

Achievement Motivation as Correlates of Academic Achievement Among Early Childhood Education Student-Teachers of Sa'adatu Rimi College of Education Kumbotso, Zaria Road Kano State

Bashir Sani¹

bashirsani626@yahoo.com

Saminu Alhaji Inuwa²

saminuinuwacollege@gmail.com

¹Department of Educational Psychology, Sa'adatu Rimi College of Education, Kumbotso kano State, Nigeria

Abstract

This paper investigated the correlation between achievement motivation and Academic Achievement among Early Childhood Education Student-Teachers of Sa'adatu Rimi College of Education Kumbotso, Kano State. The objective was to establish the achievement motivation as correlates of academic achievement among early childhood education student-teachers of Sa'adatu Rimi College of education Kano. Correlational design was adopted and the study that has a population of 61 Early Childhood Education Student-Teacher. Achievement motivation scale (AMS) with validity coefficient of 0.79 obtained from three expert results and a reliability coefficient of 0.76 obtained using test re-test method. N.C.E II Cumulative Grade Point Average (C.G.P.A.) of the subjects was considered as their academic achievement. The data collected was analyzed using frequency distribution count and Pearson Product Moment Correlation (PPMC). The findings of the study reveals a higher level of achievement motivation with a score of 3.84 (Mean $\bar{x}$ = 2.8138 SD = .33632); Also, significant correlation has been found between achievement motivation and students' academic achievement of Early childhood education Department in Sa'adatu Rimi College of Education Kumbotso, Kano (P= 0.000); There is also positive significant interactive influence of achievement motivation on students' academic achievement, which is high significant for higher achievement in Sa'adatu Rimi College of Education. The study concludes that achievement motivation is one the most appropriate strategies and techniques to be used in enhancing the Academic Achievement of the student-teachers in their early childhood education courses in Sa'adatu Rimi College of Education Kano. It was recommended that methodology for teaching ECE students should inculcate achievement motivation.

Keywords: achievement motivation, Academic Achievement, Early Childhood Education.

Introduction

The rapid development of the contemporary world is challenging the early adulthood students-teachers to face the wave of globalization. Thus, the ability to control the motives has become important for not carried away by the flow of negative and evil elements. A high achievement motivation helps to maintain a state of harmony in oneself and finally be more self

confidence in dealing with the challenges of living and learning in educational institutions. Achievement motivation is a cross-section of interrelated achievement and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands and pressures (Bar-On, 2006). It is that part of the human spirit which motivates us to perform, which gives us energy to demonstrate behaviors such as intentionality, persistence, creativity, impulse control, social deftness, compassion, intuition and integrity (Kapp, 2002). High achievement motivation can contribute to a student in the learning process (Svetlana, 2007). Students with low achievement motivation may find failure more difficult to deal with, which undermines their academic achievement (Drago, 2004).

Education concerns itself with the imparting of knowledge in people. It is an important requirement for human life, it is as much necessary as food, cloth and shelter. For many years educators, professionals and the public alike have been focusing on the intellectual achievement of individuals. In the past, perceived cognitive potential, more than any other factor has been seen as a predictor of academic achievement. It has, however, been established that despite an individual having the intellectual potential to succeed at institutions of higher education, he/she may experience difficulty dealing with motivation issues, have poor relationships, and be ineffective in his/her decision making (Goleman, 1995). These observations, among others, have led to the realization that individuals from changing populations may require more than intellectual abilities to exist and thrive academically. All students experience frustration and failure to achieve their goals. They depend on the strength of fortitude to control their negative thoughts and feelings. If they are able to control motives, they will achieve the academic goals as well (Dweck, 1996). Finnegan (1998) argued that school should help students learn the abilities underlying the achievement motivation. This belief could lead to achievement from formal education years of the child. Likewise, Abisamra (2000) reported that there is a positive relationship between achievement motivation and academic achievement. He therefore canvassed for inclusion of achievement motivation in the schools' curricula. Parker et al (2004) in their study found that highly successful students scored higher than the unsuccessful group on achievement motivation. In the same vein, Low and Nelson (2004) reported that achievement motivation skills are key factors in the academic achievement and test performance of high school and college students respectively. A study conducted by Rode et al (2007).

