Does Anxiety Matter in The Relationship Between Stress, Learning Environment on Academic Performance Among Cadet in Polac

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Abstract
Anxiety is one of the major predictors of academic performance. Students with anxiety disorder display a passive attitude in their studies such as lack of interest in learning, poor performance in exams, and on assignmentsThis study assessed the effect of academic stress; learning environment on the academic performance of students in Nigeria Police Academy, Wudil Kano. The quantitative research strategy was used for the study. The research data collection was preceded by a literature review to provide an in-depth understanding of the research topic. A structured questionnaire designed in the form of a Likert- Scale was administered to Forty (40) cadets who were the participants of the study. The data was analysed using the Statistical Package for Social Sciences (SPSS), and PLS-SEM and the results were presented in measurement and structural model, the finding reveals tat Specifically, the finding for the direct relationship between learning environment revealed negative and insignificant; while Academic stress and Academic performance revealed a positive and significant with respectively. Equally, the finding of moderation of anxiety and relationship between Academic stress, leaning environment and Academic performance demonstrated a negative and in significant relation The study recommends that the guidance and counselling department of the university should be strengthened to make it more effective in supporting students to overcome stress. In addition, guidance programmes such as seminars and public lectures on stress awareness should be organized periodically for students so that they can be adequately equipped with the needed skills to handle issues related to academic stress better. Finally, provision should be made in the curriculum for adequate time for students to rest by not allowing lectures to extend to weekends.

Keywords: Academic stress, Leaning environment, Anxiety and Academic performance, POLAC

1.Background and motivation of the study

Academic performance is often used as a vital parameter by universities to measure the standard and success of their students. Minnesota (2007) noted that "a graduate student from a higher level of education is measurable upon their achievement in academic performance." Therefore, the personal development and academic performance of graduate students are perceived as crucial to the success of the university. According to Jemma Smith (2007), excellent university education achievement can lead individuals to success in life, even though job competition in Nigeria is increasing. Graduates with strong academic backgrounds and high-performance levels tend to have better job security, more job choices, and higher salaries.

The success of academic performance is significantly linked to individual, university, organizational, and societal factors (Oredein, 2016). As such, maintaining high academic performance requires consistent efforts from graduates. In today's society, academic achievement is often used as a standardized measure of value and success. Determining the factors influencing academic performance must be emphasized as a guideline for contributing to success. Evaluating these determinants is crucial for constructing effective strategies to secure excellent academic performance.

Hijazi and Noqvi (2006) reported an increased rate of declining academic performance in universities. As students' performance in universities is closely linked to societal success, this issue requires urgent solutions. Stress, which is the feeling created when reacting to particular events, can threaten or upset students. It involves psychological, physiological, and behavioral reactions to events that challenge or threaten them. Stress can also arise from behavior-related factors, such as over-scheduling and neglecting physical health. University students often face situations that lead to feelings of frustration, anxiety, and fear of uncontrollable factors. These challenges may include relationships with family and friends, workload pressure, and role ambiguity. This survey study aims to identify the factors associated with stress among POLAC students, assess the effects of stress, and recommend appropriate actions to address the problem.

Therefore, identifying and developing effective strategies to address academic performance issues is crucial. This research focuses on POLAC cadets due to their academic performance being closely linked to their interest in their studies. For any educational institution, students are the most important asset; universities and colleges have no value without students. The economic and social development of a country is directly associated with the academic performance of its students. Consequently, students' academic performance plays a vital role in producing high-quality graduates who contribute to the country's social and economic development (Ali et al., 2009). Academic performance is often a sign of a well-developed intellect, benefiting students in various aspects of their lives. Students facing academic challenges may engage in unhealthy behaviors such as drug abuse, violations, or even suicide.

1.2 Problem Statement

Student stress significantly impacts the relationship between academic stress and performance. The objective of this research is to identify how stress affects the performance of POLAC cadets. By utilizing both questionnaires and secondary methods, the study aims to evaluate the academic performance of cadets and identify the factors related to stress, learning environment, and academic performance.

Many university students face numerous obstacles in achieving good academic performance. This paper seeks to identify factors associated with the relationship between cadet stress, learning environment, and academic performance. Student stress related to academic performance includes issues such as interpersonal relationships, workload, and role ambiguity. Interpersonal relationships often cause stress due to difficulties in adjusting to the social network within the university (Shirom, 1986). According to Adeoye, workload refers to time pressure and role conflict, which can lead to stress. Students may overschedule their plans and struggle to complete assignments due to an excessive number of tasks, resulting in poor performance (Essel, 2017). Additionally, mismanagement of time, such as delayed assignments, is often attributed to stress. Role ambiguity refers to a lack of clarity about expectations, methods for fulfilling those expectations, and the consequences of performance (Biddle, 1979).

Previous studies have shown a strong correlation between stress and academic performance, with stress negatively impacting academic achievement among university students. Severe anxiety can lead to genuine academic problems, such as blanking out during exams, experiencing physical symptoms like shaking or numbness, and other sudden disabilities related to anxiety (Afolayan et al., 2013). Role ambiguity can contribute to ineffective academic performance, including tension, hopelessness, lack of confidence, dissatisfaction with tasks, miscommunication among group members, distrust, and poor performance.

To address these issues, appropriate actions must be taken to manage stress effectively. Strategies such as motivation, efficient timetables, and enhanced social skills can lead to better academic performance. The purpose of this research is to understand how to improve the academic performance of POLAC cadets by addressing the stress factors related to role ambiguity, workload, and interpersonal relationships.

