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# ACADEMIC ANXIETY, STUDY HABIT AND BURNOUT AS PREDICTORS OF SELF-ESTEEM AMONG UNIVERSITY STUDENT IN KATSINA STATE, NIGERIA

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## Abstract

*The study investigated the relationship between academic anxiety, study habits, burnout, and self-esteem among university students in Katsina State, Nigeria. A correlational design study with a sample of 385 university students selected using a proportionate sampling technique. The study utilized standardized instruments, including the Academic Anxiety Scale, Study Habits Inventory, Maslach Burnout Inventory-Student Survey (MBI-SS), and Rosenberg Self-Esteem Scale (RSES). Multiple regression analysis revealed that academic anxiety ( $\beta = -.248, p < .001$ ), study habits ( $\beta = .274, p < .001$ ), and burnout ( $\beta = -.341, p < .001$ ) were significant predictors of self-esteem, accounting for 45% of the variance ( $R^2 = .45, F(3,381) = 105.768, p < .001$ ). The study concluded that, burnout is the strongest predictor of Self-Esteem among university students in Katsina state. The findings suggest that universities should prioritize interventions aimed at promoting students' self-esteem, managing academic anxiety, and preventing burnout. By understanding the complex relationships between these variables, stakeholders can develop targeted strategies to enhance students' self-esteem, academic performance, and overall well-being. The study's results have implications for educators, policymakers, and mental health professionals working with university students, highlighting the need for supportive learning environments and accessible mental health resources.*

**Keywords:** Academic Anxiety, Study Habit, Study Burnout, Self-Esteem

## Introduction

One of the major aspects of psychological well-being among humans is self-esteem. Self-esteem influences the overall quality of life, relationship as well as performance among school students (Orth & Robins, 2019). Self-esteem could also be seen as an evaluation of individual's worth, abilities and accomplishment. In Katsina state, university students face numerous of challenges that can impact their self-esteem, including academic anxiety, study habits, as well as study burnout. Academic anxiety is the stress, worry or fear students experience related to academic performance, evaluations, or expectation, that often manifests in the difficulty in concentrating, overthinking, fear of failure, as well as pressure to meet deadlines. It is to be noted that, academic anxiety has recently become prevalent among university students, who manifests worries, nervousness, as well as apprehension related to academic performance

(Putwain & Daly, 2014). Moreover, high levels of academic anxiety were seen as threat, impacting students' self-esteem, leading to decreased motivation, lowering academic achievement, and increasing the levels of stress among students (von der Embse et al., 2018). Furthermore, effective study habits are essential for academic success, and research has shown that students with good study habits tend to have higher self-esteem (Credé & Kuncel, 2008). Conversely, poor study habits can lead to decreased academic performance, increased stress, and lower self-esteem (Richardson et al., 2012). Burnout is a state of emotional, mental, and physical exhaustion resulting from prolonged stress, information overload among students, as well as inadequate balance in school or daily routines of activities (Maslach, 2018). It is to be noted that University students in Katsina state are particularly vulnerable to burnout due to the demands of academic life. Additionally, burnout is likely to significantly impact students' self-esteem, leading to feelings of inadequacy, hopelessness, and decreased motivation (Fernández-Castillo & Fernández-Prados, 2022).

University students in Katsina State, Nigeria, face unique challenges that can impact their self-esteem. The region has experienced security concerns, economic challenges, and cultural shifts that can affect students' mental health and well-being (Umar et al., 2023). Therefore, understanding the predictors of self-esteem among university students is essential for promoting their mental health and well-being. Moreover, academic anxiety, characterized by feelings of worry, nervousness, and apprehension related to academic performance, is a pervasive issue that can erode students' confidence and motivation. Similarly, poor study habits, including ineffective time management and lack of organization, can further exacerbate academic stress and anxiety, leading to decreased lower self-esteem among students. In this regard, Harter (2015), hinted that by identifying the factors that contribute to low self-esteem, educators and policymakers can develop targeted interventions to support students' psychological needs.

It is to be noted therefore that despite the importance of self-esteem in academic performance, mental health, and overall quality of life, there is a notable gap in research exploring the predictors of self-esteem among university students in Katsina State. Existing studies have primarily focused on students in other regions or contexts, leaving a significant knowledge gap regarding the specific challenges and needs of students in Katsina state. This study aims to investigate the relationship between academic anxiety, study habits, burnout, and self-esteem among university students in Katsina State, with a view to informing the development of targeted interventions and support services to promote students' mental health and well-being. By exploring the complex interplay between these variables, this research seeks to provide insights into the unique challenges faced by university students in Katsina State and contribute to the development of evidence-based strategies to support their academic success and overall well-being.