Bearing the foregoing in mind, there is need to produce highly professional and qualified teachers that can properly face the challenges of human resource manpower in inclusive classroom settings since it's only the expertise knowledge and skills of teaching and learning processes that can yield a fruitful outcome in such a venture. Thus, potentialities of teachers on training particularly Early Childhood Education students-teachers who seem to undergo a new course of study academically are very important to be investigated.

Understanding the Concept of Achievement and achievement motivation are an important segment and can give a wider insight about student's performance. Rayner and Devis (2018) see achievement as frame of reference deals with standards against which to judge one's own traits and accomplishment. Achievement is defined as the mastering of major concepts and principles, important facts and propositions, skills, strategic knowledge and integration of knowledge. Other scholars described an achievement as the extent to which an individual perform better in a task

that require the use of domain of learning, it encompasses student performance and ability, it is multidimensional, it is intricately related to human growth and cognitive, emotional, social and physical development, it reflect the whole child, it is not related to a single instance, but occur across time and levels, through a students' life in public school into post-secondary years and working life. This study looks at achievement as a school phenomenon, and is seen as the response on the part of the school graduates to initiates and execute work related to their fields of specialization it is on endeavor to satisfy institutional goals and objectives. General ability is that which lead to school achievement and capability to process information, to integrate experiences which result in appropriate and adaptive responses in new situation. For instances, verbal, numerical reasoning spatial relations, memory, and word fluency, constitute aspects of school achievement. The accomplishment of tasks presented in real life situation in relation to what has been learnt. For instances, ability to use knowledge acquire after instruction to solve novel problems, to reason, to compare, generalized and figure out answers anything the individual has been taught.

Achievement Motivation on the other hand is generally regarded as the drive to achieve targets and the process to maintain the drive. Motivation provides an important foundation to complete cognitive behaviour, such as planning, organization, decision-making, learning and assessments. Scholars defined achievement motivation in different perspectives. Fernández-Espínola & Almagro, (2019) viewed Atkinson perspective as the comparison of performances with others and against certain standard activities for worldwide, educational systems identify motivation as one of the factors that affect students' learning . Molleapaza, (2020) view it as an abstract concept that is used to explain a certain behaviour, and other scholars sees it to includes a process by which a behaviour is initiated and directed towards the achievement of a goal (Lugo et al., 2022), and has to do with activation of cognitive resources for learning with the drive to successfully perform tasks considered a challenge (Trujillo & Bermúdez, 2020). Further discloses that achievement motivation is a combination of two personality variables: tendency to approach success and tendency to avoid failure. It was established that motivation predisposes students to learn, and this assertion coincides with Nieto-Márquez et al. (2021), who maintain that motivation generates an impact on metacognitive regulation and the achievement of academic achievement, Also Formento-Torres et al. (2023), found a relationship between motivation and achievement of students' learning and Ruíz (2020), identified that motivation positively predisposes the student, and established how motivational strategies favour students' achievement, through stimulating their interest, and allow for the development of a positive attitude towards learning and participation, which in turn generates significant learning. Rivera et al. (2020), also identified achievement motivation as the starting point for learning, which creates the impulse to act and makes learning possible. It is highly related to personal achievements.

Academic achievement on the other side is viewed as something you do or achieve at school, either in class, in a laboratory, library or fieldwork. An academic achievement, such as graduating 1st position in one's class, is sometimes a purely quantitative matter, while having the findings of lengthy, comprehensive research published by a recognized journal is also a notable academic achievement. Others include being saddled as a head/chairman of a particular department at the school is both a professional and an academic achievement. Academic achievement is the educational goal that is achieved by a student, teacher or institution achieves over a certain period. This is measured either by examinations or continuous assessments and the goal may differ from

an individual or institutions to another. Kingsley et al (2024) described academic achievement as the attainment of success of a student in his school work among his classmates. It shows that academic achievement deals with the ability of the students to study and remember fact and being able to communicate their knowledge orally or in written form even in an examination condition very well. This success could be actualized when the students' academic achievement are in positive condition to represent a psychologically healthy individual.

