



## Principals' Time Tabling Practices and School Effectiveness in Ilorin Metropolis Secondary Schools, Kwara State

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### ABSTRACT

*This study examined the correlation between principals' time-tabling practices and private secondary school effectiveness in Kwara State, Nigeria. Time-tabling practices, encompassing planning, allocation, implementation, and evaluation, are pivotal to optimizing school operations and achieving academic excellence. The study adopted a descriptive correlational research design, involving 276 teachers selected through multistage sampling from private secondary schools across Kwara State. Data were collected using a validated questionnaire, Principals' Time-Tabling Practices and School Effectiveness Questionnaire (PTTPSEQ) and analyzed using Pearson's Product-Moment Correlation at a 0.05 level of significance. Findings revealed that time-tabling planning and allocation practices were highly utilized by principals with implementation and evaluation practices moderately adopted. The level of school effectiveness in the sampled schools was found to be high, evidenced by strong academic outcomes, student engagement and positive teaching quality. However, areas such as resource allocation, infrastructure and extracurricular engagement showed room for improvement. Significant positive relationships were identified between time-tabling practices and school effectiveness, with planning practices exhibiting the strongest correlation ( $r = 0.779$ ,  $p < 0.05$ ). Allocation and implementation practices also significantly influenced school effectiveness ( $r = 0.539$  and  $r = 0.276$ ). These results underscore the critical role of well-structured time-tabling practices in enhancing school performance. The study recommends capacity-building programs for school administrators to optimize time-tabling processes and the integration of technology to streamline planning and scheduling. Continuous evaluation and stakeholder engagement in time-tabling decisions are also encouraged to ensure adaptability to evolving educational needs.*

**Keywords:** *Principals' Time-Tabling, School Effectiveness, Teaching Quality*

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### INTRODUCTION

Efficient timetabling practices significantly influence the effectiveness of private secondary schools within the educational landscape. Timetabling, the systematic distribution of time for diverse academic and non-academic activities within the school schedule, is an essential aspect of educational management that significantly impacts student learning outcomes, teacher productivity, and overall school performance (Motamedi & Khajouie, 2020). Franklin and Harrington (2019) assert that effective timetabling requires careful planning and organization to maximize resources and facilitate the seamless operation of all school activities. This involves organizing classes, extracurricular activities, staff meetings, and other critical tasks to reduce conflicts and enhance instructional time. In private secondary schools, where resources may be more constrained than in public institutions, efficient timetabling is essential for attaining academic excellence and addressing the diverse needs of students (Oude Vrielink et al., 2019). Timetabling involves the organization and scheduling of classes, breaks, and activities within a school day, and is crucial for the effective functioning of educational institutions (Tassopoulos & Beligiannis, 2012). The operational framework of the school is fundamental, influencing student learning, teacher effectiveness, and the overall school environment. Effective timetabling optimizes resource utilization,

enables seamless transitions between activities, and fosters an environment that supports teaching and learning. The importance of timetabling about school effectiveness is highlighted by its influence on various critical aspects of educational outcomes. Research indicates that effective and organized timetabling can increase student engagement, foster instructional coherence and enhance academic performance (Baleke, 2023). Additionally, it can enhance the development of a positive school culture, promoting a sense of belonging and community among students and staff (Cooner, 2019).

The effectiveness of timetabling practices in private secondary schools has been a subject of scholarly inquiry with researchers exploring its impact on various aspects of school functioning. Chiu (2022) found that well-designed timetables can enhance student engagement and reduce behavioral disruptions in the classroom, leading to improved academic performance and higher levels of student satisfaction. Similarly, research by Abdullahi (2023) demonstrated a positive correlation between flexible scheduling arrangements and teacher morale, highlighting the importance of accommodating staff preferences and workload balance in the timetabling process. Leadership plays a vital role in the effectiveness of an educational institution, from setting goals to achieving them. Research has consistently shown a link between school leadership and effectiveness (Blau & Presser, 2013; Huber & Muijs, 2010). As noted by Darby (2024), effective leadership is essential for achieving school goals and ensuring school effectiveness. Gading (2024) emphasizes the crucial role of principals in driving educational change and effectiveness, creating a culture of quality that permeates all aspects of the institution. Effective school management relies on careful planning to maintain orderliness and decorum among staff and students. A well-planned timetable is essential, as it indicates how a school allocates its resources, particularly teacher time and room space (Tan et al., 2021). This information enables school administrators to make informed decisions about the educational program and resource allocation, ultimately achieving the school's objectives (Blau & Presser, 2013). A school timetable is a vital tool that outlines the distribution of curriculum subjects across teaching periods, school days, weeks, terms, and academic sessions (Darby, 2024). As noted by Gading (2024), a school timetable is a legally required document that regulates teaching and learning activities. Under the supervision of a school administrator, a designated staff member creates a general timetable, from which class and subject timetables are extracted. Class timetables are typically displayed on the classroom wall beside the chalkboard.