1.3 Research Question

The study seeks to proffer empirical responses to the following research questions:

i. Is academic stress significant to influence on academic performance?
ii. Is environment of learning significant to influence on academic performance?
iii. Does anxiety moderates the relationship between stress and cadets academic performance?
iv. Does anxiety moderates the relationship between environment of learning and cadets academic performance

LITERATURE REVIEW

2.1 Academic Performance

Education plays a significant role in human capital development and is connected with human well-being and opportunities for a better life (Geremew Muleta Akessa, 2015). Academic performance refers to the results of education, which are measured by whether students, lecturers, or universities achieve their goals (Arshad, 2015).

The academic performance of students is challenging to assess since it is influenced by many factors, such as the environment and socio-economic conditions (Naqvi, 2006). Student performance can be affected by various factors, and while students may have the potential to learn at a high level, limitation may arise from other factors, such as gender and race, which can influence academic performance (Hansen, 2000). Academic performance is considered in terms of observable and measurable behavior of students. According to Naqvi (2006), the objective of advancing education is to provide high-quality education that produces well-educated, skilled, and well-mannered students, meeting market requirements (Geremew Muleta Akessa, 2015).

It is important to define a sequence of variables when examining the factors affecting academic performance. This includes evaluating the variables that contribute to quality academic performance amid increasing student diversity. There is a growing interest in identifying the factors that predict academic performance.

2.2 Environment of Learning

An environment of learning can be said to be a learning setting consisting of the physical learning environment, psychological factors, and socio-economic relationships affecting the student (Finnish National Agency for Education, 2004). Silander (2012) also viewed that the environment of learning encompasses learning resources and technology, means of teaching, modes of learning, and connections to societal and global contexts. It also includes human behavioral and cultural dimensions, including the vital role of emotion in learning.

Thus, the environment plays the most important roles in people's lives, whether students, lecturers, employees, or employers (Chukwuemeka, 2013). Bossaert, Doumen, Buyse, and Verschueren (2011) define that the learning environment also plays significant roles in determining how students perform or respond to any particular situation around them. The challenge of education is to offer students experiences and opportunities to develop their skills, knowledge, and attitudes in order to solve problems or deal with tasks (Chukwuemeka, 2013). Furthermore, the environment of learning does not only affect the students' approach to learning but also affects academic outcomes, levels of motivation, and degrees of learning effectiveness (Ed, 2015). Thus, the school environment remains an important place that should be studied and excellently managed to enhance students' academic performance, such as the structure of their classrooms, location within the school compound, or the availability of facilities and accessories for students (Iwuagwu Blessing Oselumese, 2016). Chan (n.d.) believes that the environment has a more significant impact on student learning. In addition,

any development efforts to improve the environment will directly enhance students' academic performance as well. However, some people might see the environment as insignificant, but for students, lecturers, parents, and educators, it is something that they need to pay high attention to.

H1: The environment of learning could significantly influence academic performance.

2.3 Academic Stress

Stress is a feeling of strain and pressure. Small amounts of stress may be desired, beneficial, and even healthy. Positive stress helps improve athletic performance. It also plays a factor in motivation, adaptation, and reaction to the environment. Stress can be external and related to the environment but may also be created by internal perceptions that cause an individual to experience anxiety or other negative emotions surrounding a situation, such as pressure, discomfort, etc., which they then deem stressful.

We find that stress is an indirect factor that impacts academic performance. Stress can directly affect the ability to concentrate. Stress has been shown to improve focus for a short period of time. This is due to the release of chemicals in the body into the brain to help it centralize and push adrenaline into the bloodstream in order to improve the senses, which helps the body focus on the task at hand. Short-term stress could help concentration at first, but these short-term effects do not last long. Over time, stress can become the reason you cannot complete tasks. Long-term stress can lead to difficulties in concentration, attitude issues, or even self-denial, which results in a decline in the quality of learning. Stress becomes a self-destructive cycle. Finally, it will affect academic performance.

H2: Academic stress has significant influence on academic performance.

Anxiety

Definition of anxiety was presented to describe of anxiety relate with students' experience during study, namely study anxiety, and study anxiety effect on academic performance display theories consider with relationship of anxiety and performance. These were explained below

Anxiety is one of the psychophysiology difficulties (Callahan, 2001). The symptoms can be psychological physical or environmental challenges. There are various forms of anxiety which includes excessive worrying, a sense of fear, restlessness, overly emotional responses, and negative thinking. Some people when anxious they appear to be clam, but the brain never stops thinking. This will get so bad as well as interrupt the quality of life. Experts have many definitions to describe anxiety. Breuer (1999) mentioned that all anxiety disorders are defined by the dual characteristics of excessive emotional fear and physiologic hyper arousals. Sarason in Harris *et al.* (2003) defined that anxiety is a basic human emotion consisting of apprehension and uncertainty that typically appears when an individual perceives an occurrence as being a threat to the ego or self-esteem. In its conceptualization, individuals with high levels of anxiety

generally hold heightened levels of trait anxiety, but in evaluative situations, the state of anxiety also elevates.

In addition, literature showed anxiety is of two types, one is trait anxiety while the other one is state anxiety. Trait is an ability of individuals which enables them to respond the anxiety in a situation. Or it is an ability of pupils to be internally prepared to face anxiety. While state anxiety refers to the emotional state of people, they have for a short time period. This emotional state of individuals is not time bound and keeps changing time to time. Thus, academic progress of learners affected negatively by anxiety as it is typically context-specific in educational settings (Onwuegbuzie, Jiao, & Bostick, 2004).

