



EXAMINING THE IMPACT OF ACHIEVEMENT GOAL ORIENTATION ON ACADEMIC ACHIEVEMENT OF NCE

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Abstracts: The problem of poor academic achievement and low graduation rates among Nigerian Certificate of Education (NCE) students is a serious concern. This issue is evidenced by the large number of students who annually reseat carry-over courses. Considering the importance of teacher training programs to national development, if left unaddressed, this problem may lead to the production of low-quality teachers, ultimately resulting in low-quality students at primary and secondary education levels. This has far-reaching negative implications for societal development. To address this issue, this study investigates achievement goals orientation as a correlate of students' academic achievement in colleges of education in North East Nigeria. The study engaged a sample size of 989 out of 8,761 NCE II students registered in four colleges of education in the region. Data were collected using a 40-item "College Students Achievement Goal Questionnaire (CSAGQ)" and a pro forma labelled "Student Teachers' Academic Record (STAR)." Descriptive statistics (mean and standard deviation) and inferential statistics (Pearson product-moment correlation) were used for data analysis, conducted at a 0.05 alpha level. The findings showed that college students demonstrated a high level of performance approach goal orientation towards their studies (Grand mean = 4.00), with a statistically significant positive relationship between performance approach goal orientation and academic achievement ($r = 0.595$, $n = 989$, $p = 0.000 < 0.05$). Students also exhibited a high level of performance avoidance goal orientation (Grand mean = 3.69), there is no significant correlation with academic achievement ($r = 0.062$, $n = 989$, $p = 0.052 > 0.05$). Furthermore, students showed a high level of mastery approach goal orientation (Grand mean = 4.10), with a significant positive correlation with academic achievement ($r = 0.210$, $n = 989$, $p = 0.000 < 0.05$). Students demonstrated a high level of mastery avoidance goal orientation (Grand mean = 3.44), with a significant positive correlation with academic achievement ($r = 0.137$, $p = 0.000 < 0.05$). Based on these findings, it is recommended that Colleges of Education implement recognition programs and goal-setting workshops to motivate students to set and achieve high-achievement goals to improve their academic achievement.

Keywords: Achievement Goal Orientation, Academic Achievement, College Student Achievement Goal

Introduction

The aim of designing, implementing and evaluating the curriculum is to ensure that the stipulated goals and objectives therein are achieved. One of the crucial factors that determines the successful implementation of the curriculum is the learner. The goals and objectives of the curriculum translated by the teacher may not be achieved without a positive and permanent change in the learners' behaviour. Positive and permanent change in terms of acquisition of knowledge, skills, values and attitudes. One of the tools used to measure learners' change in behaviour in institutions of higher learning in Nigeria is the learners' academic achievement. However, achieving high in school is not served on a platter of gold; it comes with a deliberate effort with sacrifices from the side of the students under the guidance of the teacher. Therefore, just as there are goals and objectives in the curriculum which must be achieved, so also, learners must be seen setting achievement goals for themselves that will make them excel in their academic pursuits. For students to learn and perform effectively, they must be sufficiently motivated. The achievement goal orientation that learners have may to a large extent determine their success or failure in school. It may propel them to be self-motivated, and want to achieve high in school; nevertheless, a lack of it may drive learners to record low school achievement and possibly drop out from the system.

The problem of poor academic achievement of students at the tertiary level of education, and particularly among the Nigerian Certificate of Education (NCE) students is a matter of serious concern to all stakeholders in the society. Students' academic achievement plays a crucial role in bringing qualitative graduates who will move a country to the right path in the near future (Ali et al., 2009, Kolo, Jaafar & Ahmad, 2017). Poor student academic achievement is not only frustrating to the students and parents, but its effects are equally grave on society in terms of the dearth of manpower in all spheres of the economy and politics (Aremu & Sokan 2003). Parents would like to see their children get excellent grades. Lecturers and the College authorities would feel proud if the students performed very well in their examinations. In addition, employers will be much more comfortable absorbing qualified NCE teachers. NCE students upon graduation may be employed to teach in primary and junior secondary schools. If students at the NCE level are academically poor, they may not be likely to become good teachers. This may negatively affect primary and junior secondary education in the long run. Goni et al. (2015) lament that the problem of poor academic achievement in colleges of education is evidenced by the large number of students who come for the reseat of carryover courses.

Available statistics of studies conducted in colleges of education in Nigeria and the Northeast, East in particular show that college students' academic achievement is low. For instance, Yahya, Garuba, Ibrahim, and Idris (2019) conducted a study at Kwara State College of Education (Technical), Lafiagi. 200 NCE II students from vocational and technical education participated in the study, and the researchers found that students' general achievement is low with 51.33% of the students scoring between letter grades D to F. Similarly, in the reports of Dowu (2013), analyzed the academic achievement of 600 students from six colleges of education in South-

western Nigeria, 1 (0.2%) of the respondents falls into the failure grade (F), 18 (3%) of the students were in grade E level. 143 (33.8%) were in grade D level. The result also shows that 333 (55%) were in grade C level while 34 (5.7%) were in grade B. Akerele, Awoyemi, and Oggunniyi (2022) reported a result from five conventional federal colleges of education across Southern Nigeria. The data shows that students who performed excellently were 2(4.9%), those who indicated good were 22(53.7%) and those who indicated average performance were 17(41.5%).

The story is not different in the North Central Zone of Nigeria, where Aernyi and Odeh (2017) analyzed the results of 3,800 students from five departments in 7 Colleges of Education. It was reported that between 2011/2012 to 2015/2016 academic sessions, 43.2% of the students admitted during the period failed. On average, 1.2% of the total enrolment from 2011/2012 to 2015/2016 had distinction, 7.7% passed at credit level, 24.2% had merit while 16.2%, had pass and 5.1% had lower pass respectively. Summarily, this implies that out of 7,199 students admitted only 3,937 of them graduated; 3,937 of these students did not graduate.

