

# Extent Attention Control and Self-Monitoring Strategies Enhance Accounting Students' Academic Achievement in Colleges of Education in Anambra State, Nigeria

Okeke, Virginia Nkechi (Ph.D)<sup>1\*</sup>, Chidebe, Peter Chinenye<sup>1</sup>

<sup>1</sup>Department of Vocational Education, Chukwuemeka Odumegwu Ojukwu University, Anambra State

\***Corresponding Author:** Okeke, Virginia Nkechi

Department of Vocational Education, Chukwuemeka Odumegwu Ojukwu University, Anambra State

## Article History

Received: 22.01.2025

Accepted: 27.02.2025

Published: 02.05.2025

**Abstract:** This paper investigated the extent to which attention control and self-monitoring strategies enhance the academic achievement of accounting students in colleges of education in Anambra State, Nigeria. The study focused on a population of 400 second-year and third-year accounting students (121 males, 279 females) from two public colleges of education in Anambra State, with the entire population included in the study. Data were collected using a 23-item validated questionnaire, with an internal consistency of 0.75 confirmed by Cronbach alpha. The data were analyzed using SPSS version 26.0, employing mean and standard deviation to analyze research questions, and a t-test to test the hypotheses at a significance level of 0.05. The findings revealed that attention control and self-monitoring strategies significantly enhance the academic achievement of accounting students. Additionally, the study found that gender significantly influence the utilization of these strategies by students. The study recommends that fostering attention control and self-monitoring skills, along with targeted support based on gender, is essential for improving students' academic performance.

**Keywords:** Academic Achievement, Attention Control, Self-Monitoring, Accounting, Colleges of Education.

## INTRODUCTION

Academic achievement remains a fundamental indicator of student success in any educational system. It refers to the extent to which students attain their educational goals, as measured through examinations, continuous assessments, and overall performance in academic tasks (Narad & Abdullah, 2021). Academic achievement is influenced by several cognitive and metacognitive factors, including motivation, learning strategies, self-discipline, and self-regulated learning approaches. According to Zimmerman (2019), students who actively engage in self-regulated learning tend to achieve higher academic outcomes because they set learning goals, monitor their progress, and adjust their study techniques accordingly.

In the field of accounting education, academic achievement is particularly significant because of the technical and skill-based nature of the subject. Unlike theoretical disciplines, accounting requires students to develop analytical skills, computational accuracy, and the ability to interpret financial statements. Research has shown that students who adopt effective learning strategies, such as self-regulation through attention control and self-monitoring, tend to perform better academically (Okoli & Ozoegwu, 2021). However, many accounting students in Colleges of Education struggle with poor study habits, lack of motivation, and ineffective self-regulated learning techniques, which negatively affect their academic performance (Omidire, 2021). Given these challenges, it is imperative to examine the extent to which attention control and self-monitoring strategies contribute to academic success in accounting education. These self-regulation strategies are particularly crucial in the field of accounting.

**Copyright © 2025 The Author(s):** This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

**CITATION:** Okeke, Virginia Nkechi & Chidebe, Peter Chinenye (2025). Extent Attention Control and Self-Monitoring Strategies Enhance Accounting Students' Academic Achievement in Colleges of Education in Anambra State, Nigeria. *South Asian Res J Bus Manag*, 7(3), 179-185. 179

Accounting is a structured discipline within business education that involves recording, analyzing, and interpreting financial transactions to aid decision-making. Carnegie *et al.*, (2020) describe it as a technical field that combines mathematical precision with critical thinking and ethics. Taught at various levels, it equips students with financial analysis, auditing, and managerial accounting skills.

However, accounting is often seen as challenging due to complex calculations, regulatory standards, and financial reporting. Boelen *et al.*, (2018) highlight self-regulated learning—study planning, self-monitoring, and attention control—as essential for success. Without these skills, students may struggle with comprehension and performance (Li *et al.*, 2018). To handle accounting's technical demands, students must adopt self-regulated strategies. Attention control and self-monitoring enable them to manage distractions, track progress, and refine study techniques. Among these, maintaining focus and engaging with complex accounting concepts is essential, underscoring the significance of attention control.

