

Anxiety and Self-Esteem among Undergraduate College Students: A Correlational Study

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Abstract

College students experience many academic, social, personal, and career-related challenges. These experiences may influence their psychological well-being, particularly their levels of anxiety and self-esteem. Anxiety involves feelings of worry, fear, tension, and apprehension, whereas self-esteem refers to an individual's overall evaluation of personal worth and competence. The present study aimed to examine the relationship between anxiety and self-esteem among undergraduate college students. A quantitative, non-experimental, correlational research design was adopted. A pilot study was conducted with 30 undergraduate students aged 18–23 years. Anxiety was assessed using Sinha's Comprehensive Anxiety Test (SCAT), and self-esteem was measured using the Self-Esteem Scale (SES) developed by Singh and Srivastava. Pearson's product-moment correlation was used to examine the relationship between the two variables. The pilot results showed a positive but statistically non-significant relationship between self-esteem and anxiety, $r = .3$, $p = .07$. As the p value was greater than .05, the relationship was not statistically significant.

The findings suggest that the pilot results do not provide sufficient evidence of a significant relationship between the variables. The results also provide preliminary information for conducting the proposed main study with a larger sample.

Keywords: *anxiety, self-esteem, undergraduate students, college students*

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INTRODUCTION

The college period is an important stage of development during which students experience major academic, social, emotional, and personal changes. Students are expected to manage academic responsibilities, examinations, assignments, relationships, career decisions, and increasing personal independence. These demands can sometimes create psychological pressure and affect students' adjustment and well-being.

Anxiety is a common emotional response to situations that are uncertain, challenging, or perceived as threatening. A moderate level of anxiety can be useful because it may encourage preparation and alertness. However, when anxiety becomes excessive or persistent, it can interfere with concentration, decision-making, motivation, academic activities, relationships, and everyday functioning (American Psychiatric Association, 2022; Barlow, 2002).



Self-esteem refers to how individuals view and evaluate themselves. It includes feelings of personal worth, competence, confidence, and self-respect. Rosenberg (1965) described self-esteem as a person's overall positive or negative attitude toward the self. Healthy self-esteem can help students deal with difficulties, accept mistakes, and maintain confidence. In contrast, low self-esteem may be associated with self-doubt, insecurity, negative self-evaluation, and difficulty coping with stressful situations.

Anxiety and self-esteem may be related because students' beliefs about themselves can influence how they respond to stressful situations. Students who doubt their abilities may perceive academic or social challenges as more threatening. At the same time, repeated experiences of worry, failure, or avoidance may influence students' views of themselves. Previous studies have generally suggested an association between lower self-esteem and higher anxiety, although findings may vary according to the population and context.

The present study focuses on undergraduate students aged 18–23 years and examines the relationship between anxiety and self-esteem using standardized psychological measures.

Review of Literature

Previous research has examined the relationship between self-esteem and anxiety among young people and university students. Sowislo and Orth (2013) reviewed longitudinal research and found evidence that low self-esteem can be related to later internalizing problems such as anxiety and depression. Their findings also showed that the relationship is complex, indicating that simple correlation should not be interpreted as proof of causation.

Research among university students has also reported associations between self-esteem and anxiety. Mustafa et al. (2015) found a negative relationship between self-esteem and anxiety in one university sample, although results differed across cultural groups. Basco and Han (2016) also reported an association between self-esteem and anxiety among Korean university students. Other studies have found that academic pressure, social evaluation, fear of failure, and concerns about future careers may influence students' anxiety and self-evaluation.

Although previous research provides useful evidence, findings are not always consistent. Differences in culture, sample size, educational settings, measurement instruments, and types of anxiety may contribute to different results. Therefore, further research among specific undergraduate populations is useful.

Method

Research Design

A quantitative, non-experimental, cross-sectional correlational design was used. The researcher did not manipulate any variable. Instead, anxiety and self-esteem were measured and their statistical relationship was examined.

