Prediction of family self-esteem

and academic self-esteem based on neuroticism and conscientiousness

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Abstract

Introduction: The objective of this study was to predict family self-esteem and academic self-esteem based on neuroticism and conscientiousness.

Method: This study was a correlational - descriptive study. The research population included all second-grade high school students in Shiraz, Iran, in the academic year of 2018-2019.

Result: Using multi-stage cluster sampling, 250 students (125 females and 125 males) were selected and evaluated using the NEO Personality Inventory and Coopersmith Self-esteem Inventory.

Conclusion: The results of the multivariate regression analysis showed that neuroticism negatively predicted the family self-esteem and academic self-esteem. Moreover, conscientiousness was able to positively predict family self-esteem and academic self-esteem.

Keywords: Neuroticism, Consciousness, Family self-esteem, Academic self-esteem, Students.

Resumen

Introducción: el objetivo de este estudio fue predecir la autoestima familiar y la autoestima académica basada en el neuroticismo y la conciencia.

Método: Este estudio fue correlacional y descriptivo. La población investigada incluyó a todos los estudiantes del segundo grado de secundaria en Shiraz, Iran, en el periodo académico 2018-2019.

Resultado: utilizando un muestreo por conglomerados polietápico, se seleccionaron y evaluaron 250 estudiantes (125 femeninos y 125 masculinos) mediante el inventario de personalidad NEO y el inventario de autoestima de Coopersmith.

Conclusión: los resultados del análisis multivariado de regresión mostraron que el neuroticismo pronosticó negativamente la autoestima familiar y académica. Asimismo, la conciencia fue capaz de pronosticar positivamente la autoestima familiar y académica.

Palabras claves: Neuroticismo, Consciencia, Autoestima Familiar, Autoestima Académica, Estudiantes.

Introduction

Healthy self-esteem is a basic human need and human strives to achieve it continuously. Self-esteem refers to one's general feeling of his or her value, credibility and competence. In other words, it refers to a perception that one has towards his or her worth and value. This perception comes from experiences that a person has gained during his or her lifetime, which can be considered both as a stable attribute and as a state variable[1]. Lack of adequate self-esteem in adolescents can lead to unhealthy feelings such as anger, anxiety, and depression. The weak self-esteem makes us hide our true self with shame and it prevents the flourishment of our abilities. Low self-esteem influences various aspects of our lives and affects our relationships with others. One of the dimensions of self-esteem is family self-esteem, which is defined as one's evaluation and judgment about his or her status in the family[2]. A study showed that people with high self-esteem, compared to people with low self-esteem, have more resistance to life issues and problems, so the likelihood of their success will be higher[3]. Adolescents who have low self-esteem view themselves as less courageous and deterrent in their communication with others, and they are socially nervous and anxious and always wait for failure. Another dimension of self-esteem is academic self-esteem. Academic self-esteem dimension includes viewing yourself adaptable with desirable academic standards[4]. Self-esteem and a sense of goodness will lead to more effort to achieve a higher standard and progress. Low self-esteem has a deterrent effect on perseverance and academic performance[5]. Given the importance of self-esteem, recognizing the factors predicting it is very important. It seems that one of these factors is personality. Personality is the distinct patterns of thought, excitement, and behavior of an individual determining his or her interaction with physical and social environments[6]. Recognizing the personality characteristics or traits is crucial.

One of the personality characteristics is neuroticism, which is based on undesirable experiences and emotions and includes the characteristics such as anxiety, depression, shyness, aggression, hostility, and emotional insecurity[7]. Doosti et al.[8] showed that Individuals high in neuroticism (also referred to as emotional instability) tend to exhibit poor adjustment and are prone to negative emotional states, including nervousness, anxiety, moodiness, and worry. Conscientious-

ness is another personality characteristic. Conscientiousness includes characteristics such as thinking before action, delaying the satisfaction of desires, observance of law and norms, and organizing and prioritizing the duties and assignments. Other characteristics of conscientiousness include self-esteem, being active and dynamism, acceptance of failures in the event of failure, attempts to compensate the failures, flexibility in being responsive to affairs assigned and planning to achieve the predetermined goals[9]. Shokri et al.[10] predicted academic procrastination based on big five personality factors. Data analysis showed that conscientiousness and neuroticism predicted academic procrastination. Isaei Cheshmeh Mahi et al.[11] examined the relationship between personality traits and students' academic performance. The results showed that neuroticism is negatively, and conscientiousness is positively associated with academic performance[11]. Shokri et al.[10] studied the personality traits and academic performance. The results of the correlation matrix between variables showed that there was a positive and significant relationship between conscientiousness factors and academic performance and negative and significant relationship between neuroticism and academic performance. Doosti and Hedyati Hamadani[8] examined the relationship between family function and anxiety in students. The results showed a significant and negative correlation between the general anxiety of boys and emotional fusion, problem-solving, emotional companionship and general family function. Farrokhzad[12] investigated the influence of the family atmosphere on the children neurotic tendencies and showed that there is a negative and significant relationship between neurotic tendencies of children and family expressiveness. Currently, no research was found on the role of neuroticism and conscientiousness in predicting family and academic self-esteem. For this reason, it seems that there is a serious research gap in this regard in Iran and foreign countries[13]. Therefore, the aim of this study was to provide scientific knowledge on the role of neuroticism and conscientiousness in predicting family and academic self-esteem[14,37]. Answering the questions in these aspects can undoubtedly expand scientific knowledge and resolve some of the ambiguities in this area. Hence, the necessity of this research was to provide scientific knowledge about the role of neuroticism and conscientiousness in predicting family and academic self-esteem[15,36].

