EFFECTS OF STUDY-TIME MANAGEMENT TRAINING ON ACADEMIC SELF-EFFICACY OF LOW-ACHIEVING IN-SCHOOL ADOLESCENTS IN KOGI STATE, NIGERIA

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Abstract
The study was designed to investigate the effects of study-time management training on the academic self-efficacy of low-achieving in-school adolescents in Kogi State, Nigeria. Three specific purposes were generated. Three research questions were answered, and three null hypotheses were tested at the 0.05 significance level. The researcher adopted a quasi-experimental design for the study. The study targeted all low-achieving adolescents in Kogi State public senior secondary schools. The researcher sampled two hundred and twelve (212) identified low-achieving senior secondary two (SSII) in-school adolescents from four intact classes drawn from public co-educational Senior Secondary Schools in Kogi State. The sampled in-school adolescents were identified as low achievers based on their previous records in academic achievement. Instruments used for data collection were the Academic Self-Efficacy Rating Scale (ASRS) and the Study-Time Management Training Programme. The data obtained were organised and analysed using means and standard deviations to answer research questions, and analysis of covariance (ANCOVA) to test hypotheses. The study revealed that low-achieving in-school adolescents who received study-time management training showed significantly higher academic self-efficacy than those in the waitlisted control group. Gender did not significantly influence academic self-efficacy. Additionally, there was no significant interaction between treatment and gender, indicating that the training improved academic self-efficacy similarly for both males and females. It was recommended, among other measures, that school counsellors should use study-time management training interventions to boost low-achieving in-school adolescents' academic self-efficacy.

Keywords: Study-time management training, academic self-efficacy, low-achieving, in-school adolescents

Introduction

Persistent academic challenges among low-achieving in-school adolescents in Kogi State have drawn increasing scholarly attention, particularly regarding academic self-efficacy as a critical psychological outcome influencing learning behaviour and educational engagement. Low-achieving in-school adolescents are generally described as students who perform significantly below the average academic level expected for their age or grade, thereby struggling to meet established academic benchmarks (Park, Heckhausen, & Chang, 2020). Similarly, Roeser, Galla, Baelen, and Talbot (2022) conceptualised low-achieving adolescents as those who demonstrate limited academic progress, persistently low grades, and difficulties with standardised assessments relative to their peers. Such academic difficulties are often associated with contextual and personal factors, including ineffective study habits, poor school adjustment, and exposure to external distractions, all of which may undermine adolescents' beliefs in their academic capabilities.

Operationally, low-achieving in-school adolescents are secondary school students who attain below a 50% average in third-term cumulative academic achievement. They exhibit diminished academic self-efficacy characterised by self-doubt, fear of failure, low motivation, and limited classroom engagement. In contrast, Adolescents who consistently achieve above expected academic benchmarks typically demonstrate strong academic self-

efficacy, reflected in their confidence to manage academic demands, employ effective learning strategies, and persist when confronted with challenges (Steinmayr et al., 2019). High-achieving adolescents typically engage in active learning behaviours, demonstrate strong self-regulation, and maintain positive beliefs about their academic competence, all of which contribute to sustained academic confidence.

Individuals' beliefs about their academic self-efficacy play a pivotal role in shaping their behaviour, motivation, and, ultimately, academic achievement. Academic self-efficacy refers to an in-school adolescent's belief in their capacity to successfully perform academic tasks and attain educational goals, which significantly influences motivation, persistence, and performance within educational settings (Usher & Pajares, 2019). It reflects adolescents' self-perceived confidence in their ability to organise and execute the actions required to manage prospective academic situations effectively (Schunk & DiBenedetto, 2020). Academic self-efficacy, therefore, encompasses in-school adolescents' judgments regarding their competence to master instructional content, cope with academic challenges, and achieve desired learning outcomes, all of which are critical determinants of academic achievement (Honicke & Broadbent, 2016). A strong sense of academic self-efficacy may enhance confidence among low-achieving in-school adolescents, enabling them to approach academic tasks with greater resilience, persistence, and a proactive orientation, thereby increasing the likelihood of successful task completion.