Many studies confirm the Influence of Achievement Motivation on Academic Achievement.

Chow and Young (2013) conducted a study to examine the relationship between motivation and achievement in combined science among students from eight government secondary school in Brunel Darussalam. 324 students (141 male and 183 female). Constitute the sample of the study. Used as instrument for data collection was science motivation questionnaire by Glyann, Taasobshirazi and Brickman (2009). Pearson Product Moment Correlation (PPMC) and t-test were used to analyse the data. Result from the analysis demonstrated that there were significant positive associations between students' motivation and science achievement (Intrinsic motivation $r = 0.35$, Extrinsic motivation $r = 0.23$).

In another study conducted by Eymur and Geban (2011) on relationship between Motivation and Academic Achievement of Chemistry Education Teachers of Middle East Technical University. Sample of 48 male and 120 female (168) students was drawn. Used as instrument for data collection in the study was Turkish Version of Academic Motivation Scale (AMS) developed by Vallarand (1992). While participants Cumulative Grade Points Average (CGPA) was considered as academic achievement. The data was analysed by t-test, Analysis of Variance (ANOVA) and Pearson Product Moment Correlation (PPMC). Result from the PPMC computed showed a positive correlation between both intrinsic and extrinsic motivation and academic achievement of the participants ($r = .362$ and $.367$ respectively).

Similarly, Onete, Edet, Udey, and Ogbor (2012) conducted a study to explore the influence of Achievement Motivation (A.M.) on academic achievement among education students of Cross River University of Technology Nigeria. Ex-post factor design was adopted in conducting the study. A total of 750 out of 1352 students of the 2010/2011 academic session were randomly selected and participated in the study. The instrument used for data collection was Education Students Achievement Motivation Scale (ESAMS) was adopted from Cofer and Appley (1964). The data collected was analysed by Analysis of Variance (ANOVA). Result from the analysis as computed, showed that the calculated value ($r = 0.86$) is less than the critical value (3.00) which called for the acceptance of null hypothesis that states there is no sign influence of education Students' academic motivation levels and their academic achievements. Meaning that students' Achievement Motivation Levels had no significant influence on their academic achievement. Also Ogundokun and Adeyemo (2010) conducted a study It is revealed from the Pearson Product Moment Correlation (PPMC) computed that both intrinsic and extrinsic academic motivation of the participants positively correlates with their Academic Achievement (A.A) ($r = .67$ and $.58$ respectively).

Statement of the Problem

The trend of performance among Early Childhood Care and Education (ECCE) student-teachers in Sa'adatu Rimi College of Education Kumbotso Kano has been worrisome. The aims of introducing the course in particular in the National Certificate in Education (NCE) is to ensure effective curriculum implementation of all courses by focusing on students' academic achievement for successful teacher standard that exhibit their learned professional knowledge in their professional engagement. However, concern has been presented over the current Cumulative Grade Point Average (CGPA) of the student and which seems to affect their potential performance. For instance, out of 192 NCE I ECE student-teachers for 2022/2023 Academic Session, 159 representing 83% progressed to NCE II with CGPA below average (i.e. below 2.50). Equally 150 of the said students which represent 75% have courses to carry over. It is similar issues in NCE 2 where 183 out of 285 representing 64% scored less than 2.50 CGPA in the same academic year, (2023, NCE 1&2 CGPA).

The major issue of concern is that, the interventions implemented to address the problem stated above targeted the learning environment and teacher related factors. It was observed that emotional related factors are manifested in prior academic achievement of the students, hence, the predominant cognitive factor are taken in to account. This is an evident that in addition to cognitive ability of the learners there may be other student related factors that need to be considered in promoting their academic achievement particularly Emotional Intelligence. In view of that, this study intended to find out the extent to which Emotional Intelligence (E.I.) correlates with Academic Achievement (A.A.) among Early Childhood Care and Education (ECCE) student-teachers in Sa'adatu Rimi College of Education Kumbotso, Kano State, Nigeria.