## **Purpose of Study**

This study aims to achieve the following objectives;

1. To investigate the relationships among academic anxiety, study habits, burnout, and self-esteem in university students in Katsina state
2. To examine the collective predictive relationship of academic anxiety, study habits, and burnout on self-esteem among university students in Katsina state.
3. To identify the strongest predictor of self-esteem among academic anxiety, study habits, and burnout in university students in Katsina state.

## **Hypotheses**

The following hypotheses were designed to guide the study;

1. There will be no significant relationships between academic anxiety, study habits, burnout, and self-esteem among university students in Katsina state.
2. Academic anxiety, study habits, and burnout will not collectively predict self-esteem among university students in Katsina state.
3. There will be no significant differences in the predictive power of academic anxiety, study habits, and burnout on self-esteem among university students in Katsina state.

## **Methodology**

This study employed a correlational research design to investigate the relationship between self-esteem, academic anxiety, burnout, and study habits among university students in Katsina State. The correlational design was chosen because it allows researchers to examine the relationships between two or more variables without manipulating any variables (Creswell, 2014). This design is particularly suitable for this study because it aims to identify the relationships between self-esteem, academic anxiety, burnout, and study habits, rather than determining cause-and-effect relationships (Tabachnick & Fidell, 2013). By using a correlational design, this study can provide insights into the patterns and relationships between these variables, which can inform interventions and strategies to support university students.

The population for this study consists of 41,850 university students distributed across four universities (Umaru Musa Yar'adua University Katsina (UMYU) with students' population = 13,400, Federal University Dutsinma (FUDMA) with population = 20300, Al-Qalam University Katsina with population = 7400, and Federal University of Transportation Daura (FUTD) with population = 750) in Katsina State, Nigeria. Furthermore, determining the sample size for a study involves considering several factors, including the desired level of precision, confidence interval, and variability within the population. For this study, a sample size of 385 was determined based on the formula for sample size calculation provided by Krejcie and Morgan (1970), which is suitable for large populations. According to this formula, a population of 41,850 would require a sample size of approximately 380 participants for a 95% confidence level and a 5%

margin of error. Given the complexity and variability of the constructs being studied (self-esteem, academic anxiety, burnout, and study habits), a slightly larger sample size of 385 was chosen to enhance the reliability and generalizability of the findings. Additionally, proportionate sampling technique was used to ensure that the sample is representative of the population across different universities. This technique is particularly useful in multi-site studies where the population sizes of the different sites vary significantly (Cochran, 1977). By allocating the sample size proportionally to each university based on its population size, this study aims to ensure that each subgroup is adequately represented, thereby enhancing the validity and applicability of the findings. Hence, 127 students were selected from UMYU, 184 from FUDMA, 68 from AL-QALAM, and 6 from FUTD, who served as participants for this study.

Standardized instruments was adopted and used to collect data for this study. For Self-Esteem, Rosenberg Self-Esteem Scale (RSES) was adopted from Rosenberg (1965). Similarly, Academic Anxiety Scale was adopted form Eric (2019) to measure academic anxiety among the students. In addition, Oldenburg Burnout Inventory-Students Version (OLBI-S) developed by Demerouti and Bakker (2008) was also adopted and used in measuring burnout in this study. Also, Study Habits Inventory developed by Wrenn (1965) was adopted and utilized in measuring study habits among participants in this study. To analyse data for the study, the researchers use Pearson Product Moment Correlation and Multiple Linear Regression analyses. These statistical tools were computed through SPSS and SmartPLS 4.

## Results

**Table 1:** Descriptive Statistics

|                  | Mean  | Std. Deviation | N   |
|------------------|-------|----------------|-----|
| Self-Esteem      | 39.31 | 6.288          | 385 |
| Academic Anxiety | 25.95 | 5.961          | 385 |
| Study Habits     | 52.74 | 9.554          | 385 |
| Burnout          | 45.46 | 16.491         | 385 |

Table 1 contains descriptive statistics that summarizes the metrics for the variables in this study. It reveals that Self-Esteem has a mean score of 39.31 with a relatively low standard deviation of 6.288. Moreover, Academic Anxiety has a mean score of 25.95 and a standard deviation of 5.961, while Study Habits have a higher mean score of 52.74 with a standard deviation of 9.554, showing a wider range of scores. Furthermore, Burnout has a mean score of 45.46, but a high standard deviation of 16.491, indicating a large variation in burnout levels among participants.