Participants

The proposed main study consists of 100 undergraduate college students aged 18–23 years, including 50 boys and 50 girls. Participants are selected using purposive sampling. A separate pilot study was conducted with 30 undergraduate students, and these participants were not included in the proposed main sample.

Measures

Sinha's Comprehensive Anxiety Test (SCAT). The SCAT, developed by A. K. P. Sinha and L. N. K. Sinha, is designed to assess general anxiety. It contains 90 items with a Yes/No response format. Higher scores represent higher levels of anxiety.

Self-Esteem Scale (SES). The Self-Esteem Scale developed by R. N. Singh and Ankita Srivastava contains 20 items designed to assess an individual's overall self-worth, self-confidence, and self-respect. Higher scores indicate higher self-esteem.

Procedure

Permission was obtained from the appropriate academic authorities before data collection. Participants were informed about the study and provided informed consent. Participation was voluntary, and confidentiality was maintained. Participants first completed the demographic information, followed by the anxiety and self-esteem measures. The responses were scored according to the instructions provided in the respective test manuals.

Results

The pilot study consisted of 30 undergraduate college students. Pearson's correlation was calculated to determine the relationship between self-esteem and anxiety.

Table 1: Pearson's Correlation Between Self-Esteem and Anxiety

Variables	N	r-value	p-value	Significance
Self-Esteem and Anxiety	30	0.3	0.07	Not significant

Interpretation

As shown in Table 1, the correlation between self-esteem and anxiety was positive, $r = .3$. However, the relationship was not statistically significant, $p = .07$. Since the p value was greater than .05, the pilot study did not provide sufficient statistical evidence of a significant relationship between the two variables.

The direction of the correlation was positive, which was different from the negative relationship expected in the original hypothesis. However, because the result was not statistically significant, it should not be interpreted as evidence that higher self-esteem is associated with higher anxiety in the wider student population.

Discussion

The purpose of the pilot study was to obtain preliminary information about the relationship between anxiety and self-esteem and to examine the feasibility of the research procedure. The findings showed a positive but non-significant relationship between the two variables.

The obtained correlation coefficient ($r = .3$) indicates a positive association in the pilot sample. However, the p value of .07 was above the .05 significance level. Therefore, the null hypothesis was retained for the pilot sample. This means that the pilot study did not demonstrate a statistically significant relationship between anxiety and self-esteem.

The result differs from several previous studies that have reported a negative relationship between the two constructs. Such differences may be related to the small pilot sample, individual differences among participants, cultural factors, academic circumstances, or differences in measurement. Therefore, the pilot finding should be considered preliminary.

It is also important to note that a correlational study cannot establish cause and effect. Even if a significant relationship is found in the main study, it would not demonstrate that anxiety causes changes in self-esteem or that self-esteem causes anxiety.

Conclusion

The present pilot study examined the relationship between anxiety and self-esteem among 30 undergraduate college students. The results indicated a positive but statistically non-significant correlation, $r = .3$, $p = .07$. Thus, the pilot study did not provide sufficient evidence of a significant relationship between the two variables.

The null hypothesis was retained for the pilot sample. However, the results should not be generalized because the pilot sample was relatively small. The findings provide useful preliminary information for the proposed main study involving 100 undergraduate students. A larger sample may provide a clearer understanding of the direction and strength of the relationship between anxiety and self-esteem.

Limitations

- The study is limited by its sample size and geographical scope, which may affect the generalizability of the findings.
- Reliance on self-reported data may have introduced response bias and affected the accuracy of the results.

Suggestions

- Future studies should use larger and more diverse samples to improve the reliability and generalizability of findings.
- Researchers should consider longitudinal studies and multiple data sources for more comprehensive insights.

Implications

- The findings can help researchers and practitioners better understand the key factors influencing the study outcomes.
- The results may support evidence-based decision-making and provide a foundation for future research and practical interventions.

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