Materials and methods

The research method was correlational-descriptive, in which family self-esteem and academic self-esteem were considered as a criterion variable and neuroticism and conscientiousness were considered as a predictor variable. The research population included all second-grade high school students in Shiraz in the academic year of 2018-2019. In this research, 250 students (125 female and 125 male) were selected through multistage cluster sampling. First, district 2 out of four districts in Shiraz was selected randomly. Then, two boy's schools and two girl's schools were selected from this district and two classes were selected from each boy's school and two classes were selected from the girl's school.

Data collection tool: NEO Personality Inventory (NEO PI-R) is a personality inventory that examines a person's Big Five personality traits (openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism[20]. This inventory has five factors: neuroticism, extroversion, openness to experience, agreeableness, and conscientiousness. In this study, the neuroticism factor is measured with the items of 1, 6, 11, 16, 2, 26, 31, 36, 41, 46, 51, 56, and the conscientiousness factor is measured with the items 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60. This scale is scored on a 5-point Likert scale, ranging from strongly disagree (score 0) to strongly agree (score 4). Costa and McCrae[15,16] assessed the validity of subscales of NEO personality inventory-short form using the convergent validity and reported it 0.75 for neuroticism and 0.71 for conscientiousness. Moreover, Chamorro-Premuzic and Furnham reported the reliability of these subscales 0.76 and 0.73, respectively, by using Cronbach's alpha method. To assess the reliability of subscales, Cronbach's alpha was used, and it was found 0.73 and 0.75 for neuroticism and conscientiousness, respectively[17]. Coopersmith Self-Esteem Inventory: This inventory was developed by Coopersmith[18]. It includes five big dimensions of general, family, social, physical and academic self-esteem. In this research, the items 6, 9, 11, 16, 20, 22, 29, 44 were used for assessing the family self-esteem and items 2, 17, 23, 33, 37, 42, 46, 54 were used to assess the academic self-esteem. This scale is scored in the form of 'it looks like me' (yes) or 'it does not look like me' (no) as scores 0 and 1. Devi and Rani[19] reported the alpha coefficient of 0.88 for the general score of this test. McCrae and Costa[20], reported an internal consistency coefficient of 0.86 to 0.90 for the Coopersmith Self-Esteem test.

Results

Descriptive results: To examine the descriptive information, the mean and standard deviations of the research variables were investigated, and the results are presented in Table 1.

Table 1. The mean and standard deviation of the research variables

Variables	Total	mean	SD
Neuroticism	250	36.3440	6.61640
Conscientiousness	250	29.9719	7.74670
Family self-esteem	250	4.2218	1.26107
Academic self-esteem	250	5.2920	1.89237

Inferential analysis section: Table 2 presents the correlation matrices of the research variables. As the results of this table show, the correlation coefficients of some of the variables of research were significant.

Table 2. Correlation matrices of the research variables

Variables	Neuroticism	conscientiousness	Family self-esteem	Academic self-esteem
Neuroticism	1			
conscientiousness	-0.244**	1		
Family self-esteem	-0.214**	0.219**	1	
Academic self-esteem	-0.393**	0.360**	0.231**	1

According to Table 2, there was a negative and significant relationship between the neuroticism variable and family self-esteem and academic self-esteem. It means that as neuroticism increased, family self-esteem and academic self-esteem decreased. There was a positive and significant correlation between conscientiousness and family self-esteem and academic self-esteem. It means that as conscientiousness increased, the family self-esteem and academic self-esteem will also increase. To investigate the family self-esteem and academic self-esteem prediction based on neuroticism and conscientiousness, concurrent multiple regression analysis was used and its results are presented in Tables 3 and 4.

The results of Table 3 showed that neuroticism with a beta coefficient of 0.133 and conscientiousness with a beta coefficient of 0.131 could predict family self-esteem. According to the results of Table 3, it can be stated that 0.101 of variance in family self-esteem factor was explained by these factors.