Attention control is a cognitive mechanism that allows students to regulate their focus, filter out distractions, and maintain concentration on academic tasks. It is an essential component of self-regulated learning, as it enables students to direct their mental resources toward goal-oriented learning activities (Gopher, 2022). In educational settings, attention control plays a crucial role in ensuring that students stay engaged with course materials, effectively process information, and avoid cognitive overload.

Research has shown that students with high attention control tend to demonstrate better academic performance because they are able to sustain concentration during lectures, exams, and independent study sessions (Cao & Tian, 2020). Attention control is particularly important in skill-based subjects such as accounting, where students must work through complex numerical calculations and understand financial regulations. A study by Kokoç (2021) found that attention control significantly enhances students' problem-solving abilities and reduces the likelihood of academic procrastination.

Students with poor attention control often struggle with distractions, which negatively affects their ability to retain information and complete assignments efficiently. Cognitive load theory suggests that students who fail to regulate their attention experience information overload, leading to mental fatigue and decreased academic performance (Sweller, 2018). To address these challenges, accounting students must develop strong attention control strategies, such as minimizing distractions, engaging in focused study sessions, and using self-monitoring techniques to track their learning progress. While attention control helps students maintain focus, ensuring their learning efforts are effective and goal-driven ultimately depends on self-monitoring.

Self-monitoring is a metacognitive strategy that involves tracking one's own learning progress, assessing comprehension, and making adjustments to study techniques accordingly. It is a vital aspect of self-regulated learning that enables students to identify strengths, recognize weaknesses, and take corrective measures to enhance academic performance (Zimmerman, 2019). Self-monitoring is particularly important in accounting education, where students must continuously assess their understanding of financial principles and problem-solving approaches.

Coleman & Webber (in Okoli *et al.*, 2021) define self-monitoring as the process of recording data regarding one's behavior to facilitate self-improvement. Students who engage in self-monitoring track their academic progress by setting personal goals, evaluating their performance on assignments and tests, and adjusting their study habits to improve learning outcomes.

Self-monitoring helps students focus their attention on productive learning activities, differentiate between effective and ineffective study techniques, and obtain regular feedback on their academic progress, as found by (Schunk & Ertier in Tella, 2018). Effective self-monitoring strategies include keeping a study journal, using self-assessment checklists, and reviewing past assignments to identify errors and areas for improvement. Research indicates that students who actively engage in self-monitoring demonstrate higher levels of motivation, persistence, and academic achievement compared to those who do not (Jong, 2019).

Despite the benefits of self-monitoring, many students fail to apply this strategy due to a lack of self-discipline and inadequate metacognitive awareness. Educators can support students in developing self-monitoring skills by incorporating formative assessments, encouraging reflective learning practices, and providing structured feedback on assignments (Anthonysamy, 2021). These self-regulated learning strategies are crucial for academic success, especially in Colleges of Education.

Colleges of Education train future educators and business professionals, including accounting specialists, by offering programs that develop teaching skills and technical expertise (Ubong & Wokocho, 2021). However, accounting students in these institutions often face challenges due to limited resources and inconsistent teaching methods.

Strengthening self-regulation strategies like attention control and self-monitoring can enhance their independence and efficiency in their studies, as their learning experiences in Colleges of Education are also shaped by gender.

Gender differences in academic achievement have been widely studied, with research indicating variations in learning styles, motivation, and self-regulated learning behaviors (Eccles, 2021). In accounting education, female students often exhibit higher self-discipline and better study habits than their male counterparts (Okeke & Chidebe, 2024; Okeke). Schunk and DiBenedetto (2020) found that female students are more likely to use metacognitive strategies like self-monitoring, whereas male students tend to display greater confidence in problem-solving but may use fewer structured study techniques (Usman & Bello, 2021). Some researchers argue that gender disparities in academic performance stem from social and cultural influences rather than cognitive differences (Hyde, 2019). Societal expectations and parental support shape students' academic engagement (Agbaje & Olaleye, 2020). These disparities highlight the need to address gender-based learning needs to enhance academic achievement and ensure equitable educational opportunities.

Overall, academic achievement of accounting students in Colleges of Education is influenced by various self-regulated learning strategies, particularly attention control and self-monitoring. Attention control enables students to focus on relevant tasks, while self-monitoring helps them track progress and refine study habits. This study seeks to examine the extent to which attention control and self-monitoring strategies enhance students' academic achievement.