Coming down to North East Nigeria where the present study will be conducted, poor academic achievement of students in colleges of education has also been recorded. A study carried out by Pindar (Goni et al., 2015) indicated that a total of 181 students out of the 338 final year Nigerian Certificate in Education (NCE) students of Kashim Ibrahim College of Education Maiduguri could not graduate that session because they failed at least one course each. During the 2013/14 academic session, out of the 947 final-year Nigerian Certificate in Education (NCE) students, 519 could not graduate because of the same problem. The researcher observed over the years that a large number of NCE students proceed to the next level with weak grades and carry-over courses and some were even withdrawn from the College because of poor performance. In the same vein, Isa (2022) reported poor academic achievement in students' examination results of NCE II Technical for three different sets of students in some Colleges of Education in North-East, Nigeria. The result indicated that students' academic achievement has been consistently poor in recent years as the academic achievement recorded in examinations for three academic sessions 2017/2018, 2018/2019 and 2019/2020 is 52.3% pass and 47.7% fail, 52.9% pass and 47.2% fail, 59.4% pass and 40.6% fail respectively. With this low and poor academic achievement of student and graduate teachers from colleges of education in Nigeria and North East in particular, the question begging for answers is: what could be responsible for these unsatisfactory results recorded by student and graduate teachers?

Previous studies (Maina, 2012; Li, 2012; & Tenaw, 2013) on the subject of students' academic performance indicated that there exist several factors that influence students' academic performance, but students' and lecturers' attitudes, students' academic self-efficacy and students-lecturers' interaction remained the key determinant of academic performance. Many studies (Diaz, 2003, Kolo, Jaafar & Ahmad, 2017) have been carried out to identify causal factors of poor academic performance in several institutions worldwide and most of these studies have focused on the three elements that intervene, that is, parents (family causal factors), teachers (academic causal factors), and students (personal causal factors). The combination of factors influencing academic performance, however, varies from one academic environment to another, from one set of students to the next, and indeed from one cultural setting to another. Therefore, this study will explore the achievement goal orientation of students and how it affects academic achievement.

Being academically successful is highly dependent on what motivates a person to study, something which can also be expressed as someone's goal orientation. Goal orientation describes the action a learner takes to reach their goals. One way motives vary is by the kind of goals that students set for themselves, and by how these goals support students' academic achievement. Some goals may encourage high academic achievement more than others, but even goals that do not concern academics explicitly may affect learning indirectly. Goals are an

important part of human motivation. They guide learners' cognition and affect, and instigate, direct and maintain their behaviour particularly as they become involved in academic work (Kavitha & Suthanthiradevi, 2022).

Achievement goals are goals in which competence is the main aim for an individual (Elliot & Dweck, 2005). According to Hulleman et al. (2010), achievement goals are defined as "a future-focused cognitive representation that guides behaviour to a competence-related end state that the individual is committed to either approach or avoid. They refer to the disposition reflecting the general tendency of students to select specific goals and favour specific outcomes in the context of achievement. Achievement goal orientation is when one's disposition toward the development or validation of one's ability to achieve is high. A learner achievement goal orientation represents one's purpose for engaging in achievement-related behaviour, as well as one's orientation towards evaluating his or her competence in the achievement activity (Pastor, et al., 2007). A learner who exhibits achievement orientation is likely to want to excel, succeed, have the drive, and be passionate about achieving their goals. To develop achievement orientation, one must be highly self-motivated. This implies that, if college students exhibit achievement orientation, their ability to excel in their studies and score high grades may improve in the long run. This may lead to overall improvement in the academic achievement of student-teachers and subsequently, improvement in the graduation rates of students from these institutions. The type of goals one sets may determine the personal experience one has following the success or failure of the task in which one engages. Therefore, this study will focus on five types of achievement goals, namely; mastery-approach, mastery-avoidance, performance-approach, performance-avoidance and work avoidance goals.

The mastery approach goal of college students may affect their academic either positively or negatively. If a student is Mastery approach oriented, it may lead the student to attempt to complete the task to increase knowledge. The mastery-approach student, however, seeks to gain as much knowledge and skills as possible (Pastor, et al., 2007). College students who are mastery approach-oriented are interested, willing to try new things, ask questions in class, and seek out new ideas. They are such fun to teach because they almost teach themselves. Similarly, college student who possesses this goal, the primary concern is to learn the course material as well as possible because it is interesting, and he or she believes it will be useful to him or her in later courses. Students who are mastery approach-oriented focus on effort, use appropriate learning strategies, make choices that are challenging and engaging, and develop a positive orientation toward learning. Mastery approach goals tend to be associated with the enjoyment of learning the course material at hand, and in this sense represent an outcome that teachers often seek for students (Wolters, 2004). Similarly, Keys et al. (2012) found that mastery approach goal orientation predicted mathematics achievement. Ruishi, Sidhu and Muthukrishnan (2021) found that mastery approach goal orientation showed a significant, moderate and positive relationship with academic achievement. However, evidence suggests that students who adopt this type of goal orientation rarely attain high academic achievement (Hulleman et al., 2010). Hence, it would be interesting to know what the mastery approach goal of college students in North East Nigeria is.

Mastery avoidance goals are also another type of mastery goal that may affect college students' academic achievement. It is the opposite face of the mastery approach goal. The mastery avoidance goal-oriented student is focused on not losing the knowledge and skills they already have or misunderstanding the course material (Pastor, et al., 2007). A college student holding mastery avoidance goal orientation intends to avoid misunderstanding the academic task (Elliot & Dweck, 2005). In mastery avoidance goal orientation, college students are motivated to avoid failures or become de-skilled regarding the course material they have acquired. Ruishi, et al. (2021) reported a significant, moderate and positive relationship between mastery avoidance goal orientation of college students and academic achievement, while Ng'ang'a, Mwaura and Dinga (2018) found a significant positive correlation between mastery avoidance goal orientation of college students and academic

achievement. However, mastery-avoidance goals have been associated with low academic achievement of students (Murayama & Elliot, 2012).

