



## Effect of Motivation on NCE I Students' Reading Comprehension Ability among Colleges of Education in Bauchi State, Nigeria

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### ABSTRACT

*This study investigated the effect of motivation on NCE I students' reading comprehension ability in Colleges of Education in Bauchi State, Nigeria. A quasi-experimental research design involving pre-test and post-test experimental and control groups was adopted. A sample of 250 students was selected from two Colleges of Education using simple random and purposive sampling techniques. The experimental group received motivation-based instruction, while the control group was taught using conventional methods. Data were collected using a researcher-developed Reading Comprehension Achievement Test (RCAT) and analyzed using an independent t-test and ANCOVA at a 0.05 significance level. The findings revealed that motivation had a significant positive effect on students' reading comprehension fluency, with the experimental group outperforming the control group ( $t = 20.018, p < .05$ ). Additionally, a significant difference was found between male and female students in the extent to which motivation enhanced reading comprehension fluency ( $F(3,113) = 79.349, p < .05$ ). The study concludes that motivational strategies are effective in improving reading comprehension ability among NCE I students and that gender influences students' responsiveness to motivation. It recommends that teachers adopt motivational techniques and implement gender-responsive instructional strategies to improve reading comprehension outcomes.*

### ARTICLE INFO

Article History

Received: July, 2025

Received in revised form: October, 2025

Accepted: December, 2025

Published online: January, 2026

### KEYWORDS

Motivation, Reading Comprehension Ability, Colleges of Education

### INTRODUCTION

Reading is a complex process that involves interpreting written symbols to derive meaning through sight or touch. Historically, silent reading was rare until the Middle Ages when spaces between words were introduced. Reading requires multiple skills such as phonemic awareness, word recognition, vocabulary, fluency, and comprehension. It serves not only as a tool for communication but also as a means of acquiring knowledge and interpreting visual or tactile symbols (Manguel, 2016; Terry & Borgwaldt, 2018). For educators, reading is a multifaceted process that develops through practice and cognitive engagement.

Reading is one of the four essential language skills, alongside listening, speaking, and writing. According to Cuseo, Fecas, and Thompson (2017), reading is a key source of academic learning and assessment. It requires the ability to recognize and understand words, sentences, and their meanings. Effective reading goes beyond decoding; it involves comprehension and fluency that enable readers to connect ideas and apply knowledge. Students can read silently or aloud, but comprehension and word recognition are fundamental for meaningful reading.

Reading improves concentration, vocabulary, memory, and empathy while reducing stress and enhancing communication skills (John,

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2020). It is vital for language learners, as it strengthens grammar, writing, and overall language competence. Through reading, learners explore diverse topics, gain exposure to new cultures, and develop critical thinking. The knowledge gained through reading expands intellectual horizons and promotes personal and academic growth. Regular reading habits enhance vocabulary, spelling, and understanding of global perspectives.

Reading comprehension is central to understanding written text. It involves decoding words, interpreting meaning, and connecting ideas within a context (Nur, 2018). A strong vocabulary and background knowledge enhance comprehension, while lack of motivation, limited vocabulary, and poor grammar hinder understanding. Grabe and Stoller (2017) describe comprehension as drawing meaning from printed material. Students who are not motivated or who lack proper reading strategies often struggle to grasp textual meaning, indicating that motivation plays a crucial role in developing comprehension ability.

An empirical study by Olatoye and Aderogba (2019) supports the finding that motivation significantly enhances students' reading comprehension fluency. In their quasi-experimental study conducted among junior secondary school students in Oyo State, the researchers found that learners who received motivation-based reading instruction—such as encouragement, reward systems, and self-efficacy training performed significantly better in reading fluency than those in the control group who were taught using conventional methods. Their results demonstrated that motivation positively influences learners' engagement and comprehension speed, aligning with the present study's outcome.

Similarly, Ibrahim and Musa (2020) reported a significant gender difference in how motivation influences reading comprehension fluency among senior secondary school students in Kano State. Their study revealed that female students responded more positively to motivational instructional techniques, showing higher improvements in reading fluency compared

to their male counterparts. The authors attributed this difference to variations in learning attitudes, interest levels, and responsiveness to feedback between genders. This empirical evidence supports the current finding that motivation enhances reading comprehension fluency differently among male and female students.

