

### **Research Paper**

The Relationship Between Personality Traits (Neuroticism and Extraversion) and **Self-Efficacy With Aging Depression** 



### \*Mohammad Abbasi¹, Fazlollah Mirderikvand¹, Hamide Adavi¹, Mohammad Hojati²

- 1. Department of Psychology, Faculty of Literature and Humanities, University of Lorestan, Khoramabad, Iran.
- 2. Unit of Technology and Human Resources, Ministry of Education, Harsin, Kermanshah, Iran.



Citation: Abbasi M, Mirderikvand F, Adavi H, Hojati M. [Relationship Between Personality Traits (Neuroticism and Extraversion) and Self-Efficacy With Elderly Depression (Persian)]. Iranian Journal of Ageing. 2018; 12(4):458-469. https://doi. org/10.21859/sija.12.4.458



doi)\*: https://doi.org/10.21859/sija.12.4.458

Received: 06 May 2017 Accepted: 13 Aug. 2017

#### **ABSTRACT**

Objectives This study aimed to analyze the relationship personality traits (neuroticism and extraversion) and self-efficacy with aging depression in retiree male teachers in Harsin City, Iran.

Methods & Materials The present study followed a cross-sectional descriptive correlation method. In this research, a total of 173 retiree male teachers in Harsin were selected by random sampling method. Research tools included geriatric depression scale, NEO five-factor inventory and generalized self-efficacy

Results The obtained information was separately analyzed by Pearson correlation coefficient and regression. This research showed significant negative associations between aging depression with extraversion (r=-0.65, P<0.001), and self-efficacy (r=-0.66, P<0.001). There were also significant positive correlation between neuroticism (r=0.54, P<0.001) and aging depression.

Conclusion Neuroticism can affect aging depression of retiree male teachers. And more extraversion and self-efficacy can result in decrease in depression of retiree male teachers.

# **Key words:**

Elderly depression, Neuroticism, Extroversion, Self-efficacy

#### **Extended Abstract**

## 1. Objectives



lderly depression ranks the second among the various causes of disability in this era [1]. One of the psychological factors that play a significant role in elderly depression is personality traits [2, 3]. Neuroti-

cism and extroversion are two critical personality traits that affect depression [4]. In a meta-analysis, Maloof et al. [5] demonstrated that mood disorders are associated with a particular pattern of personality traits. On the other hand, self-efficacy is described as a critical factor in depression among various psychosocial factors [6, 7]. Self-efficacy is the self-assessment of individual's ability to perform a task and is a behavioral understanding that increases the possible commitment to a task and healthpromotion behaviors [8]. The present study evaluated the role of neuroticism, extraversion, and self-efficacy in predicting elderly depression.

### 2. Methods & Materials

This is a descriptive-correlation study (approved by the Education Headquarter of Harsin City of Kermanshah

\* Corresponding Author:

Mohammad Abbasi, PhD

Address: Department of psychology, Faculty of Literature and Humanities, University of Lorestan, Khoramabad, Iran.

Tel: +98 (917) 7769749

E-mail: abbasi.mohammad@hotmail.com



Province, No. 640/1993). The study population consisted of retired teachers (males) in Harsin City in 2016. Total 173 individuals (aged 52-68 years) were selected as a sample using simple random sampling method. 200 questionnaires were distributed in the present study of which 173 were selected for analysis. The research tool consisted of three questionnaires:

#### **Geriatric Depression Scale (GDS)**

The Geriatric Depression Scale (GDS) had 15 questions and was developed by Yesavage et al. in 1982 [9]. This tool was translated into Persian in Iran and standardized for the Iranian population. Its reliability coefficient was 0.9, and its validity was appropriate as estimated by factor analysis method [9]. The reliability coefficient of this questionnaire in the present study was 0.82 as determined by using Cronbach's alpha test.