Although the literature on timetabling practices and school effectiveness has grown significantly (Yenealem, 2024; Reinke, 2018), further research is needed to understand the specific factors that contribute to effective timetables and their impact on private secondary school effectiveness (Mayerle et al., 2022). This study aims to address this knowledge gap by investigating the relationship between timetabling practices and school effectiveness in private secondary schools in Kwara State, Nigeria.

Despite the recognized importance of timetabling in educational settings (Liddicoat et al., 2018), there exists a significant gap in the literature regarding its impact on the effectiveness of private secondary schools in Kwara State. While studies have extensively explored timetabling practices in public schools (Muller, 2020), there is limited empirical research specifically focused on the context of private education. Private secondary schools in Kwara state, characterized by their autonomy and diverse educational philosophies (Temitope, 2018), face unique challenges in managing their time effectively to meet the needs of their students and fulfil their organizational objectives. The scarcity of research on the relationship between timetabling practices and school effectiveness in private secondary education limits our understanding of how these schools optimize learning outcomes and operational efficiency (Mayerle et al., 2022; Reinke, 2018). The absence of empirical evidence hinders the development of evidence-based strategies for improving timetabling practices, potentially impacting the quality of education and competitiveness in the educational landscape (Yenealem, 2024; Singh & Agarwal, 2023). This study aims to address this knowledge gap by investigating the correlation between timetabling practices and effectiveness in private secondary schools in Kwara State. By exploring experiences, perspectives, and challenges associated with time-tabling decision-making, this research seeks to inform policy, practice, and future research efforts aimed at enhancing private secondary education effectiveness (Singh & Agarwal, 2023). The findings of this study will contribute to the existing body of knowledge on timetabling practices and school effectiveness, providing insights for school administrators, policymakers, and researchers (Yenealem, 2024). The study's outcomes will also inform the development of evidence-based strategies for optimizing timetabling practices in private secondary schools, ultimately enhancing the quality of education and operational efficiency (Reinke, 2018).

The purpose of this study is to examine timetabling practices as a correlate of private secondary

school effectiveness in Kwara State, Nigeria. Specifically, the study aims to investigate the current timetabling practices employed by private secondary schools in Kwara, assess the level of school effectiveness in these institutions, and determine the relationship between timetabling practices and the effectiveness of private schools. The research hypothesis states that there is no significant relationship between timetabling practices and private school effectiveness in Kwara.

## **Literature Review**

This study explores the role of timetabling practices in enhancing school effectiveness in private secondary schools. It highlights that effective timetabling practices have a positive impact on academic achievement, teacher satisfaction, and student attendance. A well-organized schedule allows teachers to better plan lessons and manage workload, leading to increased job satisfaction and reduced burnout. Timetabling practices also influence the overall school climate, which is characterized by a sense of community, respect and support among students, teachers, and staff (Mittermeier & Benade, 2024). A positive school climate can be achieved by promoting order and structure, leading to improved student behaviour and reduced disciplinary incidents. Conversely, poor timetabling practices can negatively affect school effectiveness, leading to disruptions in teaching and learning processes, decreased academic achievement, and increased student disengagement (Bergdahl et al., 2020; Farbman, 2015; Huang et al., 2020). The types of timetabling practices vary depending on the scheduling approach adopted by schools. Flexible schedules allow for adaptability in the school day, promoting personalized learning experiences and accommodating diverse learning styles (Mallari et al., 2023). Modified schedules involve adjustments to traditional schedules, such as longer or shorter class periods, to accommodate specific school needs (Odeniyi et al., 2015). Fixed-period schedules provide structure while block schedules facilitate in-depth learning experiences (Gray, 2023). Rotating schedules offer flexibility, and flexible schedules support personalized learning (Kallick & Zmuda, 2017). By understanding these different approaches, schools can select the most effective timetabling strategy to enhance teaching and learning experiences. By understanding these different approaches, schools can select the most effective timetabling strategy to enhance their teaching and learning experiences.