### **Purpose of the Study**

The main objective of this study is to determine the extent attention control and self-monitoring strategies enhance the academic achievement of accounting students in Colleges of Education in Anambra State, Nigeria. Specifically, the study aims to:

1. Examine the extent to which attention control strategies enhance academic achievement.
2. Investigate the extent to which self-monitoring strategies contribute to academic success.

### **Research Questions**

The study will be guided by the following research questions:

1. To what degree do attention control strategies improve the academic performance of accounting students in Colleges of Education in Anambra State?
2. To what extent does self-monitoring influence the academic success of accounting students?

### **Hypotheses**

The following null hypotheses will be tested at a 0.05 significance level:

1. There is no statistically significant difference in the average ratings of male and female accounting students regarding the impact of attention control strategies on academic achievement.
2. There is no statistically significant difference in the average ratings of male and female accounting students concerning the influence of self-monitoring strategies on academic achievement.

## **METHODS**

This study adopted a survey research design to examine the extent to which attention control and self-monitoring strategies enhance accounting students' academic achievement. The population consisted of 400 accounting students from two public colleges of education in Anambra State—Federal College of Education (Technical), Umunze, and Nwafor Orizu College of Education, Nsugbe—during the 2023/2024 academic session. Institutional records indicated that the population comprised 121 male and 279 female students.

A structured questionnaire, titled "Extent of Attention Control and Self-Monitoring Strategies Questionnaire (EACSMSQ)," was developed to measure students' use of these strategies alongside demographic information. The instrument underwent expert validation, and its reliability was confirmed with a Cronbach's alpha coefficient of 0.75, indicating good internal consistency. Data collection achieved a 98% response rate, ensuring broad participation.

For data analysis, mean and standard deviation were used to address the research questions, with a cut-off mean of 2.50 to determine high or low levels of strategy utilization. Hypotheses were tested using an independent samples t-test at a 0.05 significance level to compare the academic achievement of male and female students.

## **RESULTS**

Data collected for the two research questions and four null hypotheses were analyzed and presented in Tables 1-4.

**Research Question 1:**

To what extent does attention control contribute to the academic success of accounting students in Colleges of Education in Anambra State, Nigeria?

The data addressing this research question were analyzed and summarized in Table 1.

**Table 1: Mean scores and standard deviation on the impact of attention control strategies on the academic achievement of accounting students (n = 400)**

S/N	Item Description	$\bar{X}$	SD	Remark
1	Taking frequent break from intense concentration increases ability to pay attention	3.58	0.8	High Extent
2	Listening during accounting lectures increase chances of academic success	3.16	0.62	High Extent
3	Seeking suitable environments that are conducive to learning	2.05	0.52	Low Extent
4	Chewing gum, or snack while studying influences learning Process	4.00	0.00	High Extent
5	Engaging in regular mindfulness exercises to cultivate moment awareness help to focus during studies	3.47	0.57	Present- High Extent
6	Eliminating external distractions to increase focus during academic activities	4.00	0.07	High Extent
7	Identifying high-priority tasks first, can minimize the cognitive load associated with unfinished academic activities	2.21	0.65	Low Extent
8	Tackling high-priority tasks first, can minimize the cognitive load associated with unfinished academic activities	2.52	0.93	High Extent
9	Increasing the focused time spent on-task helps to improve academic achievement	2.68	0.88	High Extent
10	Using a visual timer that indicate the total time needed to complete a task increases focus in tackling accounting courses problem	2.02	0.74	Low Extent
11	Attending to learning tasks should be a priority	3.37	0.62	High Extent
	Cluster mean	3.01	0.13	High Extent

Table 1 above indicates that respondents rated eight out of eleven attention control strategies as significantly enhancing their academic achievement in accounting, with mean scores ranging from 2.52 to 4.00. However, three strategies were rated as having a low extent of enhancement, with mean scores between 2.02 and 2.21. The standard deviation values, ranging from 0.00 to 0.93, suggest that respondents' ratings were relatively consistent, indicating minimal variation in their perceptions.