## Testing of Hypotheses

**H<sub>01</sub>:** There will be no significant relationships between academic anxiety, study habits, burnout, and self-esteem among university students in Katsina state

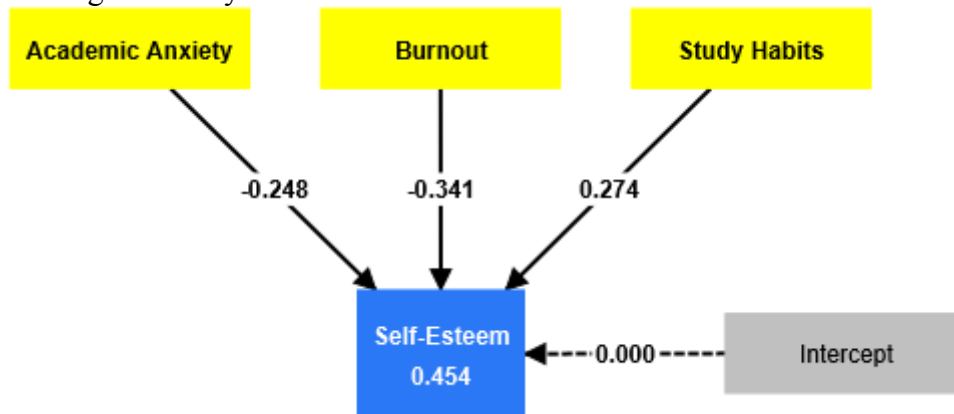
**Table 2:** Pearson Product Moment Correlation (PPMC) indicating relationship among academic anxiety, study habits, burnout and self-esteem

|                           | 1      | 2      | 3      | 4     |
|---------------------------|--------|--------|--------|-------|
| 1. Academic Anxiety       | 1.000  |        |        |       |
| 2. Study Habits           | -.381* | 1.000  |        |       |
| 3. Burnout                | .534*  | -.316* | 1.000  |       |
| 4. Self-Esteem            | -.535* | .476*  | -.560* | 1.000 |
| <b>Mean</b>               | 25.95  | 52.74  | 45.46  | 39.31 |
| <b>Standard deviation</b> | 5.961  | 9.554  | 16.491 | 6.288 |

\*Significant at  $p < .05$

The correlation matrix revealing the relationship among academic anxiety, study habits, burnout, as well as self-esteem are presented in Table 2. The results indicated that Academic Anxiety is strongly negatively correlated with Self-Esteem ( $r = -.535$ ) and Study Habits ( $r = -.381$ ), meaning higher anxiety is linked to lower self-esteem and poorer study habits. Burnout is also strongly negatively correlated with Self-Esteem ( $r = -.560$ ) and positively correlated with Academic Anxiety ( $r = .534$ ), indicating that higher burnout is associated with lower self-esteem and more anxiety. Study Habits are positively correlated with Self-Esteem ( $r = .476$ ), suggesting better study habits are linked to higher self-esteem. Therefore, the null hypothesis is rejected, since all the relationships are significant with p-values greater than 0.05 levels of significant.

**H<sub>02</sub>:** Academic anxiety, study habits, and burnout will not collectively predict self-esteem among university students



**Figure 1:** Self-Esteem Prediction Model

The model presented in figure 1 illustrates the structural relationships between academic anxiety, burnout, and study habits as predictors of self-esteem, based on the outcome of the data analysis. The standardized path coefficients indicate the strength and direction of each variable's contribution to self-esteem. Specifically, burnout (-0.341) and academic anxiety (-0.248) negatively predict self-esteem, whereas study habits (0.274)

have a positive effect. The model accounts for 45.4% of the variance in self-esteem ( $R^2 = 0.454$ ), highlighting the substantial role these psychosocial factors play. This visual model supports the interpretation of the statistical findings and emphasizes the psychological constructs that significantly influence students' self-perceptions.