Another type of achievement goal that has proved to be associated with students' academic achievement is the performance approach goal (Ruishi, et al., 2021). The performance approach goal-oriented student is focused on performing better than other students in college. Performance approach goals lead students to be motivated to appear competent in an academic task (Elliot & Dweck, 2005). According to Christopher and Beziat (2015), the performance goal-oriented student is likely to attribute success to internal, stable causes (e.g., intelligence). Students who are performance approach-oriented view themselves as having a good deal of ability and wish to measure themselves against others' performance hence, demonstrating their ability. They simply want to prove to others that they can perform the task and not about mastering the task. College students with this goal orientation are always conscious of what they are going to score on a test or examination. Ireri (2015) reported a significant positive correlation between performance approach goals orientation and students' academic achievement. However, Dupeyrat and Marine (2005); Ng'ang'a et al. (2018) found a significant negative relationship between performance approach goal and students' academic achievements.

Performance avoidance orientation goal is also the opposite side of performance approach goals. According to Elliot and Dweck (2005), performance avoidance orientation goal led students to avoid appearing incompetent when compared to others. This is because performance avoidance students are focused on not performing worse than other students. These are students who would like to pass a course with whatever grade provided they will not fail. Performance avoidance goal have been associated with negative effects, such as low academic achievement (Murayama & Elliot, 2012, Ireri, 2015). However, Ng'ang'a et al. (2018) found a significant positive relationship between performance avoidance goal and students' academic achievements.

Despite all the benefits that may accrue from Colleges of Education saddled with the responsibility of training teachers for quality education delivery at the primary and secondary levels, there is still poor performance of students characterized by low graduation rate and high drop-out rate of students as earlier stated. Consequent upon these, the study will assess one of the student factors that may have led to high failure rates and low-quality graduate teachers in colleges of education in North East, Nigeria. Moreover, the inconsistencies in the findings reported by previous scholars (Irer, 2015, Ng'ang'a et al., 2018) and the dearth of empirical evidence regarding achievement goals orientation of students in colleges of education in the study area created a gap that this study explores. In light of this, the study investigates achievement goal orientation as a correlate of academic achievement in colleges of education in the North East, Nigeria.

Statement of the Problem

The problem of poor academic achievement of students at the tertiary level of education, and particularly among the Nigerian Certificate of Education (NCE) students is a matter of serious concern to all stakeholders in the society. Buttressing this disposition, Goni et al. (2015) lamented the problem of poor academic performance in colleges of education in North East Nigeria evidenced by the large number of students who come for reseating of carry-over courses. The statistics earlier presented by previous researchers (Aernyi & Odeh, 2017; Isa, 2022) add more credence to Goni's argument. Students' academic achievement plays a crucial role in bringing qualitative graduates who will move a country to the right path in the near future (Kolo, Jaafar & Ahmad, 2017). Therefore, if this trend is left unchecked, it might pose a threat to the foundation of this nation as teachers remain at the heart of implementing any education programme. Therefore, this study assumes achievement goal orientations as one of the probable instigators of students' poor academic achievement and low graduation rates.

The goal of the curriculum is to promote the overall development of the learner. This may be difficult to achieve when learners are not seen to be practically involved in their learning. One way through which they can fully

engage in the learning process is by setting their achievement goals. Without such goal orientation, college students may find it difficult to study, as there is no force propelling them towards it. Achievement goals are defined as the reasons why one engages in an achievement task. The specific type of goals that students set for themselves may determine the personal experience they had following the success or failure of a course they offered. In the mastery approach, student views achievement (success) in school as learning something new or mastering the courses offered. Such a student is interested in mastering an academic task. Students holding mastery avoidance goal orientation intend to avoid misunderstanding the course. They engage in the academic task with an emphasis on avoiding mistakes, failures, or diminution of existing skills. The performance-approach student, however, is focused on performing better than other students in the class, while the performance avoidance student views oneself as lacking ability and therefore wishes to avoid public demonstrations of achievement that would confirm their lack of ability. However, Elliot and Dweck (2005) averred that a student may have a combination of these goals.

Whatever the goal a college student chooses to adopt, it is pertinent to know that previous studies have shown that mastery and performance approach goals indicated a significant positive relationship with students' academic achievement, however, in other studies mastery and performance approach goals correlated negatively with students' academic achievement. Similarly, mastery and performance avoidance goals correlated positively with students' academic achievement, while in other studies, mastery and performance avoidance goals correlated negatively with students' academic achievement. On the contrary, Kavitha and Suthanthiradevi (2022) found no significant relationship between achievement goal orientation and students' academic achievement. These inconsistencies provide a gap that this study explores.

The teacher is central to the implementation of the curriculum. Therefore, it is pertinent to know that any factor that affects college students' learning will eventually affect the quality of NCE graduates from these colleges. The NCE graduates are employed to teach at the primary and junior secondary school levels of education. If the NCE students are performing poorly, there is the possibility that those taught by these students will perform poorly too. The quality of education provided in any society and the nature of change effected by education are both dependent on the quality of teachers and the effectiveness of their teaching. Therefore, will mastery approach, mastery avoidance, performance approach and performance avoidance goals correlate with college students' academic achievement? This study provides answers to this question.

Purpose of the Study

This study aims to investigate achievement goals orientation as a correlate of students' academic achievement in colleges of education in North East Nigeria. Specifically, the objectives of this study are to determine the:

- i. Correlation between mastery approach goal and students' academic achievement in Colleges of Education in North East Nigeria.
- ii. Correlation between mastery avoidance goal and students' academic achievement in Colleges of Education in North East Nigeria.
- iii. Correlation between performance approach goal and students' academic achievement in Colleges of Education in North East Nigeria.
- iv. Correlation between performance avoidance goal and students' academic achievement in Colleges of Education in North East Nigeria.

Research Questions

This study was guided by the following research questions:

1. What is the level of students' performance approach goal orientation in Colleges of Education in North East Nigeria?
2. What is the level of students' performance avoidance goal orientation in Colleges of Education in North East Nigeria?