The results of Table 4 showed that neuroticism with a beta coefficient of -0.233 and conscientiousness with a beta coefficient of 0.190 could predict academic self-esteem. According to the results of Table 4, it can be stated that 0.308 of variance in the academic self-esteem factor was explained by these factors.

Table 3. Results of concurrent multiple regression method to predict family self-esteem based on neuroticism and conscientiousness

model		R	^{2}R	F	Sig	t	Standardized coefficients	Sig
							Beta	
Predictor variables	Neuroticism	0.3180	0.1010	5.383	0.0001	-1.976	0.1330-	0.0490
	conscientiousness					1.926	0.131	0.0500
Criterion variable: family self-esteem								

Table 4. Results of concurrent multiple regression method to predict academic self-esteem based on neuroticism and conscientiousness.

model		R	^{2}R	F	Sig	t	Standardized coefficients	Sig
							Beta	
Predictor variables	neuroticism	0.555	0.308	21.544	0.0001	-3.961	-0.2330-	0.0001
	conscientiousness					3.161	0.1900	0.002
Criterion variable: academic self-esteem								

Discussion

The results show that neuroticism and conscientiousness were able to predict family self-esteem and academic self-esteem. These results were consistent with that of the studies conducted by Farrokhzad[12] and Doosti and Hedayati Hamadani[8]. In explaining these results, it could be stated that neurotic people are often nervous, dissatisfied and less tolerable, and often have problems with everything. The persistence of neuroticism in people results in problems such as the lack of proper relationship with others, failures, and social harms, and a severe shortage of family self-esteem. Family self-esteem reflects one's emotions as a member of the family[21]. One who feels that he or she is a valuable member of the family performs the tasks in best ways and feels safe due to receiving affection and respect by the parents and his or her peers and finds positive self-esteem in this regard[22].

Solomon and Rothblum[23], reported that there was a significant relationship between the level of family function and neuroticism variable. Neurotic people are always anxious due to having continuous worries and concerns. The level of anger is high in these people and they are less able to cope with stress. Family and marital conflicts, lack of attention to others, lack of personality maturity, irresponsibility, superficial and self-oriented social relationships are some of the characteristics of these individuals. Thus, neurotic people do not feel safe in the family and do not perform their duties well due to the lack of responsibility[23]. They do not feel valued in the family, so they have low family self-esteem.

Conscientiousness factor was also able to predict family self-esteem. Conscientious people have characteristics that affect family self-esteem. In other words, conscientiousness is associated with characteristics such as striving, responsibility, success seeking, trying to do things in the best way[24]. It can increase the home responsibilities, so it can increase family self-esteem. Family self-esteem reflects one's emotions as a member of the family. A person who feels that he or she is a valuable member of the family performs his or her duties and task well[25,26]. In addition, conscientious people can manage to time, punctual, and equipped with the problem-solving process and identify the appropriate strategy helping them in restoring family relationships[27,28].

Neuroticism was also able to predict academic self-esteem. Neuroticism is characterized by nervousness, discomfort, unreasonable and unrealistic beliefs, very low control of impulses against the need, prone to stress, anxiety, and vulnerability. Low academic self-esteem is also associated with specific concerns such as fear of failure, test anxiety, social anxiety, and shyness[23]. Costa and McCrae[16] found that neuroticism was associated with educational problems[29]. The negative and significant relationship between neuroticism and academic self-esteem has been explained given the concept of anxiety, especially in stressful situations, such as exams. Additionally, Chamorro-Premuzic and Furnham[17] found that neurotic people, compared to non-neurotic people, are more anxious and show a higher tendency to be absent in the exams[38]. Another explanation is that neurotic person, compared to other people, experience more negative events and are more stressful[30,31]. As a result, they show poor performance in learning courses and academic achievement. Therefore, such negative characteristics can be negatively associated with academic self-esteem[32-35].

Conclusion

Conscientiousness was able to predict academic self-esteem. In explaining this result, it can be stated that conscientiousness is associated with some of the characteristics related to performance, such as trying to progress, order, and responsibility. Conscientiousness is one of the predictors of performance, especially when the inner determinants of motivation are taken into consideration, due to its relationship with motivation. Conscientious people spend a lot of time for doing their duties and tasks and gain more information about their future job. They set goals for themselves and make much effort to achieve them. In every area, they are trying more than needed[21]. Therefore, self-discipline, diligence, perseverance, progression-orientation, and accuracy can positively predict individual performance in different areas, including academic self-esteem. A sample of the study was limited to students; the results of this study may not be generalized to other populations and other cultures. Another limitation of this research was the lack of controlling the mediating role of gender. It is recommended that a similar study to be conducted to examine larger samples and in other areas. It is also recommended that the gender variable be examined concerning the variables of the research in further studies. Holding training courses is recommended to inform individuals with low family and academic self-esteem to be aware of the effects of neuroticism and conscientiousness traits on family and academic self-esteem, also results showed that neuroticism is a predictor of academic self-esteem

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