Adolescents with high academic self-efficacy exhibit strong confidence in their academic abilities, which fosters resilience, effective goal setting, proactive learning behaviours, and positive attitudes toward learning, supported by constructive feedback and perceived teacher support; these attributes enhance motivation, self-regulation, and academic achievement (Olodude, Anuodo & Owoeye, 2020; Qamar & Akhter, 2020; Usher & Pajares, 2019; Wei, 2024). In contrast, adolescents with low academic self-efficacy tend to set lower academic goals, experience heightened anxiety and frustration, avoid seeking help, and show limited classroom engagement, factors that collectively undermine their academic performance and school adjustment (Schunk & DiBenedetto, 2020; Usher & Pajares, 2019). Operationally, academic self-efficacy denotes the confidence of low-achieving in-school adolescents in their ability to effectively manage academic tasks, overcome challenges, sustain effort, and achieve educational goals. In this study, academic self-efficacy is defined as adolescents' perceived capability to apply study-time management strategies to enhance achievement, remain engaged in school activities, and cope with academic demands.

In Kogi State, where many low-achieving in-school adolescents struggle with low academic self-efficacy, study-time management training provides a structured approach to enhance students' confidence in handling academic tasks. Such training equips adolescents with skills to plan, prioritise, and allocate time effectively, use tools like planners and to-do lists, and balance academic and extracurricular responsibilities (Owolabi & Olanipekun, 2023; Shafii, 2018; Adams & Blair, 2019; Alyami, Yu, & Alwafi, 2021). By fostering better organisation and task management, study-time management training could strengthen academic self-efficacy, enabling students in Kogi State to approach learning with greater motivation, persistence, and belief in their ability to succeed academically. Moreover, in Kogi State, gender-based differences shaped by cultural norms and societal expectations influence academic self-efficacy among in-school adolescents, with girls often constrained by traditional roles and limited educational support, and boys facing pressures that affect confidence in their academic abilities. Consequently, this study examines how gender and its interaction with study-time management training affect the academic self-efficacy of low-achieving in-school adolescents in Kogi State.

Ideally, in-school adolescents are expected to develop strong academic self-efficacy that enables them to engage confidently in learning tasks, persist through academic

challenges, and achieve positive educational outcomes; however, many low-achieving in-school adolescents in Kogi State continue to exhibit diminished academic self-efficacy, reflected in low motivation, poor classroom engagement, and weak confidence in their academic abilities. This low academic self-efficacy contributes to persistent low academic achievement and heightens vulnerability to maladaptive behaviours, including reliance on examination malpractice in the region. Although previous studies have established the effectiveness of study-time management training in enhancing students' academic self-efficacy, there is limited empirical evidence on its impact among low-achieving in-school adolescents in Kogi State, thereby necessitating focused investigation into how such training can strengthen academic self-efficacy within this specific socio-educational context.

Research Questions

The following research questions were answered:

1. What are the mean academic self-efficacy scores of low-achieving in-school adolescents exposed to time management training and those not exposed?
2. What is the influence of gender on the post-test mean academic self-efficacy scores of low-achieving in-school adolescents?
3. What is the interaction effect of treatment and gender on the mean academic self-efficacy scores of low-achieving in-school adolescents?

Hypotheses

The following hypotheses were tested at a 0.05 level of significance:

HO_1: There is no significant difference in the mean academic self-efficacy scores of low-achieving in-school adolescents exposed to study-time management training and those on the waitlist.

HO_2: There is no significant influence of gender on the mean academic self-efficacy scores of low-achieving in-school adolescents.

HO_3: There is no significant interaction effect of treatment and gender on the mean academic self-efficacy scores of low-achieving in-school adolescents.

Methods

This study adopted a quasi-experimental research design, specifically a pretest-posttest non-equivalent control group design. It was conducted in Kogi State, Nigeria, targeting low-achieving in-school adolescents in coeducational public senior secondary schools. The researcher purposively sampled 212 low-achieving adolescents, comprising 116 males and 96 females, from four coeducational senior secondary schools with the highest record of low-achieving in-school adolescents. Students scoring below 50% in the three terms' cumulative average were identified as low achievers. These schools were randomly assigned to treatment and control groups, with the experimental group receiving the intervention while the control group remained on a waitlist.