3. What is the level of students' mastery approach goal orientation in Colleges of Education in North East Nigeria?
4. What is the level of students' mastery avoidance goal orientation in Colleges of Education in North East Nigeria?

Hypotheses

The following null hypotheses guided this study.

H01: There is no significant correlation between students' performance approach goal orientation and academic achievement in Colleges of Education in North East Nigeria. **H02:** There is no significant correlation between students' performance avoidance goal orientation and academic achievement in Colleges of Education in North East Nigeria. **H03:** There is no significant correlation between students' mastery approach goal orientation and academic achievement in Colleges of Education in North East Nigeria.

H04: There is no significant correlation between students' mastery avoidance goal orientation and academic achievement in Colleges of Education in North East Nigeria.

Materials and Methods Research Design

The study employed a correlational survey research design, aimed at describing the relationship between variables (Anderson & Arsenault, 2001). This type of study seeks to establish the direction, degree, and magnitude of the relationship between two or more variables (Nworgu, 2006). The direction of the relationship indicates whether the variables change in the same (positive) or opposite (negative) direction. The degree of the relationship reflects how strong or weak the association is between the variables. Correlational survey research is used to examine whether changes in one or more variables are related to changes in another variable, known as co-variance, which is a measure of how much two variables vary together. In this correlation survey study, the researcher gathered the opinions of college students on their levels of achievement goal orientations to establish a causal correlation between achievement goal orientations and their academic achievement in Colleges of Education in North East Nigeria.

Sample and Sampling Technique

The sample size for this study consisted of 989 NCE II students selected from the four Colleges of Education in the North East, Nigeria. Statistics from the target area showed that there were 8,761 NCE II students registered for the 2022/2023 session in Colleges of Education in Adamawa, Yobe and Gombe States. The sampling parameter for selecting the students was the one suggested by Nwana (2005), which states that if the population is a few hundred, a 40% or more will do, and if there are many hundreds a 20% sample will do. If a few thousand, a 10% sample will do and if several thousand, a 5% or less sample will do. Therefore, using a population of 8,761, the sample size for this study is 989 NCE II students from the four institutions which represent 10% according to Nwana. The multi-stage sampling technique at three levels was used to select the 989 College students engaged in the study. The main reason for choosing NCE II students for the study was based on the assumption that they have two years of academic experience. By then, those who have clear achievement goals orientation could be easily identified among the students through their academic excellence and backwardness. In addition, to a large extent, the NCE II students are assumed to be stable. They might have gained attainable experiences regarding their level of engagement, unlike NCE I, who are yet to be stabilized in the college academic exposures and NCE III who were in teaching practice across various secondary schools.

Research Instruments

Two instruments were employed to collect data from respondents. Student achievement goal orientation was assessed using an adapted version of the Achievement Goals Questionnaire Revised (AGQ-R) developed by Elliot

and Murayama (2008). This instrument measures four distinct achievement goals: mastery approach, performance approach, performance avoidance, and mastery avoidance. For this study, the instrument was renamed the "College Students' Achievement Goal Orientation Questionnaire (CSAGOQ)." This 40-item questionnaire, comprising four subscales with 10 items each, utilized a modified 5-point Likert scale ranging from "Very High Level (VHL)" (5) to "Low Level (LL)" (1) to gauge students' achievement goal orientations. Student academic achievement was obtained from the schools' examination officers through a pro forma titled "Student-Teachers' Academic Record" (STAR). This pro forma included columns for Serial number, College, Department, Registration number, CGPA, and Remarks.

Validation of the Instrument

To ensure validity, the CSAGOQ underwent face and construct validation by three experts from Curriculum and Instruction, Educational Management, and Educational Psychology. Face validation involved expert judgments on whether the instrument accurately measured its intended construct (achievement goal orientation) and whether the items were relevant to the target sample. Construct validation focused on evaluating the extent to which the questionnaire accurately assessed all dimensions of students' engagement. The experts scrutinized each item, considering its alignment with the instrument's purpose, objectives, research questions, and hypotheses. All expert feedback and recommendations were carefully considered and incorporated into the final draft of the instrument.

Reliability of the Instrument

To determine the reliability of the College Students Achievement Goal Orientation Questionnaire (CSAGOQ), a pilot test was conducted on a representative sample of 50 students from the College of Education (COE) Zing, Taraba State, a population excluded from the main study. Cronbach Alpha, a suitable statistical method for analyzing ordinal data (Bonett & Wright, 2015) - similar to the Likert scale used in the CSAGOQ, was employed to assess the internal consistency of the instrument. The analysis yielded reliability coefficients of 0.76. This reliability index, exceeding the acceptable threshold (Babbie, Halley & Zaino, 2003), indicates that the CSAGOQ is a reliable instrument for measuring student achievement goal orientation in this study.

Data Analysis

Descriptive statistics of mean and standard deviation were employed to analyze the data and address research questions one through four, aligning with the study's objectives. To interpret the research questions, the following real limits were used to categorize the responses: Very High Level (VHL) for scores between 4.50 and 5.00, High Level (HL) for scores between 3.50 and 4.49, Moderate Level (ML) for scores between 2.50 and 3.49, Low Level (LL) for scores between 1.50 and 2.49, and Very Low Level (VLL) for scores between 0.50 and 1.49. To test the null hypotheses associated with the study's objective, the Pearson Product-Moment Correlation Coefficient was utilized at a significance level of 0.05. All data analysis was conducted using Statistical Package for Social Sciences (SPSS) version 25.

Results

Research Question One: What is the level of students' performance approach goal orientation in Colleges of Education in North East Nigeria?

This research question was answered by analyzing the responses of 989 students' performance approach goal orientation towards their learning in Colleges of Education. The analysis involved using mean and standard deviation. The results are presented in Table 1.