Objectives of the Study

1. To determine the levels of Achievement Motivation among Early Childhood Care and Education (ECCE) student-teachers in Sa'adatu Rimi College of Education Kumbotso, Kano State, Nigeria.
2. To correlate between Achievement Motivation and Academic Achievement among Early Childhood Care and Education (ECCE) student-teachers in Sa'adatu Rimi College of Education Kumbotso, Kano State, Nigeria.
3. To determine the Interactive Influence of Achievement Motivation on Academic Achievement among Early Childhood Education Student-Teachers Sa'adatu Rimi Colleges of Education Kumbotso Kano State, Nigeria.

Research Questions

1. What is the level of Achievement Motivation among Early Childhood Care and Education (ECCE) student-teachers in Sa'adatu Rimi College of Education Kumbotso, Kano State, Nigeria?
2. Is there any significant correlation between Achievement Motivation and Academic Achievement among ECCE student-teachers in Sa'adatu Rimi College of Education Kumbotso, Kano State, Nigeria?
3. Is there any Interactive Influence between Achievement Motivation and Academic Achievement among Early Childhood Education Student-Teachers in Sa'adatu Rimi College of Education Kumbotso, Kano State, Nigeria?

Research Hypothesis

1. There is no significance difference in the mean score of Academic Achievement between Early Childhood Education Students-teachers with high and those with low levels of Achievement Motivation in Sa'adatu Rimi College of Education Kumbotso, Kano State, Nigeria.
2. There is no significance correlation between Achievement Motivation and Academic Achievement among Early Childhood Education Student-Teachers in Sa'adatu Rimi College of Education Kumbotso, Kano State, Nigeria.
3. There is no significant interactive influence of Achievement Motivation on Academic Achievement among Early Childhood Education Student-teachers in Sa'adatu Rimi College of Education Kumbotso, Kano State, Nigeria.

Methodology

The study adopted descriptive and correlation designs in examining the correlation between Achievement Motivation and Academic Achievement. Data was collected from the same group of population, and the paired scores (data) were then correlated to indicate the degree of correlation between the variables of interest. The population of the study comprised of 61 N.C.E. II ECE student-teachers in Sa'adatu Rimi College of Education Kumbotso, Kano and all were used. The adopted data collection instruments used was; Achievement Motivation Scale (AMS) with reliability indices of 0.87. The Achievement Motivation scale has 20 items (represented all the constructs of Achievement Motivation). The standardized instrument titled Achievement Motivation was adopted for the study and have the validity coefficient of 0.76 as reported by Furehng (2000). The instrument Achievement Motivation Scale had demonstrated high internal consistency with Crouchba's alpha coefficient at 0.87 .

Results

The Findings of the Study is as follows:

• Answers to Research Questions

Responses used to answer the research questions were analysed in Tables 1 to 3 In the process of analysis, the opinion of male and female students was classified into two groups that served as a characteristic of this study. The answers are shown as follows:

- Research Question One: What are the levels of Achievement Motivation among Early Childhood Education Student-Teachers of Sa'adatu Rimi College of Education Kumbotso Kano?

To answer this research question, students' result was used and the summary of the scores is presented in Table 1.

Table 1: Mean and standard deviation on difference of the levels of Achievement Motivation among Early Childhood Education Student-Teachers of Sa'adatu Rimi College of Education Kumbotso Kano.

(Descriptive Statistics)

Achievement Motivation Score of Early Childhood Education Students-Teachers	Lower N Levels of	Higher Levels	$\bar{x}$	SD	Mean Difference
---	-------------------	---------------	-----------	----	-----------------

of Sa'adatu Rimi College of Education Kano	A. M.	of A.M.				
Valid N (list wise)	2.00	3.84	61	2.8138	.33632	0.20

Table 1; reveals that the students who have lower levels of Achievement Motivation scores of 2.00 with mean scores of 2.8138 and standard deviation of .33632 ($\bar{x} = 2.8138$; $SD = .33632$) and the students who have higher levels of Achievement Motivation scores of 3.84 with mean score of 2.8138 and the standard deviation of .33632 ($\bar{x} = 2.8138$; $SD = .33632$). The result gave a mean difference of 0.20, which indicates that majority of the respondents has higher level of Achievement Motivation in the Department of Early Childhood Education of Sa'adatu Rimi College of Education Kumbotso, Kano.