The primary instrument for the study was the Academic Self-Efficacy Rating Scale (ASRS), a 20-item questionnaire rated on a 4-point scale, designed to assess self-efficacy related to academic tasks. Items were positively and negatively cued, with corresponding scoring patterns adjusted accordingly. The same instrument was used for the pretest and posttest, with items reshuffled for the posttest. The Study-Time Management Training Programme (STMTP), divided into twelve sessions over six weeks, served as the intervention. The key topics included goal-setting strategies, prioritisation techniques, and approaches to managing procrastination. To maximise the programme's effectiveness, participants were also trained in distraction control strategies, positive affirmations for maintaining motivation, and the application of the two-minute rule for promptly addressing smaller tasks. The instruments and the intervention programme underwent face validity assessment by experts in educational psychology, educational technology, and measurement and evaluation at the University of Nigeria, Nsukka. This process resulted in refining the

ASRS and STMTP to align with study objectives. Trial testing with 20 low-achieving adolescents in Ekiti State confirmed the reliability of the ASRS with a Cronbach's alpha coefficient of 0.80. Data were analysed using SPSS version 25.0. Mean and standard deviation were used to answer research questions, while analysis of covariance (ANCOVA) tested hypotheses at a 0.05 significance level. Pretest scores served as covariates to post-test scores, enabling the evaluation of covariate and group effects on the dependent variables.

Results

Research Question Two: What are the mean academic self-efficacy scores of low-achieving in-school adolescents exposed to study-time management training and those on the waitlist?

Table 3: ***Mean analysis of the academic self-efficacy scores of low-achieving in-school adolescents exposed to study-time management training and those on the waitlist***

		Pretest		Posttest		
Treatment	N	Mean	Std. Deviation	Mean	Std. Deviation	Adjusted Mean
Experimental Group	107	24.74	3.57	62.94	8.05	62.94
Waitlisted Control Group	105	24.79	3.56	29.73	4.37	29.77

Table 1 indicates that low-achieving in-school adolescents exposed to time management training improved in academic self-efficacy from pretest (M = 24.74, SD = 3.57) to posttest (M = 62.94, SD = 8.05), compared with the waitlisted control group, which showed a smaller increase from pretest (M = 24.79, SD = 3.56) to posttest (M = 29.73, SD = 4.37).

HO_1: There is no significant difference in the mean academic self-efficacy scores of low-achieving in-school adolescents exposed to study time management training and those on the waitlist.

Table 4: ***Analysis of covariance of the effect of study time management training on academic self-efficacy of low-achieving in-school adolescents***

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	58458.963[a]	4	14614.741	341.603	.000	.868
Intercept	9286.512	1	9286.512	217.062	.000	.512
Pre-Self-Efficacy	.437	1	.437	.010	.920	.000
Treatment	57490.112	1	57490.112	1343.768	.000	.867
Gender	.945	1	.945	.022	.882	.000
Treatment *Gender	6.859	1	6.859	.160	.689	.001
Error	8856.032	207	42.783			
Total	525619.000	212				
Corrected Total	67314.995	211				

a. R Squared = .868 (Adjusted R Squared = .866)

Table 2 demonstrates a statistically significant difference in mean academic self-efficacy between low-achieving in-school adolescents who received study time management training and those on the waitlist, $F(1, 207) = 1343.768$, $p < .05$, with a large effect size ($\eta^2 = .867$) indicating that 86.7% of the improvement in academic self-efficacy was attributable to the training, leading to the rejection of the null hypothesis.

Research Question Two: What is the influence of gender on mean academic self-efficacy scores of low-achieving in-school adolescents?

Table 3: ***Mean analysis of the self-efficacy scores of low-achieving male and female in-school adolescents***

		Pretest		Posttest		
Gender	N	Mean	Std. Deviation	Mean	Std. Deviation	Adjusted Mean
Male	116	24.79	3.58	45.42	18.02	46.29
Female	96	24.73	3.55	47.79	17.67	46.42

Table 3 shows that both male and female low-achieving in-school adolescents demonstrated notable improvements in academic self-efficacy from pretest to posttest, with females attaining slightly higher adjusted posttest mean scores (46.42) than males (46.29), while males exhibited greater variability in posttest academic self-efficacy scores.

Ho_2: There is no significant influence of gender on mean academic self-efficacy scores of low-achieving in-school adolescents.