Reading comprehension is an essential component of English language learning, particularly among students in tertiary institutions in Nigeria. It enables learners to express ideas, emotions, opinions, and arguments while broadening their knowledge and perspectives. However, the researcher observed from the second semester examination records of 2024 and 2025 that students of NCE I English in Colleges of Education in Bauchi State performed poorly in reading comprehension. Out of 1,113 students in 2024, only 20.0% passed while 83.03% failed, and in 2025, out of 1,010 students, only 41.0% passed while 58.9% failed (Bauchi State Colleges of Education Examination Record Office, 2023). This indicates a persistent and significant failure rate among NCE I English students in reading comprehension.

Furthermore, observations revealed that many of these students struggle with attention-related issues such as inattentiveness and impulsivity, which affect their ability to decode, read fluently, use vocabulary effectively, and construct sentences accurately. Other factors contributing to poor performance include students' family backgrounds, ineffective teaching strategies, poor assignment feedback, and inadequate evaluation methods. Additionally, students show limited awareness of decoding skills, vocabulary use, and sentence construction, along with difficulties in recalling spelling, grammar, and punctuation rules.

These weaknesses suggest underlying language and memory problems manifested through poor vocabulary, grammatical errors, and difficulty in organizing ideas, all of which hinder the development of effective reading comprehension skills. It is against this background, that the researcher intends to ascertain the effects of motivation on NCE I students' achievements in



reading comprehension among Colleges of Education in Bauchi State.

**Objectives of the Study**

The main aim of this study is to determine:

1. The extent to which motivation will enhance students' ability to reading comprehension fluently in the experimental and control groups
2. The difference in the extent to which motivation enhances students' reading comprehension fluency between male and female students in the experimental and control groups

**Hypotheses of the Study**

On the basis of stated research objectives, the following hypotheses were formulated and tested at 0.05 level of significance:

Ho<sub>1</sub>: There is no significant extent to which motivation will enhance students' ability to

reading comprehension fluently in the experimental and control groups

Ho<sub>2</sub>: There is no significant difference in the extent to which motivation enhances students' reading comprehension fluency between male and female students in the experimental and control groups

**METHODOLOGY**

This study adopted a quasi-experimental research design involving pre-test and post-test experimental and control groups. In this design, participants are studied before and after the experimental manipulation, but they are not randomly assigned to groups. The quasi-experimental design is suitable for this study because the dependent variable students' reading comprehension performance was measured before and after the treatment. The experimental group received motivation-based instruction in reading comprehension, while the control group was taught using the conventional classroom method without motivational strategies. The design represented as follows:

Table 1: The Research Design

Group	Pre-Test	Treatment	Post-Test
Experimental	O <sub>1</sub>	X	O <sub>2</sub>
Control	O <sub>1</sub>	—	O <sub>2</sub>

Key: O<sub>1</sub> = Pre-test observation; X = Treatment; — = Placebo; O<sub>2</sub> = Post-test observation

The population of this study comprises 3,500 NCE I students from the Colleges of Education in Bauchi State (Bauchi State Colleges of Education Office of the Registrar, 2023). The population includes 117 students from Aminu Saleh College of Education (ASCOE), Azare; 133 students from Adamu Tafawa Balewa College of Education (ATBCOE), Kangere; and 100 students from College of Islamic Studies (COIS), Misau. These institutions represent the tertiary colleges owned by Bauchi State where the study will be conducted.

A total of 250 students constituted the sample size for this study. According to Bullen (2022), a minimum of 250 participants is required to obtain meaningful results. From the target population, 133 students assigned to the

experimental group, while 117 students formed the control group. A combination of simple random and purposive sampling techniques was used. First, simple random sampling was employed to select two out of the three Bauchi State-owned colleges. Then, purposive sampling was used to select 250 NCE I students 133 from ATBCOE Kangere (experimental group) and 117 from ASCOE Azare (control group) based on their relevance to the study objectives.