➤ Research Question Two: Is there any correlation between Achievement Motivation and Academic Achievement among Early Childhood Education Student-Teachers of Sa'adatu Rimi College of Education Kumbotso Kano?

To answer this research question, students result was used and the summary of the scores is presented in Table 2;

Table 2: Correlation between Achievement Motivation and Academic Achievement among Early Childhood Education Student-Teachers of Sa'adatu Rimi College of Education Kumbotso Kano:

Variables of the study		Achievement Motivation	Academic Achievement
Achievement Motivation	Pearson Correlation	1	.147
	Sig. (2-tailed)		.000
	N	61	61
Academic Achievement	Pearson Correlation	.147	1
	Sig. (2-tailed)	.000	
	N	61	61

Source: (Field survey, 2024)

Table 2 reveals the sig value for achievement motivation scores as 0.00 (2-tailed) and sig value of academic achievement correlation scores of 0.00 (2-tailed). Therefore, since the sig value 0.000 which was less than the academic achievement correlation scores 0.05, it indicates a positive significant correlation between Achievement Motivation and students' academic achievement.

➤ Research Question Three (3): Is there any Interactive Influence between Achievement Motivation and Academic Achievement among Early Childhood Education Student-Teachers of Sa'adatu Rimi College of Education Kumbotso, Kano?

To answer this research question, students result was used and the summary of the scores is presented in Table 3 below:

Table 3: Summary of Regression Analysis on the Interactive Influence of Achievement Motivation on Academic Achievement among Early Childhood Education Student-Teachers of Sa'adatu Rimi College of Education Kano.

Summary Model	R	Std. Error	R ²	Adjusted R	Sig.
Achievement Motivation	.147 ^a	.81903	.039	.0508	
Academic Achievement					0.000

Source: Field survey 2024 P>0.05

The regression analysis on Table 3 was to determine the interactive influence of achievement motivation on academic achievement among early childhood education student-teachers in Sa'adatu Rimi College of Education Kano. The result revealed that R¹-value was 0.147^a with R²-value of 0.39 and Adjusted-R of 0.508 with a p-value of 0.000. The result indicated that there was positive interactive influence between achievement motivation and students' academic achievement of early childhood education department with a variance of 39% (r^2 0.39 x 100). This means that for each single increase on influence of achievement motivation, there was an increase of students' academic achievement. Hence, the observed $p = 0.000$ was less than the alpha value (0.05) indicating a significant positive interactive influence of achievement motivation on students' academic achievement. This implies that there is positive interactive influence of achievement motivation on students' academic achievement in early childhood education department.

Summary of Findings

The study established that:

1. Majority of Student-teachers in the Department of Early Childhood Education Sa'adatu Rimi College of Education Kumbotso, Kano has a higher level of achievement motivation with a score of 3.84 (Mean $\bar{x} = 2.8138$ SD = .33632).
2. There is significant correlations between achievement motivation on students' academic achievement among Early childhood education student-teachers in Sa'adatu Rimi College of Education Kumbotso, Kano ($P = 0.000$).
3. There is significant positive interactive influence of achievement motivation on students' academic achievement, which is significantly better for higher achievement in Sa'adatu Rimi College of Education.

Discussion of Findings

The findings of the research showed that Majority of Student-teachers in the Department of Early Childhood Education Sa'adatu Rimi College of Education Kumbotso, Kano has a higher level of achievement motivation with a score of 3.84 (Mean $\bar{x} = 2.8138$ SD = .33632). The findings are consistent with that of MacCann et al (2020). The results suggest that better educational outcomes might be achieved by targeting skills relating to achievement motivation and problem-focused coping between the students. Svetlana (2007) suggests the need to incorporate achievement motivation training into secondary education curricula, due to a significant relationship between achievement motivation and academic achievement. From this point of view,

the lecturers of early childhood education department and other departments need to adopt various effective teaching methods and procedures using achievement motivation in their teaching in order to make teaching more effective and enjoyable to the students.