Table 2 revealed that there was no significant influence of gender on mean academic self-efficacy scores of low-achieving in-school adolescents, F (1, 207) = .022 p = .882. Hence, the null hypothesis was not rejected since the associated probability value of .882 was greater than the .05 significance level. This implies that gender does not influence the academic self-efficacy of low-achieving in-school adolescents.

Research Question Three: What is the interaction effect of treatment and gender on the mean academic self-efficacy scores of low-achieving in-school adolescents?

Table 4: ***Mean analysis of the academic self-efficacy scores of low-achieving male and female in-school adolescents exposed to time management training and those on the waitlist***

			Pretest		**Posttest**	
Treatment	**Gender**	**N**	**Mean**	**Std. Deviation**	**Mean**	**Std. Deviation**
Experimental Group	Male	55	24.75	3.64	63.05	8.25
	Female	52	24.73	3.53	62.83	7.92
Waitlisted Control Group	Male	61	24.84	3.56	29.52	4.38
	Female	44	24.73	3.61	30.02	4.39

Table 4 indicates that both male and female low-achieving in-school adolescents exposed to time management training showed substantial gains in academic self-efficacy from pretest (males: M = 24.75, SD = 3.64; females: M = 24.73, SD = 3.53) to posttest (males: M = 63.05, SD = 8.25; females: M = 62.83, SD = 7.92), with males recording marginally higher posttest mean scores than females, whereas within the waitlisted control group, females showed slightly higher posttest academic self-efficacy than males.

HO_3: There is no significant interaction effect of treatment and gender on low-achieving in-school adolescents' mean academic self-efficacy scores.

Table 2 revealed that there was no significant interaction effect of treatment and gender on the mean academic self-efficacy scores of low-achieving in-school adolescents, F (1, 207) = .160, p = .689. Hence, the null hypothesis was not rejected since the associated probability value of .689 was greater than the .05 level of significance. This implies that the low-achieving in-school adolescents' academic self-efficacy due to their exposure to treatment conditions was not dependent on their gender.

Discussion

The findings demonstrate that study-time management training had a significant and positive effect on the academic self-efficacy of low-achieving in-school adolescents, as

participants in the experimental group recorded a marked increase in mean academic self-efficacy from pretest to posttest, whereas those in the waitlisted control group showed only minimal improvement. The experimental group's substantially higher posttest means scores indicate a clear advantage attributable to the training, although the wider dispersion of scores suggests variability in individual responsiveness to the intervention. Analysis of covariance further confirmed a statistically significant difference between the groups, leading to the rejection of the null hypothesis and revealing a large effect size, which indicates that a considerable proportion of the observed improvement in academic self-efficacy was due to the training. These results are consistent with prior empirical evidence (Garcia & Lin, 2020; Lee & Thompson, 2022; Martinez & Wong, 2023; Okafor & Aluko, 2019), underscoring the effectiveness of study-time management training in enhancing adolescents' confidence in their academic capabilities and capacity to achieve educational goals.

The findings confirmed that gender did not exert a significant influence on academic self-efficacy outcomes. The results revealed that both male and female low-achieving in-school adolescents who participated in time management training recorded substantial improvements in academic self-efficacy from pretest to posttest, with males showing marginally higher post-intervention scores, while their counterparts in the waitlisted control group exhibited only minimal gains. Further analysis indicated no significant interaction effect between treatment and gender, demonstrating that the enhancement in academic self-efficacy was attributable to the intervention rather than gender differences. This finding is consistent with previous studies (Azari, Livarjani, & Azmoodeh, 2023; Mwaura, 2021), which reported comparable benefits of time management training for both male and female students, thereby underscoring the universal effectiveness of the intervention in strengthening academic self-efficacy among low-achieving adolescents.

Conclusions

Based on the findings of this study, it was concluded that study-time management training significantly enhanced the academic self-efficacy of low-achieving in-school adolescents, with those exposed to the intervention demonstrating markedly greater improvements than their counterparts in the waitlisted control group. The large effect size and statistically significant group differences confirm that the observed gains in academic self-efficacy were largely attributable to the training, despite variations in individual responses. Furthermore, the absence of substantial gender effects indicates that the intervention was equally effective for both male and female adolescents, underscoring its broad applicability for strengthening academic self-efficacy among low-achieving students.