According to studies not only normal students and students with learning disabilities are affected by anxiety but students who are considered God gifted are also affected badly. Fletcher & Speirs (2012) showed in their study how negatively perfect students experienced anxiety during their examinations as a result of their own or other people's unreasonable expectations. However, it is clear that perfectionism is not limited to gifted students. On other hand, it is reported by Huberty (2009) that anxiety influences learners' way of behaving, their perception and their philosophy. For instance, risk taking examinations are extremely challenging for students who are victims of anxiety. Pupils with anxiety may likewise experience ill effects of depression. It is suggested that parents in collaboration with teachers should work to help their child to tackle anxiety. At the University of Bahawalpur, Pakistan, Nadeem, Ali, & Zaidi (2012) investigated the impact of anxiety on students' academic progress. Their insightful and analytical data showed that academic achievement of learners is influenced by anxiety. It showed that academic achievement of both genders, whether male or female, declines when level of anxiety rises.

An exploration led by Agboola & Evans (2015) for investigating relationship among anxiety and students' academic achievement in international learners in the colleges of UK. It was clearly showed in their study that anxiety had a significant impact on academic performance. While a study by Singh (2015) emphasized to guage the effects of anxiety on undergraduates learners' academic achievement. The nature of this study was descriptive. It was observed that learners with low or moderate anxiety tend to have a positive relationship with their academicachievement. In contrast, an exploratory study by Shibli (2015) found to have no significant correlation between anxiety and college students' academic achievement.

However, a systematic literature review conducted by Rehman (2016) focused on determining the factors of anxiety that affect learners' academic progress at higher education level in India. However, numerous factors were found to be there which led to extreme anxiety among higher education students, such as distraction in workflow, declining motivation, fatigue and tiredness.

H3: Anxiety Moderate the relationship Academic stress and academic performance.

H4: Anxiety Moderate the relationship Learning environment and academic performance.

3. Theoretical Background

Spady's Sociological Principle: Spady might have been a standout among those analysts who recommended a widely recognized theory in 1970 (Spady, 1970). The essential assumption of this theory is that learner performance is best demonstrated by a transformation guiding, including an interaction between the individual and the college environment. In this interaction, the student's qualities, such as attitudes, abilities, and investment, need to be exposed and will influence the expectations and demands of the school. The outcomes of this interaction will focus on whether the individual will be integrated into the academic performance of the school and, therefore, whether the learner will remain in the college. Connected to this process are variables that push academic and social integration for scholars in higher education. These variables include the learning environment, academic pressure, evaluation performance (result focus), academic development, and peer support. All these variables further connect with two other variables, namely satisfaction with the school environment and regulatory commitment (Spady, 1970). Academic workload aims to enhance students' creativity and knowledge, but students' performance can be affected when they are overwhelmed with assignments. At the same time, when students lose focus on their exams, poor time management may occur. The learning environment affects students' performance positively when they perceive themselves as being in a good environment. All these factors can influence students' emotional well-being, which impacts their motivation and learning style.

Based on the various relationships between variables mentioned above, the model is shown in

figure below:

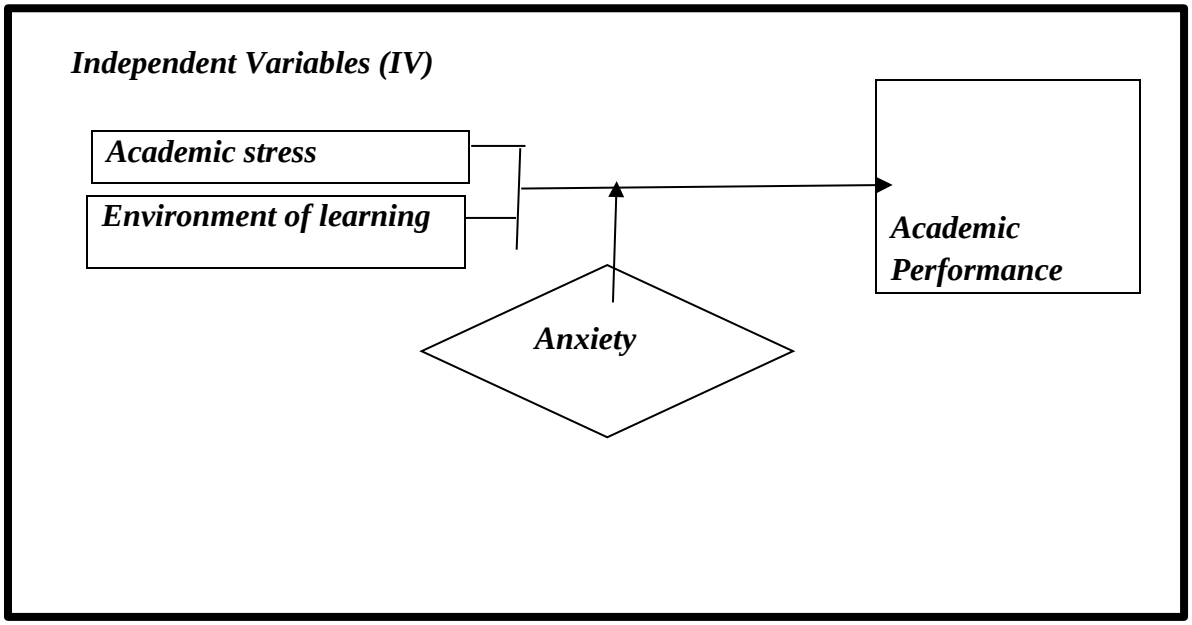

Figure 2.1: Academic Performance Framework

RESEARCH METHODOLOGY

3. Methods and Materials

The study is aimed at establishing the effect of the independent variables on dependent variables; therefore survey research method will be employed for analysis in the study. The population of the study will be all permanent the cadets which sample 40. In this research, three determinants include the independent variables of 'oriented result focused', 'academic performance' and 'environment of learning' was been analyse on its assumptions to the linkage of its relationship on students' academic performance in POLAC.