Table 1: Summary of Mean and Standard Deviation of College Students' Performance Approach Goal Orientation

S/No.	Item	N = 989	Mean	SD	Remark
1.	I put in effort to perform better in my courses than my classmates.	4.37	.92	HL	
2.	I feel successful when I perform better than others on an assignment.	4.22	.98	HL	
3.	I am motivated by the opportunity to outperform others in my class.	3.79	1.16	HL	
4.	Competing with others gives me a sense of excitement	4.02	1.09	HL	
5.	Being recognized for my achievements in class is important to me.	4.14	.99	HL	
6.	My goals involve proving that I can get better grades in my course compared to others.	4.15	1.03	HL	
7.	Positive feedback about my performance compared to others motivates me.	4.09	1.09	HL	
8.	The possibility of not performing as well as others is often on my mind.	3.67	1.83	HL	
9.	I like to demonstrate my abilities in a competitive setting.	3.87	1.13	HL	
10.	I take pride in knowing that my performance is better than others.	3.69	1.38	HL	
	Grand Mean		4.00	1.16	HL

Examining the individual items in the table, the majority of the means fall within the "high level" (HL) range, indicating a high-level performance approach goal orientation among college students. Students reported a high desire to put in effort to perform better than their classmates ($M = 4.37$), a sense of success when they outperform others on assignments ($M = 4.22$), and a high level of motivation driven by the opportunity to outperform their peers ($M = 3.79$).

Furthermore, the data shows that college students find competing with others to be an exciting experience ($M = 4.02$) and consider being recognized for their achievements in class to be important ($M = 4.14$). Their goals also

involve proving that they can achieve better grades compared to others ($M = 4.15$), and they are motivated by positive feedback about their performance relative to their peers ($M = 4.09$).

Interestingly, the possibility of not performing as well as others is often on the minds of these students ($M = 3.67$), indicating a heightened sense of competitiveness and concern about their relative performance. Additionally, they take pride in knowing that their performance is better than others ($M = 3.69$) and enjoy demonstrating their abilities in a competitive setting ($M = 3.87$). Examining the grand mean of 4.00 provides further insight into the overall trend. This grand mean indicates that, on average, college students exhibit a high level of performance approach goal orientation towards their studies in Colleges of Education in North East Nigeria.

Research Question Two: What is the level of students' performance avoidance goal orientation in Colleges of Education in North East Nigeria?

To answer this research question, the responses of the students to the items on the level of students' performance avoidance goal orientation towards their learning in Colleges of Education were analyzed using descriptive statistics of mean and standard deviation. The data are summarized in Table 2.

Table 2: Summary of Mean and Standard Deviation of College Students' Performance Avoidance Goal Orientation

S/No.	Item	N = 989	Mean	SD	Remark
1.	I often worry about performing poorly in my class.		3.80	1.38	HL
2.	I am concerned that others will judge me if I fail.		3.75	1.26	HL
3.	I just want to avoid performing poorly compared to others.		3.82	1.26	HL
4.	Prefer easier tasks over difficult ones to ensure I don't perform poorly.		3.67	1.29	HL
5.	Setting low expectations for my performance to avoid disappointment.		3.78	1.52	HL
6.	My main motivation is simply not to fail rather than to succeed.		3.93	1.22	HL
7.	I like my classes when there is nothing much to learn.		3.25	1.46	ML
8.	I do not want others to know my performance in the class.		3.52	1.31	HL
9.	Negative feedback about my performance affects me seriously.		3.89	1.20	HL
10.	I'm afraid of my ability to succeed when compared to others.		3.46	1.38	ML
Grand Mean			3.69	1.33	HL

Table 2 provides a comprehensive summary of the mean and standard deviation of college students' performance avoidance goal orientation. This construct reflects the extent to which students are motivated to avoid demonstrating their incompetence or performing poorly compared to their peers. Students reported a high level of worry about performing poorly in their classes ($M = 3.80$) and a high level of concern about being judged by

others if they fail ($M = 3.75$). The data reveals that college students are highly motivated to simply avoid performing poorly compared to others, rather than to succeed ($M = 3.82$). They also prefer easier tasks over difficult ones to ensure they do not perform poorly ($M = 3.67$) and set low expectations for their performance to avoid disappointment ($M = 3.78$).

Additionally, the students' main motivation is often not to fail rather than to succeed ($M = 3.93$), and they tend to like their classes moderately when there is not much to learn ($M = 3.25$). They also do not want others to know about their performance in the class ($M = 3.52$) and negative feedback about their performance affects them seriously ($M = 3.89$).

Remarkably, the data also shows a moderate level of fear among college students about their ability to succeed when compared to others ($M = 3.46$), indicating a mix of performance avoidance and performance approach tendencies. This grand mean of 3.69 indicates that, on average, college students exhibit a high level of performance avoidance goal orientation. This suggests that these students are simply motivated to avoid demonstrating their incompetence or performing poorly instead of doing more to succeed.

Research Question Three: What is the level of students' mastery approach goal orientation in Colleges of Education in North East Nigeria?

To answer this research question, students' responses on the level of mastery approach goal orientation were analyzed using mean and standard deviation. The results are illustrated in Table 3.

Table 3: Summary of Mean and Standard Deviation of College Students' Mastery Approach Goal Orientation

<u>S. 1.</u>	<u>Item</u>	<u>N = 989</u>	<u>Mean</u>	<u>SD</u>	<u>Remark</u>
1.	I am motivated to understand my course contents very well.	4.39	.91		HL
2.	I try to improve my test/examination scores throughout the semester.	4.32	.92		HL
3.	I am more concerned with doing my best than doing better than others.	4.15	.96		HL
4.	Prefer challenging course material that will help me develop my mental abilities.	4.02	.99		HL
5.	I see difficult assignments as opportunities to improve my knowledge.	4.09	1.07		HL
6.	Failure in my tests/examinations motivates me to work harder.	4.03	1.09		HL
7.	Understanding the course contents is more important than just getting a good grade.	4.06	1.12		HL
8.	I set my standards of success based on personal improvement.	3.97	1.03		HL
9.	I am always eager to learn new things no matter how difficult.	4.17	1.03		HL
10.	I see mistakes as a natural part of the learning	3.81	1.23		HL process.
	Grand Mean	4.10	1.04		HL

The data presented in Table 3 provides an insightful summary of college students' mastery approach goal orientations, reflecting their attitudes towards learning. Starting with the highest mean value, the statement "I am motivated to understand my course contents very well" received a mean score of 4.39, which signifies a very high level of agreement among students regarding their intrinsic motivation to comprehend their academic material thoroughly. This sentiment is further supported by the second item, "I try to improve my test/examination scores throughout the semester," which has a mean of 4.32. This indicates that students are not only focused on understanding the material but are also actively seeking to enhance their academic performance over time.