School effectiveness is the ability of a school to achieve its educational goals and provide a high-quality learning environment that promotes student success and well-being (Day et al., 2020). Assessing school effectiveness involves examining various indicators across different domains of school functioning, providing valuable insights into the effectiveness of teaching and learning processes. Academic achievement is a critical indicator of school effectiveness, as it indicates that students are mastering the curriculum and acquiring the necessary knowledge and skills for their future endeavours (Kimbark et al., 2017). Schools with consistently high academic outcomes are often characterized by strong leadership, effective teaching practices, and a focus on continuous improvement (Hitt & Tucker, 2016; Stronge & Xu, 2021). These schools tend to have well-developed systems for monitoring student progress and providing targeted interventions to support struggling students. Student engagement is another significant indicator of school effectiveness, as it involves students' participation in academic and extracurricular activities, motivation to learn, and sense of belonging at school (Moreira et al., 2018; Sengsouliya et al., 2020). Fostering student engagement requires creating a supportive and inclusive school environment where students feel valued and connected.

Teacher quality is another vital indicator of school effectiveness, as effective teachers possess strong content knowledge, pedagogical skills, and the ability to adapt their teaching to meet the diverse needs of students (Bardach & Klassen, 2020; Blömeke et al., 2016). Schools that invest in the continuous growth and development of their teaching staff are more likely to see improvements in student outcomes. School climate is another important indicator of school effectiveness, as it encompasses the quality and character of school life, including relationships among students, staff, and parents (Darling-Hammond & Cook-Harvey, 2018). A positive school climate is associated with better academic outcomes, reduced absenteeism, and lower rates of behavioural problems (Kutsyuruba et al., 2015). Parent and community involvement is also a key indicator of school effectiveness. Schools that actively engage parents and community members in the educational process tend to have higher levels of student achievement and satisfaction. Meaningful partnerships between schools, families and communities can enhance the educational experience for students. Resource allocation and management are critical indicators of school effectiveness, as they ensure the efficient use of financial, human and material resources to provide high-quality education and support services (Amos et al., 2021; Usman, 2016). Equitably distributed resources

are essential for addressing disparities in educational outcomes.

The relationship between timetabling practices and school effectiveness is influenced by various mediating factors that shape the context in which these practices operate. Understanding these factors is crucial for designing and implementing time-tabling strategies that contribute to improved educational outcomes. Resource allocation is a fundamental factor influencing the relationship between timetabling practices and school effectiveness (Cheng, 2022). Efficient allocation of resources, including staffing, facilities, and instructional materials is critical for supporting effective timetabling practices. Schools with limited resources may face challenges in implementing optimal time tabling strategies, leading to overcrowded classrooms, inadequate instructional support, and disparities in educational opportunities (Charles & Mkulu, 2020). Strategies for addressing resource constraints include prioritizing needs-based allocation, leveraging community partnerships, and adopting innovative scheduling models that maximize resource utilization. Leadership and management practices play a pivotal role in shaping the organizational culture and priorities within schools. Effective leadership can foster a supportive environment conducive to implementing and sustaining effective timetabling practices (Aarons et al., 2016; Shirey, 2017). Strong leadership can foster collaboration among staff, facilitate the allocation of resources, and promote continuous improvement in timetabling processes. Engaging with stakeholders, including parents, students, and community members, can ensure that timetabling practices are responsive to the needs and preferences of the school community.

The socio-economic context and community characteristics surrounding a school can significantly influence its effectiveness. Schools serving diverse student populations may need to adapt time-tabling practices to address the unique needs, preferences, and cultural backgrounds of their communities (Theoharis, 2024). Community partnerships and engagement initiatives can enhance the relevance and responsiveness of timetabling practices to local contexts. Collaborating with parents, caregivers, and community organizations can provide valuable insights and resources for improving school effectiveness. Technology integration is another key factor that can mediate the relationship between timetabling practices and school effectiveness. Technology-enabled scheduling tools and platforms enable schools to automate routine tasks, analyze data, and optimize resource allocation in real time (Palanivel, 2020).