Based on the issue of academic performance, each variable will be study on its assumption in the correlated relationship on its significance in influencing the academic performance. Hypothesis testing been conducted because it may use to ascertain the correlated relationship of those independent variables on its linkage with academic performance either positively or negatively related. Thus, through the conduction of hypothesis testing, it also effective in determining either assumption is accepted or not, by the given population parameter (Investopedia, 2017). while respondents will be drawn using census sampling within the groups.

The data to be used for the study will be drawn from primary sources only, using questionnaires administration to respondents. The questionnaire will be distributed by hand delivery to the respective respondents., In addition, five-point Likert scale structured questionnaires will be

employed for collection of data. To ensure validity and reliability of the research outcomes diagnostic and specification test such as factor analysis to test construct validity, composite reliability and discriminant validity will be conducted. Data were analyzed using Partial Least Squares (PLS) Structural Equation Modelling (SEM) version 3, to test the hypotheses formulated for the study. SEM PLS will be used because it is suitable for a relatively complex model, with a large number of indicators or latent variables (Hair, Hult, Ringle, & Sarstedt, 2013). The hypotheses will be tested at 5% level of significance and the decision rule is that, if the t-value is less than the critical value, the hypothesis will be accepted and if equal or greater than the critical value, it would be rejected.

Data Preparation and Analysis

A sample of 40 individual students from POLAC has been selected for this research. All 40 questionnaires were returned and ready for analysis. In addition, the missing value and outliers were checked and found no issue with data. The researchers employed 40 questionnaires in total for their final study. To calculate the measurement and structural model, the study used SmartPLS version 3.0. (Anderson & Gerbing, 1988). Some of the advantages of employing PLS are as follow; can be used small number of data, and account for measurement error, at the same time, it may estimate the links between variables as well as indicators and their link with other variables, It uses a bootstrapping approach to generate statistically reliable estimates of interaction effects, which may lower the potential relationship while boosting the theory's validity (Allard, Henseler, Ildikó, & Zuzana, 2016; Hair *et al.*, 2017).

4.1 Measurement Model Results

According to Hair et al (2019), the evaluation of measurement model begins with the size and significance of the loadings, reliabilities, and then convergent and discriminant validity. According to Hair et al. (2017) average variance extracted is 0.5 and composite reliability is 0.7, while the indicator reliability depends on what improve the AVE or CR. Therefore, the validity and reliability result is presented in figure 2 and table 1 below.

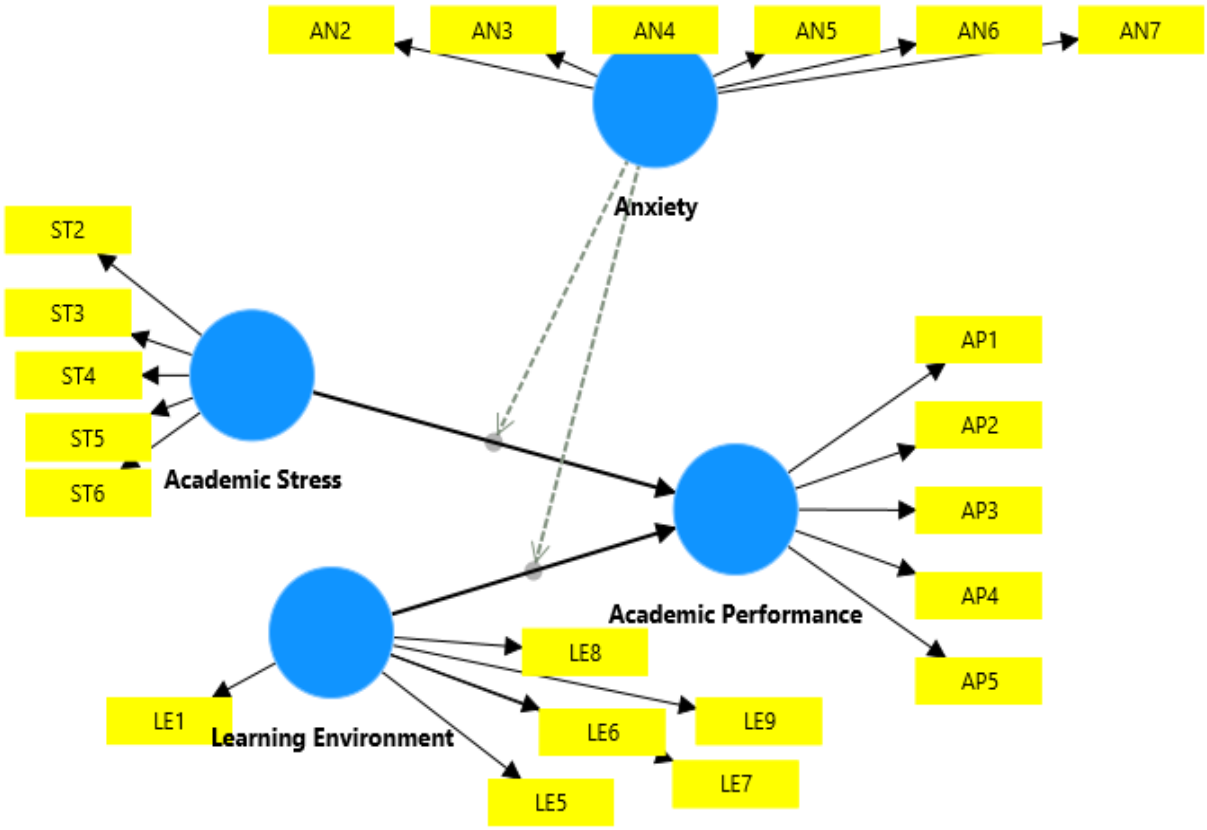

Figure 2: *Measurement Model*

Table 1: *Internal consistency reliability and convergent validity for reflective construct*