The third item, "I am more concerned with doing my best than doing better than others," scored a mean of 4.15, suggesting that a majority of students prioritize personal achievement over competition with peers. Similarly, the item regarding a preference for challenging course material to develop mental abilities received a mean score of 4.02. This indicates a willingness among students to engage with rigorous academic challenges. Moreover, students expressed a positive attitude towards challenging situations, as indicated by the mean score of 4.09 for "I see difficult assignments as opportunities to improve my knowledge." The item "Failure in my test/examinations motivate me to work harder," with a mean of 4.03, further emphasizes this point, illustrating that students view setbacks as opportunities for growth rather than discouragement. The item "Understanding the course contents is more important than just getting a good grade" scored a mean of 4.06, reinforcing that students value deep learning over superficial achievement. This is complemented by the score of 3.97 for "I set my standards of success based on personal improvement," which, while slightly lower, still reflects a solid commitment to self-improvement.

The enthusiasm for learning is further evident in the mean score of 4.17 for "I am always eager to learn new things no matter how difficult," indicating a strong desire among students to expand their knowledge base regardless of challenge. However, the item "I see mistakes as a natural part of the learning process," which received a mean of 3.81, suggests that while students recognize the importance of learning from errors, there may be some hesitation or discomfort in fully embracing this mindset. The mean scores for each item indicate a generally high level of motivation among students to engage deeply with their coursework and improve personally. The grand mean of 4.10 suggests a strong overall tendency towards a mastery approach goal orientation within the sample population.

Research Question Four: What is the level of students' mastery avoidance goal orientation in Colleges of Education in North East Nigeria?

To answer the research question about the level of students' mastery avoidance goal orientation in Colleges of Education in North East Nigeria, descriptive statistics of mean and standard deviation were employed. The data is presented in Table 4.

Table 4: Summary of Mean and Standard Deviation of College Students' Mastery Avoidance Goal Orientation

S/No.	Item	N = 989	<u>Mean</u>	<u>SD</u>	<u>Remark</u>
1.	I avoid course materials that are too difficult for me to understand.		3.22	1.49	ML
2.	I avoid discussing topics that look difficult to master.		3.17	1.34	ML
3.	My goal is to avoid learning less than it is possible.		3.22	1.31	ML
4.	I worry about not fully mastering a course content.		3.57	1.32	HL
5.	I always doubt my ability to master my course materials.		3.61	1.24	HL
6.	I am not confident in my ability to learn difficult material.		3.28	1.37	ML

7.	I am easily discouraged by failure when trying to learn new things.	3.44	1.39	ML
8.	I worry that I learn slowly compared to my classmates.	3.60	1.26	HL
9.	I avoid activities that will expose my lack of knowledge.	3.73	1.23	HL
10.	I like to stick to what I know to avoid the risk of not mastering new things.	3.55	1.42	HL
Grand Mean		3.44	1.34	ML

The data presented in Table 4 shows that the item "I avoid course materials that are too difficult for me to understand" received a mean score of 3.22, suggesting that a significant portion of students may feel apprehensive about engaging with challenging academic content. This avoidance behaviour is further supported by the similar mean score of 3.17 for "I avoid discussing topics that look difficult to master." This data indicates a potential reluctance among students to confront difficult subjects.

Another noteworthy item, "My goal is to avoid learning less than it is possible," also achieved a mean of 3.22, demonstrating that while students may have the desire to avoid underperforming, this goal is clouded by their tendencies to shy away from difficult content. In contrast, the item "I worry about not fully mastering a course content" scored a higher mean value of 3.57, indicating that students experience considerable anxiety about their mastery of course materials. The item "I always doubt my ability to master my course materials" yielded the highest mean score in this table at 3.61. This highlights a prevalent lack of self-confidence among students regarding their mastery of academic content, which could significantly impact their engagement and persistence in challenging learning environments. Additionally, the mean score of 3.28 for "I am not confident in my ability to learn difficult material" further reinforces the theme of self-doubt present within these college students.

Moreover, the item "I am easily discouraged by failure when trying to learn new things," with a mean score of 3.44, underscores the emotional impact of setbacks on students' learning attitudes. The concern about relative performance is evident in the item "I worry that I learn slowly compared to my classmates," which received a mean of 3.60, indicating that students are not only focused on their mastery but are also comparing themselves to their peers.

Concerning avoiding exposure to their knowledge gaps, the item "I avoid activities that will expose my lack of knowledge" scored a mean of 3.73, suggesting that students actively seek to evade situations that may highlight their academic weaknesses. This sentiment is echoed in the item "I like to stick to what I know to avoid the risk of not mastering new things," which garnered a mean of 3.55. The grand mean of 3.44 indicates that the majority of the students demonstrated mastery avoidance goal orientation.

Hypothesis H01: There is no significant correlation between students' performance approach goal orientation and academic achievement in Colleges of Education in North East Nigeria.

In order to test this hypothesis, the mean responses of the 989 students' performance approach goal orientation and academic achievement were correlated using the Pearson Product Moment Correlation statistic. The results are displayed in Table 5.

Table 5: Summary of Pearson r Correlation between College Students' Performance Approach Goal Orientation and Academic Achievement

Variable	N	Mean	SD	r	Sig. (2-tailed)
Performance Approach Goal Orientation	989	4.00	1.16	.595	.000*
Academic Achievement	989	3.80	.83		

*Significant; $p < 0.05$.