Recommendations

1. School counsellors should implement targeted time management interventions as part of regular counselling services to improve academic self-efficacy among low-achieving students.
2. Both male and female low-achieving adolescents should be encouraged to participate in time management programmes, as the study found no significant gender-based differences in academic self-efficacy improvement.
3. Teachers should be trained to deliver time management strategies effectively, ensuring that both male and female students receive consistent guidance to improve self-efficacy.

REFERENCES

Adams, R. V., & Blair, E. (2019). Impact of time management behaviours on undergraduate engineering students' performance. *SAGE Open, 9*(1), 1–11.

Adelakun, O. A., & Akinola, A. A. (2023). Learning strategies, motivation and academic performance of secondary school students in Nigeria. *Journal of Educational Research and Practice, 13*(2), 145–158.

Alyami, M., Yu, J., & Alwafi, H. (2021). The effect of time management training on academic performance and stress among university students. *International Journal of Educational Psychology, 10*(2), 135–150.

Azari, N., Livarjani, P., & Azmoodeh, M. (2023). The effectiveness of time management training on academic self-efficacy and academic performance of secondary school students. *Journal of Educational Psychology Studies, 15*(2), 89–103.

Garcia, R. T., & Lin, X. (2020). Time management training and academic self-efficacy among first-year college students. *Journal of Educational Research and Practice, 10*(1), 45–58.

Honicke, T., & Broadbent, J. (2016). The influence of academic self-efficacy on academic performance: A systematic review. *Educational Research Review, 17*, 63–84.

Lee, S. Y., & Thompson, J. E. (2022). Improving students' academic self-efficacy through structured time management interventions. *Educational Psychology Review, 34*(3), 1121–1143.

Martinez, P. R., & Wong, K. L. (2023). Effects of study-time management training on adolescents' academic self-efficacy and achievement. *International Journal of Educational Research, 117*, 102111.

Mwaura, J. M. (2021). Gender differences in academic self-efficacy among secondary school students. *African Journal of Educational Studies in Mathematics and Sciences, 17*(1), 65–76.

National Bureau of Statistics. (2021). *Education statistics report*. Abuja, Nigeria.

Ogunleye, A. J., & Ajayi, K. O. (2023). Psychological factors and academic underachievement among secondary school students in Kogi State, Nigeria. *African Journal of Educational Psychology, 7*(1), 92–106.

Okafor, C. E., & Aluko, O. A. (2019). Time management skills and academic self-efficacy of secondary school students in Nigeria. *Nigerian Journal of Educational Psychology, 13*(2), 101–114.

Olodude, D. O., Anuodo, J. O., & Owoeye, J. S. (2020). Academic self-efficacy and resilience as predictors of students' academic performance. *Journal of Educational Foundations, 14*(2), 55–68.

Owolabi, H. O., & Olanipekun, S. S. (2023). Time management skills and academic performance of secondary school students in South-West Nigeria. *Nigerian Journal of Educational Studies, 21*(1), 101–115.

Park, D., Heckhausen, J., & Chang, E. S. (2020). Midlife adults' motivation for low achievement: A lifespan developmental perspective. *Developmental Psychology, 56*(10), 1931–1945.

Qamar, A., & Akhter, N. (2020). Students' academic self-efficacy and teachers' support: A correlational study. *International Journal of Educational Studies, 7*(3), 89–98.

Roeser, R. W., Galla, B. M., Baelen, R. N., & Talbot, J. E. (2022). Social–emotional learning and academic functioning among adolescents. *Educational Psychologist, 57*(2), 123–139.

Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology, 60*, 101832.

Shafii, M. (2018). Time management strategies and academic performance of secondary school students. *Journal of Education and Practice, 9*(6), 34–41.

Steinmayr, R., Weidinger, A. F., Schwinger, M., & Spinath, B. (2019). The importance of students' motivation for their academic achievement. *Learning and Individual Differences, 72*, 40–49.

Usher, E. L., & Pajares, F. (2019). Sources of self-efficacy in school: Critical review of the literature and future directions. *Review of Educational Research, 89*(4), 543–586.

Wei, X. (2024). Teacher support and academic self-efficacy among secondary school students: A multilevel analysis. *Journal of School Psychology, 94*, 1–15