**Table 3:** Summary of Regression Analysis for academic anxiety, study habits, and burnout as collective predictors of self-esteem among university students in Katsina state

| Regression analysis | Analysis of variance | df  | S.S      | MS       | F-ratio    |
|---------------------|----------------------|-----|----------|----------|------------|
| R .674              | Source               |     |          |          |            |
| R <sup>2</sup> .454 | Regression           | 3   | 6898.673 | 2299.558 | 105.768*** |
| S.E 4.663           | Residual             | 381 | 8283.545 | 21.742   |            |

\*\*\*Significant at  $p < .001$

The regression analysis in table 3 shows that academic anxiety, study habits, and burnout collectively predict self-esteem, with a strong relationship ( $R = .674$ ) and explaining about 45.4% of its variation ( $R^2 = .454$ ). The standard error of the estimate is 4.663, indicating the average distance between observed and predicted self-esteem scores. Therefore, the null hypothesis is rejected, since the ANOVA results confirm that the predictors have a significant impact on self-esteem, with an F-ratio of 105.768 ( $p < .001$ ), indicating that the collective prediction is statistically significant.

**H<sub>03</sub>:** There will be no significant differences in the predictive power of academic anxiety, study habits, and burnout on self-esteem among university students in Katsina state

**Table 4:** Regression coefficient of academic anxiety, study habits, and burnout as predictors of self-esteem among university students in Katsina state

| Variable         | Unstandardized Coefficients |       | Standardized Coefficients | t        | p    |
|------------------|-----------------------------|-------|---------------------------|----------|------|
|                  | B                           | SE    | Beta(β)                   |          |      |
| Constant         | 42.532                      | 2.166 |                           | 19.633   | .000 |
| Academic Anxiety | -.262                       | .049  | -.248                     | -        | .000 |
| Study Habits     | .180                        | .027  | .274                      | 5.352*** | .000 |
| Burnout          | -.130                       | .017  | -.341                     | 6.616*** | .000 |
|                  |                             |       |                           | -        |      |
|                  |                             |       |                           | 7.551*** |      |

Note. Constant=42.532,  $F(3,381)=105.768$ \*\*\*,  $p < .000$ ,  $R^2=.454$

The regression analysis in table 4 reveals that academic anxiety, study habits, and burnout collectively predict self-esteem among university students, with academic anxiety having a significant negative effect on self-esteem ( $\beta = -.248$ ,  $p < .001$ ), indicating

that higher anxiety leads to lower self-esteem. Study habits have a significant positive effect ( $\beta = .274, p < .001$ ), suggesting that better study habits are associated with higher self-esteem. Burnout also has a significant negative effect ( $\beta = -.341, p < .001$ ), with higher burnout linked to lower self-esteem. Notably, burnout is the strongest predictor, followed by study habits and then academic anxiety, based on the standardized coefficients. Given these findings, the null hypothesis is rejected, as the predictors have varying strengths and directions of effect on self-esteem, evident in the differing beta values and significant p-values for each predictor (academic anxiety:  $\beta = -.248, p < .001$ ; study habits:  $\beta = .274, p < .001$ ; burnout:  $\beta = -.341, p < .001$ ).

## **Discussion of findings**

The findings of this study align with existing literature on the predictors of self-esteem among university students. Consistent with the research of von der Embse et al. (2018), academic anxiety was found to have a significant negative effect on self-esteem ( $\beta = -.248, p < .001$ ), suggesting that high levels of anxiety can erode students' confidence and motivation. This is particularly relevant in the context of Katsina State, where university students face unique challenges that can impact their mental health and well-being (Umar et al., 2023). The positive relationship between study habits and self-esteem ( $\beta = .274, p < .001$ ) supports the findings of Credé and Kuncel (2008), which suggest that effective study habits are essential for academic success and higher self-esteem. Conversely, poor study habits can lead to decreased academic performance, increased stress, and lower self-esteem (Richardson et al., 2012).

The significant negative effect of burnout on self-esteem ( $\beta = -.341, p < .001$ ) is consistent with the research of Fernández-Castillo and Fernández-Prados (2022), which highlights the impact of burnout on students' self-esteem, leading to feelings of inadequacy, hopelessness, and decreased motivation. The finding that burnout is the strongest predictor of self-esteem in this study underscores the importance of addressing burnout in university students, particularly in contexts where students may be vulnerable to prolonged stress and inadequate balance in academic life (Maslach, 2018). Overall, the findings of this study emphasize the need for targeted interventions and support services to promote students' mental health and well-being in Katsina State.