The table shows that the mean score for performance approach goal orientation was 4.00 while the mean academic achievement score was 3.80. The correlation analysis revealed a statistically significant, positive relationship between performance approach goal orientation and academic achievement of students ($r = 0.595$, $p = 0.000 < 0.05$). This implies that as students' performance approach goal orientation increased, their academic achievement also tended to increase.

Hypothesis H02: There is no significant correlation between students' performance avoidance goal orientation and academic achievement in Colleges of Education in North East Nigeria.

To test this hypothesis, 989 students' mean responses on performance avoidance goal orientation were correlated against their academic achievement. Pearson Product Moment Correlation statistic was used for the analysis. The following Table 6 displays the results.

Table 6: Summary of Pearson r Correlation between College Students' Performance Avoidance Goal Orientation and Academic Achievement

Variable	N	Mean	SD	r	Sig. (2-tailed)
Performance Avoidance Goal Orientation	989	3.69	1.33	.062	.052
Academic Achievement	989	3.80	.83		

Not Significant; $p > 0.05$.

The analysis in Table 6 shows no significant correlation between college students' performance avoidance goal and academic achievement ($r = 0.062$, $n = 989$, $p = 0.052 > 0.05$). This implies that college students' performance avoidance goal shows no association with their academic achievement.

Hypothesis H03: There is no significant correlation between students' mastery approach goal orientation and academic achievement in Colleges of Education in North East Nigeria.

The mean response of students on the level of mastery approach goal orientation and their academic achievement were correlated using Pearson product-moment correlation analysis. The results are presented in Table 7.

Table 7: Summary of Pearson r Correlation between College Students' Mastery Approach Goal Orientation and Academic Achievement

Variable	N	Mean	SD	r	Sig. (2-tailed)
Mastery Approach Goal Orientation	989	4.10	1.04	.210	.000*
Academic Achievement	989	3.80	.83		

*Significant; $p < 0.05$.

The mean score for mastery approach goal orientation was 4.10 and the mean academic achievement score was 3.80. The analysis revealed a statistically significant, positive relationship between mastery approach goal orientation and academic achievement ($r = 0.210$, $p = 0.000 < 0.05$). The correlation coefficient (r) of 0.210 indicates a weak positive correlation suggesting that as students' mastery approach orientation increased, their academic achievement also tended to improve slightly.

Hypothesis H04: There is no significant correlation between students' mastery avoidance goal orientation and academic achievement in Colleges of Education in North East Nigeria.

The hypothesis was tested by jointly correlating the mean response scores of students on mastery avoidance goal orientation using the Pearson correlation method. The results are illustrated in Table 8.

Table 8: Summary of Pearson r Correlation between College Students' Mastery Avoidance Goal Orientation and Academic Achievement

Variable	N	Mean	SD	r	Sig. (2-tailed)
Mastery Avoidance Goal Orientation	989	3.44	1.34	.137	.000*
Academic Achievement	989	3.80	.83		

*Significant; $p < 0.05$.

The table presents a Pearson r correlation analysis examining the relationship between college students' mastery avoidance goal orientation and academic achievement. The mean score for mastery avoidance goal orientation was 3.44 indicating a moderate level of this motivational orientation among the students. The mean academic achievement score was 3.80. The analysis revealed a statistically significant, positive relationship between mastery avoidance goal orientation and academic achievement ($r = 0.137$, $p < 0.05$). However, the correlation coefficient ($r = 0.137$) suggests a weak positive association, indicating that as students' mastery avoidance orientation increased, their academic achievement tended to improve only slightly.

Summary of major findings

1. College students demonstrated a high level of performance approach goal orientation towards their studies in colleges of Education in North East Nigeria (Grand mean = 4.00). The correlation analysis revealed a statistically significant, positive relationship between performance approach goal orientation and academic achievement of students ($r = 0.595$, $n = 989$, $p = 0.000 < 0.05$).
2. College students exhibited a high level of performance avoidance goal orientation towards their studies in Colleges of Education in North East Nigeria (Grand mean =
3. 69). There is no significant correlation between college students' performance avoidance goal and academic achievement of students ($r = 0.062$, $n = 989$, $p = 0.052 > 0.05$).
3. College students exhibited a high level of mastery approach goal orientation towards their studies in Colleges of Education in North East Nigeria (Grand mean = 4.10). There is a statistically significant, positive correlation between mastery approach goal orientation and academic achievement of students ($r = 0.210$, $n = 989$, $p = 0.000 < 0.05$).
4. College students demonstrated a high level of mastery avoidance goal orientation in Colleges of Education in North East Nigeria (Grand mean = 3.44). There is a significant, positive correlation between mastery approach goal orientation and academic achievement ($r = 0.137$, $p = 0.000 < 0.05$).

Discussion

The finding of this study showed that college students in North East Nigeria demonstrated a high level of performance approach goal orientation towards their studies. Furthermore, the analysis revealed a statistically significant positive relationship between performance approach goal orientation and academic achievement. This implies that as students' performance approach goal orientation increases, their academic achievement also tends to improve correspondingly.

This finding is supported by evidence from various studies. For instance, Ng'ang'a et al. (2018) found a significant positive correlation between performance approach goals and academic achievement among Form Three students in Kiambu County, Kenya. Similarly, An et al. (2021) conducted a longitudinal study among Chinese college students, revealing positive reciprocal relations between performance approach goals and academic performance.

Additionally, Ileri (2015) reported a significant positive correlation between performance approach goals orientation and students' academic achievement.

However, not all studies have found consistent results. Tan et al. (2021) explored the relationship between learning strategies and academic performance among regular and nonregular entry undergraduates, finding no significant correlation between performance approach goals and the academic performance of students. Furthermore, Musa et al. (2016) investigated gender differences in achievement goals and academic performance among senior secondary school students in Nigeria and found no significant effect of performance approach goals on academic performance. The mixed findings suggest that while performance approach goals can positively influence academic achievement, the relationship is not universally consistent. Factors such as cultural context, educational environment, and individual differences may play a role in moderating this relationship. The positive correlation observed in the North East Nigeria study might be influenced by specific cultural or educational factors unique to that region, which may not be present in other contexts.