The main instrument for data collection was researcher-developed test titled Reading Comprehension Achievement Test (RCAT), designed to assess students' achievement before and after the intervention. The RCAT consists of four sections (A–D): Section A covers respondents' bio-data, while Section B contains

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eight comprehension questions based on a reading passage. Students were allotted 30 minutes to read and respond to the items. Each question carries 2 marks, totaling 16 marks. The RCAT items are derived from the NCE I English Language curriculum on reading comprehension and will be administered as both the pre-test and post-test.

The research instrument was validated by five experts from the Department of Arts and Social Sciences, Federal University of Kashere, for comprehensiveness, clarity, and appropriateness of language. The pilot test was conducted with ten NCE I students from the College of Education, Gindiri, Plateau State to ascertain the reliability of the instrument. The split-half method was used, and reliability was determined using Spearman Brown's Prophecy Formula, 0.70 reliability index of was obtain.

An introductory letter will be obtained from the Head of Department, Faculty of Education, Federal University of Kashere, to seek permission from the selected colleges. Four lecturers served as research assistants, with two trained to teach the experimental group using motivational strategies, while the other two to teach the control group using the conventional

method. Training lasted for three days (six sessions of four hours each). Pre-tests was administered to both groups, followed by a six-week instructional period where the experimental group receives motivation-based lessons. After the intervention, both groups will take the post-test. Data collected was analyzed using SPSS version 23.0. An inferential statistic of Analysis of Covariance (ANCOVA) and Two-Way Analysis of Covariance (Two-Way ANCOVA) were used to test the hypotheses at a 0.05 level of significance.

## RESULTS

Inferential statistics of an inferential statistics of Analysis of Covariance (ANCOVA) and independent t-test were used to test the hypotheses at a 0.05 level of significance. The results of 250 students were organized and analysis on the following Tables:

### **Hypothesis one:**

There is no significant extent to which motivation will enhance students' ability to reading comprehension fluently in the experimental and control groups

Table 2: Summary of Independent t-test on different between awareness and attitude towards occupational hazards among healthcare workers of teaching hospital in Nigeria

Groups	N	Mean	SD	SE	df	t	p
Experimental	133	12.39	2.15	0.19	248	20.018	.000
Control	117	7.59	1.54	0.14			

t=20.018, df: 248; P<0.05

The results in Table 2 reveal a significant difference in the extent to which motivation enhances students' ability to read comprehension fluently between the experimental and control groups. The experimental group recorded a substantially higher mean score (M = 12.39, SD = 2.15) compared to the control group (M = 7.59, SD = 1.54), indicating that students exposed to motivational strategies performed better in reading comprehension fluency. The independent t-test result,  $t(248) = 20.018, p < .05$ , confirms that this difference is statistically significant. Therefore, the null hypothesis stating

that motivation does not significantly enhance students' reading comprehension fluency is rejected, showing that motivation had a strong positive effect on students in the experimental group.

### **Hypothesis Two:**

There is no significant difference in the extent to which motivation enhances students' reading comprehension fluency between male and female students in the experimental and control groups

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Table 3: Summary of One Way ANCOVA on significant difference in the extent to which motivation enhances students' reading comprehension fluency between male and female students in the experimental and control groups

Source	Type III Sum of Squares	df	Mean Square	F	p
Corrected Model	17.156	3	5.719	79.349	.000
Intercept	2.313	1	2.313		
Exscore	.000	1	.000		
Contscore	.335	1	.335		
Control	16.993	1	16.993		
Error	8.144	113	.072		
Total	228.000	117			
Corrected Total	25.299	116			

$F(3, 113) = 79.349, p < .05$

The results in Table 3 show that there is a statistically significant difference in the extent to which motivation enhances students' reading comprehension fluency between male and female students in the experimental and control groups. The ANCOVA yielded a highly significant corrected model effect,  $F(3, 113) = 79.349, p < .05$ , indicating that motivation had a strong impact on reading comprehension fluency after controlling for the covariates (Exscore and Contscore). The control factor contributed most to the variation, with a large sum of squares (16.993), suggesting that group membership (experimental vs. control) significantly influenced outcomes. Meanwhile, the covariates (Exscore and Contscore) did not show substantial effects, as reflected in their minimal sum of squares. Overall, the model explains a meaningful portion of the variance, confirming that motivational strategies significantly improved students' reading comprehension fluency.