**Research Question 2:**

To what extent does self-monitoring influence the academic performance of accounting students in Colleges of Education in Anambra State, Nigeria?

The data corresponding to this research question were analyzed and presented in Table 2.

**Table 2: Mean scores and standard deviation on the impact of self-monitoring strategies on the academic achievement of accounting students (n = 400).**

S/N	Item Description	$\bar{X}$	SD	Remark
12	Making sure that learning progress is in relation to each accounting learning goals activity	2.51	0.97	High Extent
13	Assuming responsibility for learning to enhance performance in financial accounting	3.04	0.82	High Extent
14	Making necessary changes during the semester to ensure good performance in accounting courses	2.17	0.81	Low Extent
15	Identifying learning problems so as to solve them	2.88	0.93	High Extent
16	Reflecting on academic performances in accounting to make needed adjustment	1.53	0.87	Low Extent
17	Checking academic behaviours so as not to deviate from the goals set accounting	2.25	0.96	Low Extent
18	Keeping record of a number of hours spent on solving accounting tasks	1.97	1.00	High Extent
19	Checking effective and ineffective performance for academic excellence	2.81	1.06	High Extent
20	Preventing inappropriate behaviour through observing	1.54	0.93	Low Extent
21	Recording behaviour independently for academic development	2.55	0.94	High Extent learning
22	Prompting to find a more suitable learning strategy for accounting courses	3.08	1.05	High Extent
23	Revealing inadequacy of a learning strategy	1.36	1.36	Low Extent
	Cluster mean	2.51	0.20	High Extent

Table 2 above reveals that respondents rated seven out of twelve self-monitoring strategies as highly enhancing their academic achievement in accounting, with mean scores ranging from 2.51 to 3.08. However, they rated five strategies as having a low extent of enhancement, with mean scores between 1.36 and 2.25. The standard deviation scores (0.61–1.06) indicate minimal variation in responses.

**Hypothesis 1:**

There is no significant difference in the mean ratings of male and female accounting students on the extent attention control strategies enhance their academic achievement in accounting in Anambra State colleges of education.

Data obtained in respect of the first hypothesis were analyzed and presented in table 3.

**Table 3: Summary of t-test analysis of mean ratings of male and female accounting students on the extent attention control strategies enhance their academic achievement**

Gender	N	$\bar{x}$	SD	df	t-cal	t-crit	Decision
Male	121	3.01	0.13	231	0.06	1.96	Not Significance
Female	279	3.01	0.14				

As shown in Table 3 above, the t-calculated value is 0.06 while the t-critical (table) value is 1.96 at a 0.05 level of significance. As the t-calculated value is less than the t-critical value, the null hypothesis is therefore not rejected. This shows that there is no significant difference in the mean ratings of male and female accounting students on the extent attention control strategies enhance their academic achievement in accounting at Anambra State Colleges of Education.

**Hypothesis 2:**

There is no significant difference in the mean ratings of male and female accounting students on the extent self-monitoring strategies enhance their academic achievement in accounting at Anambra State Colleges of Education.

Data obtained for the first hypothesis were analyzed and presented in Table 4.

**Table 4: Summary of t-test analysis of mean ratings of male and female accounting students on the extent self-monitoring strategies enhance their academic achievement**

Gender	N	$\bar{x}$	SD	df	t-cal	t-crit	Decision
Male	121	2.43	0.18	398	8.51	1.96	Significance
Female	279	2.26	0.18				

As shown in Table 4 above, the t-calculated value is 8.51 while the t-critical (table) value is 1.96 at a 0.05 level of significance. As the t-calculated value is greater than the t-critical value, the null hypothesis is therefore rejected. This shows that there is a significant difference in the mean ratings of male and female accounting students on the extent self-monitoring strategies enhance their academic achievement in accounting at Anambra State Colleges of Education.

**DISCUSSION OF FINDINGS**

The findings of the study are discussed as follows:

**Extent Attention Control Strategies Enhance the Academic Achievement of Accounting Students in Colleges of Education in Anambra State**

The findings in Table 1 indicate that accounting students in Colleges of Education in Anambra State highly rated attention control strategies such as taking breaks, active listening, mindfulness, and eliminating distractions for enhancing

academic achievement. These strategies likely help students maintain focus, manage cognitive load, and improve information retention. In contrast, strategies like selecting suitable study environments, prioritizing tasks first, minimizing cognitive load, and using visual timers were rated as less effective, possibly due to challenges in consistent implementation or perceptions of limited immediate impact. This aligns with Kokoç (2021), who emphasized attention control in reducing distractions like social media. The results also support Wu & Cheng (2019), who highlighted the role of attention control in minimizing distractions to improve academic achievement.

