

The Relationship between Neuroticism and Self-Esteem

Zhixin Yao

University of California, Riverside

ABSTRACT. *This study focused on addressing the correlation between neuroticism and self-esteem due to a lack of research on this topic. A self-report survey method was used to collect data from Chinese and American male and female subjects (N = 99) aged 16-36 (M = 26.2, SD = 5.7). The 22-question online survey adopted questions from the Rosenberg Self-Esteem Scale and the neuroticism sub-scale from the Eysenck Personality Questionnaire-Revised. Results showed a significant correlation ($r(99) = -.59, p < 0.001$) between neuroticism and self-esteem, which confirmed the hypothesis that neuroticism and self-esteem are negatively correlated. Thus, this study concluded that people high in self-esteem tend to be low in neuroticism. This conclusion allows more future studies to be conducted in different social contexts in respect of people's negatively linked relationships in neuroticism and self-esteem.*

KEYWORDS: *Self-esteem, Neuroticism, Personality traits*

1. Introduction

Over the decades, self-esteem has gained researchers' attention and has been widely studied by researchers from different countries [1][2]. One of the most renowned measurements of self-esteem is the Rosenberg Self-Esteem Scale (RSES). Consisting of 10 questions regarding positive and negative self-image questions, RSES has proven to be validated and reliable through intensive studies (Rosenberg, 1965). Additionally, RSES is used to find out the correlations between the level of one's self-esteem and other factors such as aggression and depression. Previous studies have suggested that subjects with low self-esteem tend to have high levels of depression and aggressive behaviors [1][3].

Another personality trait, neuroticism, has also been studied extensively regarding its effect on other variables such as the mediating role it plays between self-esteem and aggressive behaviors as well as the relationship it exerts on the work-family conflict [1][4]. In an attempt to measure participants' neuroticism level, the Eysenck Personality Questionnaire-Revised (EPQ-R) is used by researchers [5] due to its reliability.

Various studies have been conducted with regard to using both neuroticism and self-esteem to research in a third variable such as depression [6]. Some studies showed that low self-esteem and high neuroticism tend to associate with the same outcome (e.g., aggression), yet, others indicated the opposite result [1][4]. Thus, more studies are required to reveal the link between neuroticism and self-esteem. Nevertheless, to date, no research has been done in discovering solely the relationship between these two variables. This study aims to locate the correlation between neuroticism and self-esteem using RSES and EPQ-R.

2. Goal and Hypothesis

The present study hypothesized that people with high self-esteem tend to have low neuroticism level. Intending to locate the negative correlation between these two variables, this study used a survey composed of questions from RSES and EPQ-R.

3. Methods

3.1 Participants

The subject of the study consisted of 29 males and 70 females age 16-36 ($M = 26.2$, $Md = 26$, $Mo = 32$, $SD = 5.7$) from China and the United States. All samples were convenience samples such as classmates, friends, and relatives. All samples were recruited online as volunteers.

3.2 Measures

3.2.1 Self-Esteem

Participants completed the Rosenberg Self-Esteem Scale. The self-report RSES contains 10 items which are to evaluate a person's value and worthiness toward him/herself [7]. Responses were entered on a 4-point Likert scale ranging from 1 (strongly agree) to 4 (strongly disagree). The RSES comprises 5 positively (e.g., I take a positive attitude toward myself) and 5 negatively (e.g., I certainly feel useless at times) worded questions. For encoding purposes, "strongly agree" was counted as 4 and "strongly disagree" was counted as 1 for positively worded questions. Scoring was the opposite of negatively worded questions which 1 for "strongly agree" and 4 for "strongly disagree." The higher the score (10-40) is, the higher the self-esteem an individual has.

3.2.2 Neuroticism

A short version of the Eysenck Personality Questionnaire, Eysenck Personality Questionnaire-Revised (EPQ-R), was used in the study. The EPQ-R contains 48 questions accessing aspects of P-Psychoticism, E-Extraversion, N-Neuroticism, and L-Lie. Each subscale consists of 12 questions. For the purpose of this study, only 12 questions from the N scale were used. Participants were to answer Yes or No for each item. For the encoding purpose, Yes scored 1 and No scored 0. The higher the score (0-12), the more neurotic a person is.

3.2.3 Procedure

Subjects were to fill out an anonymous 22-question online self-report survey. The survey was distributed in either English or Chinese depending on participants' residency. Chinese participants could enter the survey through WeChat (a widely used social media in China), while native English speakers received it through text messages, or Snapchat/Instagram. All subjects answered the survey completely.

3.2.4 Data Analysis

Based on the scoring guideline mentioned above, the correlation between self-esteem and neuroticism was calculated using Microsoft Excel. The p-value of the correlation was computed to indicate the significance of the value.

4. Results

The main claim in the current study is that high neuroticism negatively correlates with low self-esteem. Using the Pearson test, a Pearson correlation coefficient revealed a significant negative correlation between neuroticism and self-esteem, $r(99) = -.59$, $p < 0.001$ (see Table 1.). The regression graph performed also indicates the negative relationship between the two variables with $R^2 = 0.32$ (Figure 1.). Therefore, all data are shown supportive of the hypothesis.

Table 1

	Age		Neuroticism	Self-Esteem
Mean	26.20		5.50	29.20
Medium	26.00		6.00	29.00
Mode	32.00		6.00	30.00
SD	5.70		3.40	5.10
	Correlation (r)		-0.59	
	P-Value (p)		<0.001	

Descriptive data for all measures and the correlation and p-value for neuroticism and self-esteem.