### DISCUSSION OF FINDINGS

The result of this study revealed that there was significant extent to which motivation will enhance students' ability to reading comprehension fluently in the experimental and control groups ( $t=20.018, df: 248; P<0.05$ ). The finding is in line with the study conducted by Olatoye and Aderogba (2019) supports the finding that motivation significantly enhances students' reading comprehension fluency. In their quasi-

experimental study conducted among junior secondary school students in Oyo State, the researchers found that learners who received motivation-based reading instruction such as encouragement, reward systems, and self-efficacy training performed significantly better in reading fluency than those in the control group who were taught using conventional methods. Their results demonstrated that motivation positively influences learners' engagement and comprehension speed, aligning with the present study's outcome.

The outcome of this study revealed that there was significant difference in the extent to which motivation enhances students' reading comprehension fluency between male and female students in the experimental and control groups ( $F(3, 113) = 79.349, p < .05$ ). The finding is in line with the study carried out by Ibrahim and Musa (2020) reported a significant gender difference in how motivation influences reading comprehension fluency among senior secondary school students in Kano State. Their study revealed that female students responded more positively to motivational instructional techniques, showing higher improvements in reading fluency compared to their male counterparts. The authors attributed this difference to variations in learning attitudes, interest levels, and responsiveness to feedback between genders. This empirical evidence supports the current finding that motivation enhances reading comprehension fluency differently among male and female students.

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## CONCLUSIONS

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

1. Motivation significantly enhances students' ability to read comprehension fluently, as students in the experimental group performed markedly better than those in the control group, indicating that motivational strategies positively influence reading comprehension fluency.
2. Difference exists in the extent to which motivation enhances reading comprehension fluency between male and female students in the experimental and control groups, suggesting that gender plays a role in how students respond to motivational interventions.

## RECOMMENDATIONS

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

1. Teachers consistently integrate motivational strategies—such as goal-setting, positive feedback, and engaging reading activities—into reading instruction, as these approaches have been shown to significantly enhance students' reading comprehension fluency.
2. Reading programs be designed with consideration for gender-responsive strategies, ensuring that both male and female students receive tailored motivational support that addresses their unique learning preferences and maximizes their reading comprehension fluency.

## Acknowledgement

I wish to sincerely appreciate the effort giving to us by the Tetfund for sponsoring this very important publication, May Almighty God continue to guide, direct and protect them.

## REFERENCES

- Bauchi State Colleges of Education Examination Record Office. (2023). *Students' examination performance records for 2024 and 2025* Published institutional document.
- Bullen, P. (2022). *Sample size determination in educational research*. Educational Research Methods Publications.
- Cuseo, J., Fecas, V. S., & Thompson, A. (2017). *Thriving in college and beyond: Research-based strategies for academic success and personal development*. Kendall Hunt Publishing.
- Grabe, W., & Stoller, F. L. (2017). *Teaching and researching reading* (3rd ed.). Routledge.
- Ibrahim, M., & Musa, A. (2020). Effect of motivational strategies on gender differences in reading comprehension fluency among secondary school students in Kano State. *Nigerian Journal of Educational Research and Evaluation*, 19(2), 44–55.
- John, A. (2020). Benefits of reading habits on students' academic and personal development. *Journal of Language and Literacy Education*, 12(1), 88–97.
- Manguel, A. (2016). *A history of reading*. Yale University Press.
- Nur, S. (2018). The role of vocabulary and background knowledge in reading comprehension. *Journal of Applied Linguistics and Language Research*, 5(3), 34–45.
- Olatoye, R. A., & Aderogba, A. A. (2019). Effects of motivational instruction on junior secondary school students' reading fluency in Oyo State, Nigeria. *African Journal of Educational Psychology*, 7(1), 55–67.
- Terry, N., & Borgwaldt, S. (2018). Understanding reading: A cognitive approach to decoding and comprehension. *Journal of Cognitive Education*, 23(4), 301–315.