### **Influence of Gender on Attention Control**

The findings in table 3 indicate that gender does not significantly impact the effectiveness of attention control strategies in enhancing academic achievement. This aligns with the research by Chan (as cited in Alavi *et al.*, 2019), who found no gender differences in sustained attention control responses and academic performance. The results suggest that attention control is not inherently gender-dependent, with external factors like study habits and motivation playing a more significant role (Alavi *et al.*, 2019). Therefore, enhancing attention control strategies across all students, rather than focusing on gender-specific differences, may be more effective in improving academic outcomes.

### **Extent Self-Monitoring Strategies Enhance the Academic Achievement of Accounting Students in Colleges of Education in Anambra State**

The findings in Table 2 reveal that accounting students in colleges of education in Anambra State view self-monitoring strategies such as setting learning goals, taking responsibility for their learning, tracking time, and evaluating performance as highly effective for academic success. Conversely, strategies like mid-semester adjustments and behavior monitoring received lower ratings. These results underscore the significance of self-monitoring in academic achievement, aligning with Guo (2022), who demonstrated that self-monitoring positively influences academic performance. However, the lower ratings for certain strategies suggest that the effectiveness of self-monitoring may vary depending on contextual factors, indicating the need for educational practices that foster consistent self-regulation among students.

### **Influence of Gender on Self-Monitoring**

The findings from Table 4 indicate that gender significantly affects how self-monitoring strategies enhance accounting students' academic achievement in Anambra State Colleges of Education. Female students were more likely to adopt these strategies, aligning with Zimmerman and Martinez-Pons (as cited in Liu *et al.*, 2021), who found that higher self-regulation among females contributes to better academic outcomes. This may be linked to differences in learning behaviors, motivation, or social expectations. Similarly, Okeke-Ezeanyanwu and Chidebe (2023) observed that female accounting students in Anambra State more frequently employ help-seeking strategies, which are closely related to self-monitoring, leading to improved academic achievement. To maximize learning potential, educational interventions should promote self-monitoring strategies for both genders, bridging performance gaps in accounting education.

## **CONCLUSION**

This study examined how self-regulatory strategies, particularly self-monitoring and attention control, influence the academic achievement of accounting students in Anambra State Colleges of Education. The findings revealed that students widely use these strategies, with gender and class level affecting their application. While attention control significantly impacted academic performance, self-monitoring fostered independent learning and improved achievement in financial accounting. Female students showed a greater tendency toward self-monitoring, whereas class level significantly influenced attention control, highlighting the need for instructional approaches suited to different academic stages.

### **Implications of the Study**

The findings emphasize the need to integrate self-regulatory strategies into accounting education. Educators should foster metacognitive skills that help students track progress, maintain focus, and improve comprehension. Teaching methods should address gender-based differences in self-monitoring, while attention control strategies should suit different academic levels. Embedding these techniques in the curriculum can enhance independent learning, critical thinking, and academic performance.

### **Recommendations**

1. **Integrate Self-Regulatory Strategies:** Accounting educators should embed self-monitoring and attention control techniques in teaching to enhance students' metacognitive skills and academic performance.
2. **Tailor Instruction to Student Differences:** Educators should adapt teaching methods to address gender variations in self-regulation, ensuring all students effectively apply these strategies for improved learning outcomes.