Conclusion

Based on the findings discussed above, this study concludes that achievement motivation is one of the most appropriate strategies and techniques to be used in enhancing the Academic Achievement of the student-teachers in their early childhood education courses in Sa'adatu Rimi College of Education Kano. The students who were taught using achievement motivation strategy can earn good grades which enabled them to have admission into university for further studies.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. The methodology should inculcate Achievement Motivation strategies in teaching early childhood education courses in Sa'adatu Rimi College of education to improve student's academic achievement.
2. The lecturers of early childhood education department and other departments need to adopt various effective teaching methods and procedures using achievement motivation in their teaching in order to make teaching more effective and enjoyable to the students.

References

- Abisamra, et al (2000) reported that there is a positive relationship between emotional Intelligence, achievement motivation and academic achievement.
- Arias, J., Soto-Carballo, J. G. & Pino-Juste, M. R. (2022). Emotional intelligence and academic motivation in primary school students. *Psicol, Repl, Cril* 35, (14) 115-172.
- Aremu, O. A. (2014). Relationship between Emotional Intelligence (EI). Locus of control and Academic Achievement (A.A) among senior secondary school students in Ibadan, Nigeria, *International Journal of Educational Psychology*, 2(3) 11-19.
- Bar-On, R. (2005). The Bar-On Model of Emotional-Social Intelligence. Consortium for Research on Emotional Intelligence in Organisations-Issues in Emotional Intelligence, *Psicothema*, 17(1), 1-28.
- Bresman, H., & Rao, V. (2017). What generations X, Y. and Z want from leadership. Retrieved from <https://knowledge.instead.edu/leadership-organisations/what-generations-x-y-and-z-want-from-leadership-5716>.
- Chang, Y. C. & Tsai, Y. T. (2022). The Effect of university students' emotional intelligence, learning motivation and self-efficacy on their academic achievement-online English courses. *Frontiers in Psychology* 13(2), 818-929.
- Chow, S. J., & Yong B. C. (2013). Secondary School Students' Motivation and Achievement in Combined Science. *US-China Education Review* 3(4), 213-228.
- Csobanka, Z. (2016). The Z generation *Acta Educationis Generalis*, 6(2) 63-76.
- Guzman-Zamora, N. & Gutierrez-Garcia, R. A. (2020). Motivacion escolar metas academicas, estilos atribucionalesy rendimiento academic en estudiantes de education media AVFT- *Archivos venezolanos de Famacologiay Terapeuica* 39(3) 12-19

- Maccann, C., Jiang, Y., Brown, L. E. R. Double, K., Bucich, M., & Minbashian, A. (2020). Emotional intelligence predicts academic performance: A meta-analysis. *Psychological Bulletin*, 142(2), 150-186
- Mayer, J. D., Salovey, P. & Caruso, D. (2002). *Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)*, Toronto, Canada: Multi-Health Systems, Inc.
- Mayer and Salovey, (2022): *Ability Model of Emotional Intelligence (AMEI)*
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence: In P. Salovey, D. Sluyter (Eds.). *Emotional Development and Emotional Intelligence: Implication for educators 3-31* New York Basic Books
- Ononye, U., Ogbeta, M., Ndudi, F., Bereprebofa, D. & Maduemezia, I., (2022). Academic resilience, emotional intelligence and academic performance among undergraduate students. *Knowledge and Performance Management*, 6(1), 1-10
- Ogundokum, M. O., & Adeyemo, D. A. (2010). Emotional intelligence and academic achievement: The moderating influence of age, intrinsic and extrinsic motivation, In *The African Symposium*, 10(2), 127-14.
- Onete, O. U., Edet, P., Udey, F., & Ogbor, B. P. (2012). Academic Performance: A function of achievement motivation among education students of cross River University of Technology, Calabar *Review of Higher Education in Africa Journal* 2185.
- Svetlana, H. (2007). *Emotional intelligence and academic achievement in Higher Education* Pepperdine University.
- Twenge, J. M. (2017). *Igen: Why today's super-connected kids are growing up less rebellious, more tolerant, less happy and completely unprepared for adulthood and what means for the rest of us*, New York , NY, US Atria Books UNESCO 2022 UNESCO HED Roadmap 2030.