations; 4) show different preferential coping methods (Suls and Martin, 2005; Baker-Ericzen, Brookman-Fraze & Stahmer 2005; Watson, David and Suls, 1999).

*Facing situations causing tension.* The change in the probability of confrontation with situations causing tension is one of the major pathways through which personality affects experiences causing tension. Most of the studies in predicting increased risk of facing situations causing tension as well as facing a wide range of devastating conditions emphasized the pivotal role of low social status and did not pay adequate attention to the role of personality traits in predicting increased risk of exposure to situations causing tension (Adler, Marmot, McEwen & Stewart, 1999; Adler and Matthews, 1994).

However, currently, many theorists agree that stable individual differences are one of the most important aspects of situation selection by individuals (Mitchell, Hilliard, Mednick, Henderson, Cogen, & Streisand, 2009). Thus, individuals with high avoidance motivation (McClelland, 1987; quoted by Semmer, 2006) or with inhibitor-oriented control focus (Brockner & Higgins, 2001), due to avoidance of facing factors causing tension in the short term, may lose opportunities of future success in the long term. While this type of mechanism involves active-selection (Zautra, Affleck, Tennen, Reich & Davis, 2005), there is another mechanism through which the individual stress level, due to having some special features, is increased by others. For example, some research evidence has shown that depressed people have less appeal to others and due to receiving less support from others, show more social isolation (Sako, Domant and Do, 1993; Vinabs, Bank Marsylis, 1998; quoted by Semmer, 2006). Similarly, people with low emotional stability, high hostility and low social competence, put themselves and other people exposed to a range of situations causing tension. On the opposite side, people with high adaptability receive more social support and experience fewer

situations causing tension (Bowling, Beehr & Swader, 2005; Zellars & Perrewe, 2001). Zautra, Affleck, Tennen, Reich & Davis (2005) emphasized that neuroticism is effective in predicting the experience of negative and stressful events. Also, Suls and Martin (2005) showed that people with high level of neuroticism, due to more exposure to situations causing tension, reported more negative emotional experiences.

***Evaluation of the different situations as causing tension.*** Lazarus (1999) emphasizes that personality, through the impact of cognitive assessment processes- as a fundamental component in stress process- is effective in predicting emotional experiences causing tension. People who scored high on flexibility characteristics, reported less stress in facing events causing tension. Some research evidence shows that neuroticism is effective in predicting inefficient cognitive assessment facing different situations (Rusting, 1998).

Accordingly, individuals with high trait-anxiety- as the major component of neuroticism or negative agitation- pay more attention to threatening stimuli selectively and in case of facing ambiguous situations always try to make threatening interpretations (Gunthert, Cohen & Armeli, 1999; Suls and Martin, 2005). People with high hostility characteristics- as another aspect of neuroticism characteristic- are strongly sensitive to the clues related to signs of violence in others and they always attempt to evaluate the ambiguous clues as markers of hostility (Berkowitz, 1998). People with low self-esteem- as one of the other characteristics of neurotic individuals- tolerate more stress since they evaluate failure experiences as " self-identifier" (Bruckner, 1988; quoted by Semmer, 2006).

***Distinct reactions to the situations causing tension.*** Severe reaction to those negative events which are evaluated the same, is another way that relates personality variables to the experiences causing tension. In fact, there is an essential component of overall feature of negative affectivity in the pattern of physiological response to negative stimuli (Eysenck, 1988; Gray, 1987; Larsen and Ketlar, 1991; quoted by Semmer, 2006).

Thus, anxiety- as a personality characteristic of neuroticism- is related to high reactivity to factors causing tension (Suls and Martin, 2005). Zautra,

Affleck, Tennen, Reich & Davis (2005) emphasized that neuroticism increases the negative effect of destructive events. Gunthert, Cohen & Armeli (1999) emphasized that negative cognitive evaluations show a relation with neuroticism. Therefore, neuroticism modifies the relation between unpleasant evaluation of a situation and subsequent negative emotional experiences. In other words, Gunthert, Cohen & Armeli (1999) showed that the relation between secondary evaluation (effectiveness of expected collation) and negative affection among participants with high level of neuroticism was intensified.

***Dealing with the situations causing tension.*** Lazarus (1999), emphasizing situation-oriented approach and doubting the characteristics approach, noted that, when dealing with situations causing tension, people do not follow stable and sustainable coping styles. In contrast, some researchers emphasizing that some people compared with others in facing tension causing situations are mostly using specific forms of coping strategies. Studying individuals' coping strategies facing tension causing situations had necessary empirical support from characteristics viewpoint (Watson, David & Suls, 1999). Watson, David & Suls (1999) indicated that neuroticism constantly shows a relation with non-adaptive coping methods. Gunthert, Cohen & Armeli (1999) also found that people with high level of neuroticism compared to those with low neuroticism, while facing tension causing situations, use non-adaptive coping methods more. Bolger & Zuckerman (1995) and Suls and Martin (2005) reported a similar result about the relation between neuroticism and non-adaptive coping strategies. Suls and Martin (2005) showed that people with high neuroticism, even in response to situations with low levels of causing tension possibility, used excitement-oriented strategies. Furthermore, Suls and Martin (2005) reported that spillover of a negative mood from one day to the other day among people with high neuroticism compared to those with low level of neuroticism was higher. Also, due to lack of "habituation" characteristic, individuals with high level of neuroticism facing similar tension causing situations reported more difficulties (Mc Ewan, 1999; quoted by Semmer, 2006). Overall, the results of the mentioned studies indicate that

individuals with high level of neuroticism facing tension causing situations use non-adaptive coping strategies more.

In tune with differential choice-effectiveness model pattern (Bolger and Zuckerman, 1995), personality affects selection and coping strategies. Thus, the effectiveness of the same coping strategy for people with high level of neuroticism and those with low level is different. Gunthert, Cohen & Armeli (1999) showed that on the one hand, people with high level of neuroticism, facing tension causing situations use non-adaptive coping strategies more, and on the other hand, the use of these strategies for people with high level of neuroticism has more negative effects. Thus, different experimental evidence show that personality traits affect experiences causing stress through facing mechanisms, evaluation, reactivity and coping. Findings of the present study should be interpreted and generalized in the context of its limitations. First, this study, like many other studies, due to the use of self-reporting tools and not studying actual behavior, may persuade participants to use methods based on achieving social approval and avoiding the stigma related to the lack of individual competence in answering questions. In other words, in order to confirm self-reporting scales, we did not use behavioral observation and clinical parameters. Secondly, considering the study sample, fathers and mothers with normal children and those with exceptional children, validity testing of BFI-SV among different genders was neglected here. Thirdly, although the internal consistency coefficient of the five factors is low, just like Rammstedt and John (2007) using the given instrument while the researcher faces time limit to collect data, seems plausible.

Overall, this research, among other available studies about testing factorial invariance of the five big inventories of personality among different cultural groups, is considered "complementary" and "expander". Recent findings provided new empirical evidence about factorial validity and psychometric properties of BFI-SV among adult samples with normal children and adults with exceptional ones and these findings can provide a useful tool for

researchers who are interested in studying the role of personality traits among parents with normal and exceptional children.

Because of applicability of personal traits in different areas, testing the invariance of the factor structure of the Short Version of the Five Inventories in other populations seems inevitable. Undoubtedly studies like this one provide invaluable information about Inter-group validity of the Short Version of the Five-Inventory decision making.

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