## REFERENCES

- Agbaje, A., & Olaleye, Y. (2020). *Social and cultural influences on student engagement in accounting education*. *Journal of Business Education*, 45(2), 78-95.
- Alavi, S. M., Rezaee, A. A., & Mahmoodi, M. H. (2019). *Gender differences in attention control and academic performance*. *Educational Psychology Review*, 31(4), 557-579.
- Anthonysamy, L. (2021). *The role of self-regulated learning in higher education: Strategies and applications*. *Journal of Learning and Development*, 10(1), 22-38.
- Boelen, M., Koopman, M., & Beishuizen, J. (2018). *Self-regulated learning strategies in financial accounting education: A critical analysis*. *Accounting Education Review*, 27(3), 305-322.
- Cao, L., & Tian, R. (2020). *Attention control and academic performance: A meta-analytic review*. *Educational Psychology Journal*, 42(1), 15-34.
- Carnegie, G. D., Parker, L. D., & Tsahuridu, E. (2020). *The evolving nature of accounting: A technical and ethical perspective*. *Accounting Horizons*, 34(2), 123-145.
- Eccles, J. S. (2021). *Gender differences in motivation and self-regulated learning behaviors*. *Annual Review of Educational Research*, 91(1), 78-102.
- Gopher, D. (2022). *Cognitive mechanisms of attention control in learning environments*. *Journal of Cognitive Psychology*, 44(2), 112-135.
- Guo, Y. (2022). *The impact of self-monitoring on students' academic performance: A longitudinal study*. *Educational Research Journal*, 39(4), 285-310.
- Hyde, J. S. (2019). *Gender similarities and differences in learning and cognitive processes*. *Psychological Bulletin*, 145(6), 512-534.
- Jong, J. (2019). *Self-monitoring strategies and academic achievement: The mediating role of motivation*. *Educational Review*, 41(3), 205-219.
- Kokoc, M. (2021). *The role of attention control in academic performance and procrastination tendencies*. *Journal of Educational Technology*, 58(1), 66-81.
- Li, Y., Zhang, X., & Wang, H. (2018). *Understanding financial accounting through self-regulated learning: A case study approach*. *International Journal of Accounting Education*, 25(2), 172-194.
- Liu, Y., Zimmerman, B. J., & Martinez-Pons, M. (2021). *Gender differences in self-regulation and their impact on academic achievement*. *Journal of Educational Psychology*, 113(5), 875-890.
- Narad, A., & Abdullah, M. (2021). *Academic achievement and its determining factors: A systematic review*. *International Journal of Educational Research*, 56(3), 212-228.
- Okeke-Ezeanyanwu, J. A., & Chidebe, P. C. (2024). *Influence of help-seeking strategies on academic achievement among accounting students in Colleges of Education in Anambra State*. *African Journal of Educational Studies and Social Sciences*, 5(1), 1-10.
- Okoli, A., & Ozoegwu, M. (2021). *Learning strategies and academic achievement in business education*. *African Journal of Business and Learning*, 14(2), 56-73.
- Okoli, C., Webber, K., & Coleman, D. (2021). *Self-monitoring and its role in academic performance: A metacognitive perspective*. *Journal of Applied Psychology*, 49(3), 188-205.
- Omidire, M. (2021). *Study habits and self-regulated learning among accounting students in Colleges of Education*. *Journal of Business Education Research*, 19(1), 45-61.
- Schunk, D. H., & DiBenedetto, M. K. (2020). *Motivation and self-regulation in learning: Gender differences and implications for education*. *Educational Psychology*, 42(5), 378-393.
- Schunk, D. H., & Ertier, J. (2018). *The impact of self-monitoring on academic motivation and persistence*. *Journal of Learning Psychology*, 32(4), 112-129.
- Sweller, J. (2018). *Cognitive load theory and its applications in education: An update*. *Educational Psychology Review*, 30(2), 451-471.
- Tella, A. (2018). *Metacognition and self-regulated learning: Exploring the role of self-monitoring in student achievement*. *African Journal of Educational Research*, 24(2), 98-114.
- Ubong, B., & Wokocho, I. (2021). *The role of Colleges of Education in professional accounting training*. *Nigerian Journal of Educational Development*, 29(1), 56-71.
- Usman, R., & Bello, S. (2021). *Gender and learning behaviors in financial accounting education: A comparative study*. *Journal of African Business Education*, 27(3), 198-214.
- Wu, S., & Cheng, L. (2019). *Reducing academic distractions through attention control strategies*. *Learning and Instruction*, 61(1), 45-60.
- Zimmerman, B. J. (2019). *Self-regulated learning and academic achievement: A social cognitive perspective*. *Journal of Educational Psychology*, 110(3), 404-420.