This study's finding revealed a high level of performance avoidance goals among college students in North East Nigeria, yet surprisingly, no significant correlation was found between these goals and academic achievement. This finding aligns with some existing literature. For instance, Wang et al. (2021) found that performance avoidance goals did not significantly predict the academic achievement of students. Frumos et al. (2024) demonstrated that performance avoidance goals negatively predicted academic achievement among Romanian university students, attributing this to the negative emotions associated with such goals. Similarly, Li et al. (2021) reported a link between performance avoidance goals and lower academic performance and well-being among Chinese medical students. Also, performance avoidance goal have been associated with negative effects, such as low academic achievement

(Murayama & Elliot, 2012, Ileri, 2015). However, Ng'ang'a et al. (2018) found a significant positive relationship between performance avoidance goal and students' academic achievements.

The finding of this study showed that college students in North East Nigeria demonstrated a high level of mastery approach goal orientation towards their studies. Similarly, a statistically significant positive correlation between this goal orientation and the academic achievement of students was observed. Buttressing this finding, Ng'ang'a et al. (2018) demonstrated a significant positive correlation between mastery approach goals and academic achievement among Form Three students in Kiambu County, Kenya. The research showed that students who pursued mastery goals tended to achieve higher academic success. Similarly, Keys et al. (2012); Barzegar (2021) found a significant relationship between mastery approach goals and academic performance of students. Ruishi, Sidhu and Muthukrishnan (2021) found that mastery approach goal orientation showed a significant, moderate and positive relationship with academic achievement.

On the other hand, not all research supports this unequivocal positive relationship. Evidence suggests that students who adopt this type of goal orientation rarely attain high academic achievement (Hulleman et al., 2010). This is buttressed by Wang et al. (2021) who found that mastery approach goals did not directly predict academic achievement. This suggests that other intervening factors, such as student engagement and motivational factors, play crucial roles in determining academic outcomes.

The finding of this study revealed that college students in North East Nigeria's Colleges of Education demonstrated a high level of mastery avoidance goal orientation towards their studies and that mastery avoidance goals were positively correlated with academic achievement among college students in North East Nigeria. While this finding may seem counterintuitive, it supports some research, such as Ruishi, et al. (2021) who reported a significant, moderate and positive relationship between mastery avoidance goal orientation of college students

and academic achievement, while Ng'ang'a, Mwaura, and Dinga (2018) found a significant positive correlation between mastery avoidance goal orientation of college students and academic achievement. However, mastery-avoidance goals have been associated with low academic achievement of students (Murayama & Elliot, 2012). In the same vein, Cury et al. (2002) and Van Yperen et al. (2014) found that excessive focus on avoiding incompetence can decrease intrinsic motivation and hinder learning.

Baranik et al. (2010), suggest that mastery avoidance goals, when channeled effectively, can motivate students to engage with course material to avoid misunderstanding deeply. Similarly, Elliot and McGregor (2001) have argued that the anxiety associated with mastery avoidance goals can, in certain cases, drive increased effort and persistence, leading to improved performance. Furthermore, as reported by Wang et al. (2021), other factors, such as learning engagement and individual motivation, can significantly influence the relationship between goal orientation and academic achievement. This could be advanced as the likely reason for the result obtained in the study.

Conclusion

The study concluded that the Colleges of Education in North East Nigeria reveal distinct patterns in the relationship between different goal orientations and academic achievement among college students. Students demonstrated high levels of both performance approach and mastery approach goal orientations, each of which showed a statistically significant positive correlation with academic achievement. This suggests that goals focused on demonstrating competence and achieving mastery are beneficial for academic performance.

On the other hand, while students also exhibited high levels of performance avoidance and mastery avoidance goal orientations, the correlations with academic achievement were mixed. Performance avoidance goals did not show a significant relationship with academic outcomes, indicating that the fear of performing poorly may not directly impact academic success. Conversely, mastery avoidance goals did show a significant positive correlation with academic achievement, albeit weaker than the approach orientations.

These findings highlight the importance of fostering goal orientations that emphasize positive outcomes, such as mastery and performance approach goals, to enhance academic achievement. At the same time, it is crucial to provide support for students with avoidance goals to mitigate potential negative effects and promote a more balanced and effective approach to learning. By understanding and addressing the diverse motivational profiles of students, educational institutions can create environments that better support academic success and overall student well-being.

Recommendations

These recommendations aim to improve academic achievement among college students in North East Nigeria's Colleges of Education by promoting positive learning behaviours and creating a supportive environment. Implementing them will help students reach their potential and foster a love for learning.

1. Given the significant positive correlation between performance approach goal orientation and academic achievement, educational institutions should implement recognition programmes and academic rewards to motivate students to set and achieve high performance goals. Additionally, conducting goal-setting workshops can help students articulate and pursue their performance goals effectively, leading to improved academic outcomes.
2. The finding that performance avoidance goals do not significantly correlate with academic achievement suggests a need to redirect these goals towards more productive outcomes. Colleges should provide counselling and support services to help students overcome the fear of failure and develop healthier academic motivations. Stress management programmes can also be introduced to reduce the negative impact of performance avoidance goals on student well-being.

3. The positive correlation between mastery approach goal orientation and academic achievement highlights the importance of fostering these goals. Colleges of education should promote intrinsic motivation by creating a learning environment that values curiosity, self-improvement, and a love for learning. Utilizing interactive and participatory teaching methods that emphasize mastery and understanding over rote memorization can also enhance students' academic performance.
4. While there is a significant positive correlation between mastery avoidance goals and academic achievement, it is crucial to manage these goals carefully to avoid potential negative impacts. Encouraging a balanced approach to goal setting that includes both mastery and performance goals can provide a comprehensive framework for academic success. Offering regular and constructive feedback can help students gauge their progress and address areas of concern, thereby reducing the anxiety associated with mastery avoidance goals.

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