### **Neo Five-Factor Inventory (NEO-FFI)**

In this study, the short form of the Neo Five-Factor Inventory (NEO-FFI) containing 60 questions was used. In this form, 12 items are assigned to measure each of the personality traits. The scoring of this questionnaire was performed on a 5-degree Likert scale (1-5). In this study, the reliability coefficient of neuroticism and extraversion subscales was 0.77 and 0.81 as determined using Cronbach's alpha.

### **General Self-Efficacy Inventory (GSE)**

The General Self-Efficacy Inventory (GSE) includes 17 items on a Likert scale (1, completely disagree to 5, completely agree). In the scoring of this test, each item is given a score from 1-5 [10]. The reliability coefficient

of the questionnaire was 0.77 as determined using Cronbach's alpha.

#### 3. Results

Descriptive findings including the mean (standard deviation) were calculated for each variable. The mean elderly depression, neuroticism, extroversion, and self-efficacy were 7.83(3.65), 31.73(10.10), 36.55(7.88), and 41.53(48.11), respectively. In addition, the skewness (and kurtosis) of these variables were 0.17(-1.64), 0.64(-0.64), 0.28(-0.080), and -0.21(-1.21), respectively, which indicating the data normality. The multicollinearity was examined before analyzing the presumption of using multiple regressions to assess the independence of predictive variables. Multicollinearity is the condition when the predictor variables are highly correlated at 0.90. The correlation coefficients between the predictive variables are displayed in Figure 1, all of which are below 0.90, the multicollinearity is avoided.

Pearson correlation coefficient was used to investigate the relationship between predictive variables (neuroticism, extraversion, and self-efficacy) and elderly depression. The correlation coefficients for the neuroticism with elderly depression (P<0.001, r=0.54), extraversion with elderly depression (r=-0.65, P<0.001), and self-efficacy with elderly depression (r=-0.66, P<0.001) were calculated, and all of them were significant at P<0.001. This data demonstrate that neuroticism is directly proportional to elderly depression. However, extraversion and self-efficacy are inversely proportional to elderly depression. In addition, regression analysis was performed using the Imus 24 to determine the role of personality traits (neuroticism and extraversion) and self-efficacy in the elderly depression. The results are presented in Figure 1.

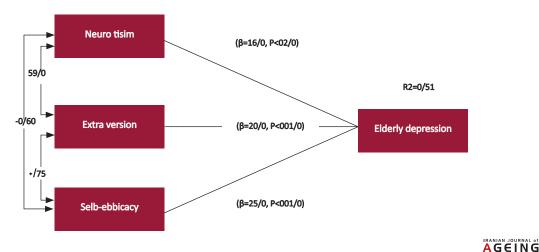


Figure 1. Regression coefficients and their significance level for prediction of elderly depression through neuroticism, extraversion, and self-efficacy variables



As shown in Figure 1, the beta coefficients of neuroticism, extraversion, and self-efficacy are 0.16, -0.30, and -0.35, with a significant level of P<0.001. This data demonstrates that self-efficacy, extroversion, and neuroticism are the critical factors for the prediction of elderly depression. In summary, these three variables account for 51% of the variance in male teachers' with elderly depression.

#### 4. Conclusion

The present study provides evidence for the effective factors (neuroticism, extraversion, and self-efficacy) involved in elderly depression. Based on current findings, it can be speculated that neuroticism people, because of false cognitive assessments, do not give themselves the opportunity to evaluate the problem and do not understand the situation appropriately. This results in using inefficient coping style such as excitement, and these people tend to be depressed. In contrast, extraversion includes positive emotional styles and positive emotions, intimate interpersonal relationships, and high levels of interaction and social activity [11]. On the other hand, self-efficacy with beta -0.35 had a negative and significant effect on depression in elderly. Kim [12] reports that depression is associated with weak self-efficacy beliefs. Individuals with poor self-efficacy beliefs avoid dealing with barriers and set high standards for themselves in an unrealistic manner. Therefore, these individuals face successive failures which lead to a feeling of deprivation and depression.

## Acknowledgments

This research did not receive any specific grant from funding agencies in the public, commercial, or not-forprofit sectors.

#### **Conflict of Interest**

The authors declared no conflicts of interest.

460

www.SID.ir