## **Implications for Practice**

The findings of this study have several implications for practice. To begin with, universities in Katsina state can develop targeted interventions to address academic anxiety, poor study habits, and burnout, which are significant predictors of self-esteem among university students. These interventions can include workshops, counseling services, and online resources to support students' mental health and well-being. In addition, universities can also offer study skills training programs to help students develop effective study habits, time management, and organization skills. This can enhance students' academic performance, reduce stress, and promote higher self-esteem. Additionally, universities can implement strategies to prevent burnout, such as promoting

work-life balance, providing stress management workshops, and encouraging self-care activities, which can help reduce the negative impact of burnout on students' self-esteem. Accessible counseling services are also essential to support students' mental health and well-being. Counselors can help students develop coping strategies, manage anxiety, and improve their self-esteem. Faculty members can also play a crucial role in promoting students' self-esteem by providing supportive and encouraging learning environments, helping students develop a growth mindset, providing constructive feedback, and fostering a sense of belonging.

Moreover, policymakers can develop policies that prioritize students' mental health and well-being, such as providing resources for counseling services, promoting stress management programs, and encouraging healthy lifestyles. By implementing these strategies, universities in Katsina state can promote students' self-esteem, academic success, and overall well-being.

## Conclusion

This study provides significant insights into the complex relationships between academic anxiety, study habits, burnout, and self-esteem among university students in Katsina State. Hence, the following key findings were revealed:

1. Academic anxiety had a statistically significant negative effect on self-esteem ( $\beta = -0.248$ ,  $p < .001$ ), indicating that higher levels of anxiety reduce students' confidence and academic motivation.
2. Study habits were found to have a significant positive influence on self-esteem ( $\beta = 0.274$ ,  $p < .001$ ). Students with effective study habits tend to have higher levels of self-esteem and academic confidence.
3. Burnout emerged as the strongest negative predictor of self-esteem ( $\beta = -0.341$ ,  $p < .001$ ). Students experiencing higher burnout showed markedly lower self-esteem, highlighting the severe emotional toll of academic stress.
4. The structural model explained 45.4% of the variance in self-esteem ( $R^2 = 0.454$ ), indicating a substantial combined impact of academic anxiety, study habits, and burnout on students' self-perceptions.

These findings collectively underscore the importance of psychological and behavioral factors in shaping self-esteem among university students in Katsina State, and set the foundation for developing evidence-based mental health and academic support interventions.



## **Recommendations**

Based on the study's findings and conclusions of this study, the following recommendations are made:

1. Since academic anxiety significantly reduces students' self-esteem, university counseling units should implement regular stress-reduction programs and academic resilience workshops. These programs should focus on helping students manage test anxiety, academic pressures, and fear of failure, especially in high-stress environments such as Katsina State.
2. Given the positive impact of study habits on self-esteem, universities should incorporate study skills training into orientation programs and ongoing academic support services. Faculty advisors and counselors should also encourage time management, goal setting, and active learning techniques to help students build sustainable academic routines.
3. Burnout was identified as the strongest negative predictor of self-esteem. Therefore, institutions should develop mental health support systems such as peer support groups, access to trained mental health professionals, and policies that promote work-life balance for students, including flexible deadlines and reduced academic overload where feasible.
4. Since the combination of academic anxiety, study habits, and burnout explains a significant proportion of variance in self-esteem, universities should adopt a holistic approach to student support. This includes creating psychologically safe learning environments and embedding emotional wellness strategies into academic policies and curricula.

## **Limitations and Future Directions**

While this study provides valuable insights into the predictors of self-esteem among university students in Katsina state, several limitations should be acknowledged. The correlational design limits the ability to establish causality between the variables. Also, the reliance on self-report measures may introduce bias and social desirability effects. The study's focus on university students in Katsina state may also limit the generalizability of the findings to other contexts and populations. Future research should consider experimental or longitudinal designs to examine the causal relationships between academic anxiety, study habits, burnout, and self-esteem. Additionally, incorporating multiple data sources, such as objective measures of academic performance, could provide a more comprehensive understanding of the relationships between these variables. Furthermore, studies could explore the effectiveness of interventions aimed at promoting self-esteem and mitigating the negative effects of academic anxiety and burnout among university students. Expanding the study to include students from diverse backgrounds and institutions would also enhance the generalizability of the findings.

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