

The Role of Temperament and Character Traits, Basic Psychological Needs and Cognitive Flexibility in Psychological Hardiness of Autistic Children's Mothers

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Abstract

The present study investigated the role of the temperament and character traits, basic psychological needs and cognitive flexibility in hardiness of autistic children's mothers in Ahvaz city. The method was descriptive-correctional. The statistical population were included of all mothers of children with autistic in Ahvaz. A sample of 130 mothers were selected. The instruments were Ahwaz Hardiness, Temperament and Character, Basic Psychological Needs and Cognitive Flexibility Inventory. Data were analyzed by multiple regression. The results showed that there are significant and negative relationships between harm avoidance and reward-dependence on hardiness and positive relationship between other dimensions of temperament and character, basic psychological needs and psychological flexibility with hardiness. The results showed that the temperament, character, novelty-seeking and self-transcendence predicted hardiness. Therefore, improving the communication, novelty-seeking and self-transcendence, competency and perception of the alternative solutions may enhance the hardiness of autistic children's mothers and it may improve their welfare.

Keywords: Autism, basic psychological needs, flexibility, hardiness, temperament and character

Introduction

The need to care for Autism children is crucial, affecting parents, siblings, and needs substantial support resources in the community (Baio, et al., 2018). The presence of an autistic child in a family often causes irreparable damage to the family (Wainer, et al., 2016). Psychological hardiness is a set of personality traits that acts as a source of resistance against life tensions and stress. Research results show that the hardiness is related to personality traits including the Cloninger's bio-psychological model of nature and character (Zappitelli, et al., 2013). The dimensions of nature, including the components of avoidance and persistence, have characteristics that provide the basis for endurance and hardiness. Cognitive flexibility is one of the factors affecting mother's mental health and requires a wide range of possible and flexible solutions to deal with problems in order to better coping and adapting to changes (Kobylińska & Kusev, 2019).

Therefore, the purpose of this study was to investigate the role of temperament and character traits, basic needs, and psychological flexibility in the hardiness of mothers of autistic children. So, the hypotheses of the present study are that (1) there is a relationship between temperament and character traits, basic psychological needs, and flexibility with the psychological hardiness of mothers of autistic children and (2) temperament traits, basic needs, and Psychological flexibility have a significant role in predicting the psychological hardiness of mothers of autistic children.

Method

The research design was descriptive-correlational. The statistical population included all mothers who referred to the organization, treatment, and rehabilitation centers of Ahwaz in 2019 with at least one child with autism. The sample size consisted of 130 individuals who were selected using Cochran formula by available sampling method.

Ahwaz Psychological Hardiness Inventory (AHI) Kiamarsi et al. (1998): This is composed of 27 items. In the study of Rahimian Boogar, et al. (2008), to assess concurrent validity, this scale was correlated with Anxiety Questionnaire 0.55, Depression Scale 0.62, Self-efficacy Scale 0.55 and Hardiness Structural Validity 0.51, that were significant.

Temperament and Character Inventory (TCI) Cloninger, et al. (1994): This questionnaire with 125 items and the internal consistency coefficients of the questionnaire were 0.78, 0.87, 0.76, and 0.65 in the original sample for temperament dimensions (novelty seeking, harm avoidance, reward-dependency, and persistence, respectively), and for the dimensions of character traits (self-defectiveness, self-transcendence, and cooperation), these values were reported 0.86, 0.89, and 0.84, respectively (Cloninger, et al., 1994).

Basic Needs Psychological Scale (La, et al, 2000): This scale is composed of 21 items that measure three psychological needs of autonomy, competence, and communication. Cronbach's alpha coefficient of this scale was obtained about 0.83 in the research of Deci & et al. (2001) using Cronbach's alpha.

Cognitive Flexibility Inventory (CFI) Dennis and Vander Wal (2010): This questionnaire with 20 items and three aspects of cognitive flexibility: such as Perception of controllability, behavior justification and different options, holding the co-validity with Beck Depression Inventory and its convergent validity with Martin and Robin Cognitive Flexibility Scale (1995) was 0.75.

Results

Before using Pearson correlation tests between variables, the normality of the distribution was assessed by the Kolmogorov-Smirnov test, indicating that the distribution was normal.

According to the results of Table 2, the tolerance and VIF values are in the desired range, indicating that there is no multiple linear correlation between the independent variables. The value of the Durbin Watson statistic to assess the assumption of errors independency in the last column is also 1.5 to 2.5. Therefore, the assumption of independence between errors or non-correlation between errors is accepted.

Table1. The statistical pre-assumptions of applying regression on research variables

Variables	Linearity statistics	independence of errors test	
	tolerance	variance inflation factor	Durbin Watson
Novelty	1.24	0.80	1.93
Harm avoidance	1.04	0.94	
Reward-dependency	1.05	0.99	
persistence	1.11	0.89	
Self-defectiveness	1.07	0.92	
cooperation	1.15	0.86	
Psychological needs	1.49	0.67	
Psychological flexibility	1.33	0.74	

Enter regression was used to investigate the potency of temperament and character traits, basic needs and flexibility in predicting hardiness of mothers with autistic children. The results shown in Table 3 show that self-efficacy ($P = 0.001$, $F = 50.28$), novelty ($P = 0.001$, $F = 31.94$), competence ($P = 0.001$, $F = 24.66$) perceived alternative justifications ($P \leq 0.001$, $F = 20.45$) have the ability to predict psychological hardiness.

Table 2. Results of regression by enter method for research variables

Statistical index Predictive	R^2	F	regression coefficients			
			P	β	B	t
Constant	0.46	7.63	-	27.04	2.97	0.004
Novelty		0.001	0.24	1.21	2.95	0.004
self-transcendence			0.36	2.82	3.87	0.000
competence			0.21	0.59	2.20	0.030
Alternative solution perception			-0.27	-1.68	-2.47	0.015

Discussion

The results of the present study showed that novelty, self-transcendence, competence, communication, and alternative solution perception have the predictive role for hardiness. This finding is consistent with the results of researches by Densham, et al (2016). When people feel they can overcome the tasks and challenges they face and are effective in changing situations, they feel more empowered and more inclined to express their abilities. Competence is nurtured in a challenging situation and increases one's stubbornness. One of the limitations of this study was the research sample of mothers of children with autism in Ahwaz, so in generalizing the results to

mothers of other cities, caution must be taken. Therapists are advised to find new horizons for treatment and prevention of psychological trauma by finding ways to increase flexibility and educate mothers of autistic children.

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Conflicts of interest

They did not declare conflict of interest.

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