Items	Loading	Cronbach's alpha	Composite reliability (rho_c)	Average variance extracted (AVE)
AN2	**0.744**	**0.818**	**0.868**	**0.524**
AN3	**0.691**			
AN4	**0.736**			
AN5	**0.665**			
AN6	**0.775**			
AN7	**0.726**			
AP1	**0.800**	**0.844**	**0.889**	**0.615**
AP2	**0.802**			
AP3	**0.758**			
AP4	**0.775**			
AP5	**0.786**			
LE1	**0.631**	**0.825**	**0.876**	**0.557**
LE5	**0.359**			
LE6	**0.836**			
LE7	**0.850**			
LE8	**0.789**			
LE9	**0.877**			
ST2	**0.800**	**0.652**	**0.722**	**0.514**
ST3	**0.802**			
ST4	**0.758**			
ST5	**0.775**			
ST6	**0.786**			

Note: AN= Anxiety, AP=Academic Performance, LE=Learning Environment, ST=Academic Stress; AVE= Average Variance Extracted and CR = Composite Reliability

As revealed in Table 1 above, the indicator reliability was achieved for all the constructs because deleting any item will not increase the AVE or the CR as suggested by (Hair et al., 2017). Also, the AVE values of all the constructs range from 0.514 to 0.615, with consistent composite reliability values also ranging from 0.722 to 0.889 interprets that the items employed in the study measure the constructs and as well show an attainment of convergent validity. Therefore, indicator loadings, AVE and CR in this study are achieved as recommended by Hair *et al.* (2017).

Furthermore, to determine the discriminant validity, Duarte and Amaro (2018) proposed the use of Heterotrait-Monotrait Ratio (HTMT) method as the best for evaluating discriminant validity compared to Fornell-Larcker criterion and cross-loading. Therefore, the recommended thresholds of HTMT value should be 0.85, 0.9 or 1 (Hair *et al.*, 2017; Henseler *et al.*, 2015; Kline, 2011). Thus, the discriminant validity of this study had achieved as specifically indicated in table 2 that all the values are below the recommended thresholds.

Table 2*: Discriminant Validity (Heterotrait-Monotrait Ratio (HTMT) (n=40)*

	Academic Performance	Academic Stress	Anxiety	Learning Environment
Academic Performance				
Academic Stress	0.923			
Anxiety	0.279	0.279		
Learning Environment	0.254	0.254	0.804	

4.2 Structural Model Results

After successfully validating the instruments in the measurement model, the next is to assess the structural model by applying bootstrapping technique with 5,000 samples to ascertain the significance levels of the direct and moderating relationships (Hair *et al.*, 2017). These include the hypotheses testing, evaluation of R-square, effect size and predictive relevance.