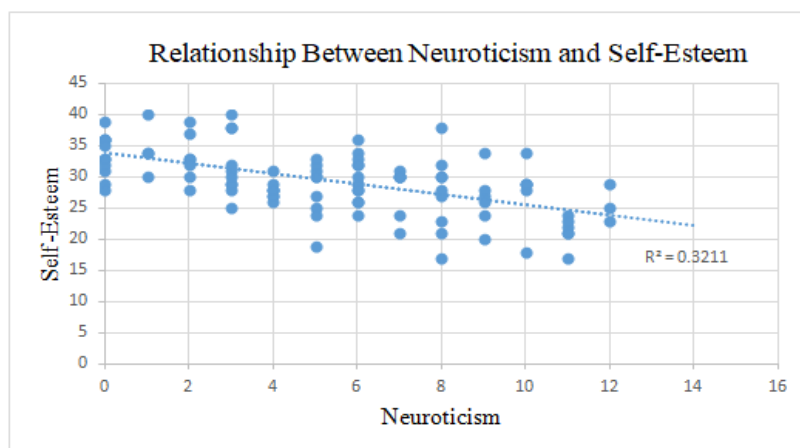


Fig.1 Regression Graph for Neuroticism and Self-Esteem

5. Conclusion

The study presented revealed that people high in neuroticism, in other words, high anxiety, insecurity, emotional instability, and worry [8], tend to have low self-esteem, which refers to low self-value, low feelings of self-worth and social acceptance [9]. This may be an important factor to address to those in different social contexts, for instance, educational industries, working facilities, as well as familial settings. Those who experience low self-esteem have a high tendency of being bullied in school [10]. Based on the finding of this study, it would be reasonable to infer that there is a positive relationship between neuroticism and victimization. However, to date, no studies have been done regarding this topic. In terms of job performance in working environments, those who demonstrate high self-esteem tend to do better in work and thus have higher accomplishments. Nevertheless, although high self-esteem indicates low neuroticism, the correlation between neuroticism and job performance is not significant enough to predict that those who are low in neuroticism will reach high achievement in work [9]. Furthermore, parents who have high self-esteem and high emotional stability would develop a healthier and less work-family conflicted relationship between their spouses and children [11][4]. This statement is consistent with the finding of the current study. Therefore, although only a few studies have been done regarding self-esteem and neuroticism in the social context, the significant negative correlation between self-esteem and neuroticism serves as a critical element in addressing various social settings as well as provides directions to future studies.

6. Limitations

Due to the small number of sample size and region restrictions (99 people from China and the United States), this study cannot be representative enough to apply to people from different countries/areas. Moreover, as shown in the result section, more females took the survey than male participants. Hence, there may be a lack of generalizability in the conclusion that high neuroticism indicates low self-esteem, because it may not entirely apply to the male population. Although the questionnaires the present study used are well-developed and widely used by researchers, biased answers from participants may have been a limitation. Participants could have answered quickly without truly reading the questions thus resulting in a misinterpretation. In addition, participants might not have answered the survey honestly. Though the identity of participants remained completely anonymous, participants may have been tempted to presenting their ideal self instead of their real self to researchers. Another limitation would be that Chinese participants might misunderstand the question due to cultural differences and translation despite that the Chinese versions of both questionnaires used and validated by previous studies.

7. Future Directions

The current study revealed solely the relationship between self-esteem and neuroticism; hence, we encourage future studies to research specific settings or contexts in which both self-esteem and neuroticism can be affected. For instance, more research can be done regarding job achievement and workplace relationships of employees with respect to their self-esteem and neuroticism level. Moreover, for future references, a larger population in various countries and in different ethnic groups is encouraged for generalizability. Further, the number of male and female participants can be more evenly distributed in future studies.

References

- [1] Teng, Z., & Liu, Y (2013). The Role of Neuroticism in the Relation between Self-Esteem and Aggressive Emotion among 1085 Chinese Adolescents. *Psychology*, vol.4, no.10, pp.729-735.
- [2] Schmitt, D. P., Allik, J (2005). Simultaneous administration of the rosenberg self-esteem scale in 53 nations: Exploring the universal and culture-specific features of global self-esteem. *Journal of Personality and Social Psychology*, vol.89, no.4, pp.623-642.
- [3] Cong, X., Tian, L., & Zhang, X (2005). Self-esteem: The core of mental health. *Journal of Northeast Normal University (Philosophy and Social Sciences)*, no.31, pp.144-148.
- [4] Wayne, J. H., Musisca, N., Fleeson, W. (2003). Considering the role of personality in the work–family experience: Relationships of the big five to work–family conflict and facilitation.
- [5] Eysenck, H. J., Eysenck, S. B. G (1975). *Manual of the Eysenck Personality Questionnaire (junior and adult)*. London: Hodder and Stoughton.
- [6] Schmitz, N., Kugler, J., Rollnik, J (2003). On the relation between neuroticism, self-esteem, and depression: results from the National Comorbidity Survey, pp.125-126.
- [7] Rosenberg, M (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- [8] Barrick, M. R., Mount, M. K (1991). The Big Five Personality Dimensions and Job Performance: A Meta-Analysis. *Personnel Psychology*, vol.44, no.1, pp.1-26.
- [9] Judge, T. A., Bono, J. E (2001). Relationship of core self-evaluations traits-self-esteem, generalized self-efficacy, locus of control, and emotional stability-with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology*, vol.86, no.1, pp.80-92.
- [10] Rigby, K., Slee, P. T (1991). Bullying among Australian school children: Reported behaviour and attitudes to victims. *Journal of Social Psychology*, no.131, pp.615-627.
- [11] El Ghaziri, N., & Darwiche, J (2018). Adult self-esteem and family relationships: A literature review. *Swiss Journal of Psychology/Schweizerische Zeitschrift Für Psychologie/Revue Suisse De Psychologie*, vol.77, no.3, pp. 99-115.