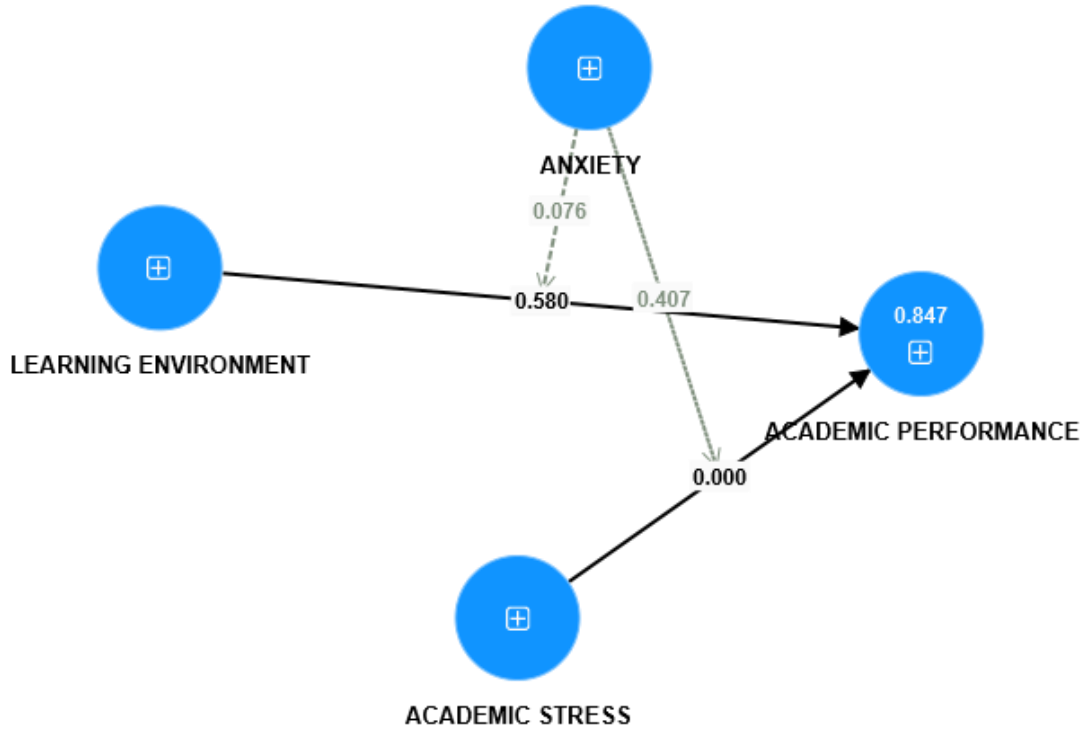

Figure 3: *Bootstrapping for Direct and Moderation*

Table 3: *Path Coefficient for Direct and Moderation Relationships*

Hypothesis	Relationship	Beta	Standard Deviation	t-value	p-values	Decision	Confidence Interval 2.5%	97.5%
H_{01}	LE -> AP	-0.024	0.030	0.806	0.421	Rejected	-0.035	0.081
H_{02}	ST-> AP	0.970	0.024	40.034	0.000	Accepted	0.935	1.028
	LE*AN -> AP							
H_{03}	ST*AN->	-0.032	0.016	1.928	0.054	Rejected	-0.063	0.001
H_{04}	AP	0.018	0.026	0.737	0.461	Rejected	-0.029	0.068

Note: AN= Anxiety, AP=Academic Performance, LE=Learning Environment, ST=Academic Stress

Table 3 above presents the results of direct and moderation relationships of the study. Specifically, the finding for the direct relationship between LE -> AP, revealed negative and insignificant (β = -0.024 and P=0.421); while ST-> AP revealed a positive and significant with (β = 0.970 and P=0.000) respectively. This provides the basis for accepting H_{02} the direct relationship null hypotheses and rejecting H_{01}. Equally, the finding of moderation relationship between LE*AN -> AP demonstrated a negative and in significant with (β = -0.032 and P = 0.054) and ST*AN-> AP moderation yield positive but insignificant relation

with (β = 0.018 and P = 0.068). The result also provides evidence of rejecting the null hypotheses H_{03} ; H_{04}. To further understand whether a path coefficient is significantly different from zero, Hair *et al.* (2017) stated the important of reporting bootstrap confidence interval which provides additional information on the stability of a coefficient estimate at 2.5% lower level (LL) and 97.5% upper level (UL). As presented also in table 3, there is no zero between the confidence intervals of the significantly rejected null hypotheses except the accepted hypothesis.

The coefficient of determination (R^2) of endogenous constructs is another criterion for evaluating structural models (Hair et al., 2017). The R^2 values of 0.19, 0.33, and 0.67 are considered weak, moderate, and substantial (Chin, 1998).

Table 4: *Coefficient of Determination (R2) for direct and Moderation Relationships*

Construct		**R-Square (R^2)**
Academic Performance		0.850 (85%)
Constructs	**F^2**	**Effect Size**
ST	5.247	Large
AN	0.100	Small
LE	0.002	None

Note: AN= Anxiety, LE=Learning Environment, ST=Academic Stress

As presented in Table 4 above, the cumulative result of exogenous constructs explains 85.3% of the total variance on the endogenous construct (Employee performance). Following Chin's (1998) recommendations, the *R*-squared (R^2) value explained by these exogenous constructs and the moderator on the endogenous construct (Academic performance) is Substantial.

After determining the coefficient of determination (R2), the next step is to determine the effect size (f^2). The f^2 value provides an overview of the potential effect or impact of a particular exogeneous variable on the endogenous variable. Keny (2016), proposed that 0.005, 0.010 and 0.025 as more realistic thresholds for small, medium, and large effect size respectively.

Table 4 above, show that ST, AN is Small effect size on Academic performance, while LE exert a None effect on Academic performance.

In addition, to assess the results of predictive relevance (Q^2), blindfolding process was used. According to Geisser (1974), any model above "0" has predictive relevance; it has the ability

to predict relationship and if the value is“0”and below means the model has no any predictive influence.

Table 5:
Predictive Relevance for Moderation Relationships: Q-Square/ Importance-Performance Matrix Analysis (IPMA)

Total	**SSO**	**SSE**	**1-SSE/SSO**
Academic Performance	2000.00	1022.346	0.489
Constructs	**Importance**	**Performances**	
ST	0.965	52.078	
AN	0.163	86.718	
LE	0.017	70.963	

Note: AN= Anxiety, LE=Learning Environment, ST=Academic Stress

As shown in Table 5, the Q^2 value for the endogenous latent construct is more than zero (0.425), as confirming the model's predictive relevance (Hair et al., 2014; Hayes, 2009; Chin, 1998).

4.3 Assessment of the Importance-Performance Matrix Analysis (IPMA)

The Importance-Performance Matrix Analysis (IPMA) compares the overall effects (importance) of the structural model with the average value of the latent variable scores (performance). The goal is to identify antecedents that have a relatively high importance for the target construct but relatively low performance to highlight important areas of improvement that can receive high attention by owner-manager to boost the performance of their employee. Therefore, Table 5 presents the result of IPMA.

As can be seen from table 5 above, ST have a higher importance with a value of 0. 965 representing 96.5% for the target construct (Academic performance) but show a moderate performance with a value of 52.08. Equally, AN have an average importance with a value of 0. 163 representing 16.3% for the target construct (Academic performance) but show a higher performance with a value of 86.718; and LE has lower importance with value of 0.017 representing 02% for the target construct (Academic performance) but show a moderate performance with a value of 70.963.

5. Discussion

The study's main goal was to see if AN have a moderating effect on the link between LE; ST and Academic performance. The study added to the body of knowledge by elucidating how AN interact with ST, LE to affect Academic performance. The findings of the study revealed that ST have a positive and significant effect with Academic performance. The findings is in

line with the findings of extant studies (*e.g.*, (*e.g., Akanpaadgi et al. 2023; Vuai 2021; Singh et al. 2016*. Who claim that stress is a product of the physical and mental demands placed on students trying to pursue a programme at a university. On how to manage stress, it was found out that students consciously or unconsciously adopted the following ways; making time to rest, making time to exercise, minimizing the rate at which they attend functions, completing and submitting assignments on time, not waiting until when it is getting to the end of the semester before they start learning; as a means of dealing with academic stress.

It also revealed that, AN is negative and insignificantly Moderated LE; ST and Academic performance; equally. This signifies that the essential prerequisites for driving academic performance depend on the ability of Institution to take proactive action and risk to implementing measures that will curtail anxiety They found that a less physically crowded environment, along with motivation and parental support, were associated with higher educational levels of children. Seminars and public lectures on stress awareness should be organized periodically for students so that they can be adequately equipped with the needed skills to handle issues related to academic stress. Lecturers and other academic staff of the academy must have cordial interactions with cadets. The central government should also work towards improving the facilities on campus. The study further recommends that provision be made in the curriculum for adequate time for cadets to rest by not allowing lectures to extend to weekends. Finally, the academy authorities and the cadets Representative Council should collaborate in providing sporting facilities and activities for cadet's employee commitment incentives in their business in order to achieve higher performance.

Conclusion

The purpose of this study was to explore the Cadets' conception on what they perceived is important to achieve good academic performance. The results revealed that the key element that contributes to their achievement. The researchers observed that higher levels of stress could result in poor academic performance. Students who suffer from acute stress may experience negative physical and mental health outcomes which could affect their academic performance. Even though stress can sometimes have a positive impact on students' academic performance. This study has shown a positive and significant relationship between the physical characteristics of the school such as classroom buildings, furniture, instructional facilities and students‟ academic performance.

Theoretically, the study improved our understanding on the interaction of AN; LE with ST to predict Academic performance. However, little or no extant study has been found that used AN as moderating variable for the association of LE; ST and Academic performance. Regarding the practically contributions, the findings of this study will help the management and higher Academy, policy makers and academic researcher's in designing the policies and programs to promote Academic performance in Nigeria

A number of limitations ought to be considered in this study. First, the study adopted cross-sectional design that captures only responses of data collected over a single period of time. Therefore, future studies should consider a longitudinal approach that collects data over two or more particular period. Second, the present study focused on Cadets in POLAC. Future research is expected to cover other part of the state as well as the entire northern region. Finally, AN was used in this study to moderator LE; ST and academic performance relationship. We therefore suggest to future researches to consider other potential mediator in their study.

References

A. Yusuf. (n.d.). *Inter-relationship among academic performance, academic achievement, and learning outcomes*.

Academic Performance Index (API), (2010). Academic Performance Index. Retrieved from http://www.greatschools.org/issues/ca/api.html. on 12 - 4 - 2012

Airasian, P. W. (1994). *Classroom assessment* (2nd ed.). McGraw-Hill.

Alos, S. B., Caranto, L. C., & David, J. J. T. (2015). Factors affecting the academic performance of the student nurses of BSU. *RELIEVE*, *5*(2), 60-65. Retrieved from http://article.sapub.org/10.5923.j.nursing.20150502.04.html

Arshad, M. (2015). *Self-esteem and academic performance among university students*.

Berkowitz, J. (n.d.). *Sampling and sample size*. Retrieved from Columbia University: http://www.columbia.edu/~mvp19/RMC/M6/M6.doc

Bossaert, G., Doumen, S., Buyse, E., & Verschueren, K. (2011). Predicting students' academic achievement after the transition to first grade. *Journal of Educational Psychology*, *103*(1), 147-158. https://doi.org/10.1037/a0021027

Bradford L. Goldense, P. G. (2015). *The difference between research and development*. Retrieved from RD Magazine: https://www.rdmag.com/article/2015/02/difference-between-research-and-development

Chan, T. C. (n.d.). *Environmental impact on student learning*. Valdosta State University. Retrieved from https://www.valdosta.edu

Chukwuemeka. (2013). *Environmental influence on academic performance of secondary school students in Port Harcourt Local Government Area of Rivers State*.

Crawford, J. R., & Henry, J. D. (2004). *The Positive and Negative Affect Schedule (PANAS): Construct validity, measurement properties, and normative data in a large non-clinical sample*. *British Journal of Clinical Psychology*, *43*(3), 245-265. https://doi.org/10.1348/0144665042002597

Dissertation. (2012). *Sampling techniques*. Retrieved from http://dissertation.laerd.com/process-stage6-step6-p2.php

Early Childhood Education. (n.d.). *Play and the learning environment*. Retrieved from Sage Publications: https://www.sagepub.com/sites/default/files/upm-binaries/53567_ch_10.pdf

Ed, M. F.-Q. (2015, March). *Associations between approaches to study, the learning environment, and academic achievement*.

Finnish National Agency for Education. (2004). *Distribution of lesson hours*.

Gargallo, B., Suárez-Rodriguez, J. M., & Pérez-Perez, C. (2009). The CEVEAPEU questionnaire: An instrument to assess the learning strategies of university students. *RELIEVE*, *15*(2), 1-26. Retrieved from http://www.uv.es/RELIEVE/v15n2/RELIEVEv15n2_5eng.htm

Geremew Muleta Akessa, A. G. (2015). *Factors that influence students' academic performance: A case of Rift Valley University, Jimma, Ethiopia*.

Gregory M. Herek, P. (2012). *A brief introduction to sampling*. Retrieved from University of California, Davis: http://psychology.ucdavis.edu/rainbow/html/fact_sample.html

Geisser, S. (1974). *A predictive approach to the random effect model. Biometrika, 61*(1), 101–107.

Hafeez, U. and Akbar, W. (2015) Impact of Training on Employees Performance" (Evidence from Pharmaceutical Companies in Karachi, Pakistan). *Business Management and Strategy 6 (1).*Doi.org/10.5296/bms.v6i1.7804

Hair Jr, J.F., Black W.C., Babin, B.J., & Anderson, R.E. (2014). *Multivariate Data Analysis: A Global Perspective*. (7th ed.). New Jersey: Pearson.

Hair Jr, J.F., Tomas, M.H.G., Ringle, C.H., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (Second Edi). Los Angeles: Sage Publications Inc.

Hayes, A.F. (2009). Beyond Baron and Kenny: statistical mediation analysis in the new millennium.*CommunicationMonographs,76*(4),408–420. doi:10.1080/03637750903310360

Henseler, J., Dijkstra, T.K., Sarstedt, M., Ringle, C.M., Diamantopoulos, A., Straub, D.W., & Calantone, R.J. (2014). Common beliefs and reality about PLS: Comments on Rönkkö and Evermann (2013). *Organizational research methods*, 17(2), 182-209.

Henseler, J., Ringle, C.M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43, 115–135.

Hu, L.-T., & Bentler, P.M. (1999). Fit indices in covariance structure modeling: Sensitivity underparameterized model misspecification. *Psychological Methods*, 3, 424–453.

Hansen, J. B. (2000, April). *Student performance and student growth as measures of success: An evaluator's perspective*. Paper presented at the annual meeting of the American Educational Research Association.

Hoyle, E. (1986). *Policies of school management*. Suffolic.

Investopedia. (n.d.). *Hypothesis testing*. Retrieved from https://www.investopedia.com/terms/h/hypothesistesting.asp

Iwuagwu Blessing Oselumese, D. O. (2016, March). *Environmental influence on students' academic performance in secondary school*.

Joe, A. I. (n.d.). *Academic achievement prediction: Role of interest in learning and attitude towards school*.

Keamu, C. G. (2016). *Student academic performance: The role of motivation, strategies, and perceived factors hindering Liberian junior and senior high school students' learning*. *Education Research International*.

Keamu, C. G. (2017). *Student academic performance: The role of motivation, strategies, and perceived factors hindering Liberian junior and senior high school students' learning*. *Education Research International*.

Khan, I. M. (2012). *Factors affecting students' academic performance*.

M. S. A. Rahim, N. S. (n.d.). *Relationship between academic workload and stress level among biomedical science students in Kuala Lumpur*.

M. J. Khan, S. Altaf, and H. Kausar, "Effect of Perceived Academic Stress on Students' Performance," FWU

J. Soc. Sci., vol. 7, no. 2, 2013.

K. A. Kalli and A. B. Shehu, "Effects of stress on the academic performance of students of Tertiary Institution (A case Study of Ramat Polytechnic Maiduguri, Borno State, Nigeria)," Int. J. Humanit. Art Soc. Stud., vol. 3, no. 3, pp. 79–88, 2018.

M. Saqib and K. U. Rehman, "Impact of Stress on Students Academic Performance at Secondary School

Level at District Vehari," Int. J. Learn. Dev., vol. 8, no. 1, p. 84, Feb. 2018.

McLeod, S. (2008). *Research variables*. Retrieved from Simply Psychology: https://www.simplypsychology.org/variables.html

Moss, C. L. (2015). Role conflict and role ambiguity as predictors of burnout in special and general education co-teachers. *RELIEVE*, 1-162. Retrieved from http://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=1043&context=dissertations

Naqvi, S. T. (2006, January). *Factors affecting students' performance*. Retrieved from https://theseus.fi/bitstream/handle/10024/124792/Thesis%20Document.pdf?sequence=1&isAllowed=y

Nigel Mathers, N. F. (2007). *Surveys and questionnaires*.

Nzesei, M. M. (2015). *A correlation study between learning styles and academic achievement among secondary school students in Kenya*.

Oosterhof, A. (2001). *Classroom applications of educational measurement*. Merrill Prentice Hall.

Oredein, O. (2016). *Effect of school variables on student academic performance in Calabar municipal area of Cross River State*.

Rashidi, N., & Javanmardi, F. (2012). The relationship between Iranian EFL students' achievement goal orientations and their gender. *RELIEVE*, *2*(1), 8-15. Retrieved from http://article.sapub.org/10.5923.j.edu.20120201.02.html

Reliawiki. (n.d.). *Simple linear regression analysis*. Retrieved from http://reliawiki.org/index.php/Simple_Linear_Regression_Analysis

Shaaria, A. S. (2013). *The relationship between lecturers' teaching style and students' academic engagement*.

Silander, P. &. (2012). *Oppimisympäristön arviointikehikko oppilaitosjohdolle*. Retrieved from http://www.hel.fi/wps/wcm/connect/c6aaf1804b55a9bcb544f78fcc181101/tietoyhteiskuntakehityksen+strateginen+johtajuus.pdf?MOD=AJPERES&lmod=1934169621

Wikipedia. (n.d.). *Unit of analysis*. Retrieved from