However, successful technology integration requires adequate infrastructure, training, and support systems to ensure equitable access and effective utilization. Schools must also address concerns related to data privacy, security, and digital literacy to maximize the benefits of technology-enabled timetabling practices. Teacher collaboration and professional development are critical factors that influence the effectiveness of timetabling practices. Teachers who are directly involved in the delivery of instruction and the implementation of schedules can contribute to the development and refinement of timetabling practices (Kennedy, 2016). Investing in ongoing professional development for staff is more likely to see improvements in the quality and effectiveness of their timetabling practices. Policy and regulatory frameworks at the local, state, and national levels can also impact the relationship between timetabling practices and school effectiveness. Policies related to instructional hours, curriculum requirements, and class sizes can influence how schools develop and implement their timetables. Advocacy and collaboration with policymakers can help create more flexible and supportive regulatory environments that facilitate effective timetabling practices.

## **METHOD**

The research design adopted for the study is a descriptive research design of correlational type. This design is appropriate as posited by Maxwell et al. (2017) that correlational research design is an approach that seeks to establish the relationship between two or more complex variables based on predictions made. Therefore, this study would enable the researcher to elicit quantitative data to analyse the current problem by describing and evaluating the timetabling practices and private secondary school effectiveness in Kwara State, Nigeria.

The population for this study includes all 8,197 teachers in the 363 private senior secondary schools in the 16 Local Government Areas of Kwara State. There are 5,028 teachers and 193 schools in Kwara Central, 1,197 teachers and 47 schools in Kwara North, and 1972 teachers and 75 schools in Kwara South (Kwara State Ministry of Education and Human Capital Development, 2023). This population represents the basis for selecting a sample to investigate the relationship between timetabling practices and private secondary school effectiveness in Kwara State.

Consequently, using the Research Advisor (2006) sample determinant, a total of 260 respondents

was suggested for the population of this size. Hence, Multistage sampling techniques would be used to select the 260 teachers for the study. At stage one, a stratified proportional sampling technique would be used to select 159 teachers in Kwara Central, 38 teachers in Kwara North and 63 in Kwara South senatorial district. At stage two, a simple random sampling technique would be used to select the 276 subjects for the study.

To investigate the correlation between timetabling practices and private secondary school effectiveness in Kwara State, the study employed quantitative research instruments. The Principals Time Tabling Practices and School Effectiveness Questionnaire (PTTPSEQ) was used to assess the planning, allocation, implementation and evaluation of timetabling practices in various aspects of school operations.

The research instruments were validated by three researchers' experts in educational research and school administration at Al-Hikmah University, Ilorin. Their input ensured that the instruments comprehensively covered the relevant aspects of timetabling practices and their impact on private secondary school effectiveness in Kwara State.

The reliability of the research instruments will be evaluated using a test-retest approach and Cronbach's Alpha coefficient. This ensures consistent measurement of the constructs and maintains the precision of the data. The reliability methods include internal consistency, test-retest reliability and inter-rater reliability. These methods establish the instruments' ability to yield consistent and accurate results, thereby enhancing the trustworthiness and credibility of the study's findings on the correlation between timetabling practices and private secondary school effectiveness in Kwara State.

The validated research instruments were administered in randomly selected private secondary schools in Kwara State. Trained research assistants, comprising students and non-teaching staff were used to distribute and collect the questionnaires. The data collection process involved obtaining informed consent, distributing questionnaires, conducting interviews and focus groups, collecting academic records, observing timetabling practices, and managing data. To ensure consistency and integrity, quality control measures were implemented throughout the data collection process.

The data collected was entered and presented using a 5-point Likert scale. Following data collection, a thorough data cleaning process was conducted to identify and rectify incomplete or inaccurate responses, enhancing the data's quality. Subsequently, the data was coded and entered into the computer for analysis using the Likert scale. The data were analyzed using various statistical measures, including measures of central tendency (mean, mode and median) and distribution (percentages and frequencies). The hypothesis was tested using Pearson's product-moment correlation statistics at a 0.05 level of significance.

## RESULT AND DISCUSSION

**Research Question One:** What are the current principals' timetabling practices employed by private secondary schools in Kwara State?

Table 1 presents a descriptive analysis of principals' timetabling practices employed by private secondary schools in Kwara State. The table shows the mean scores of 3.53, 3.50, 3.22 and 2.78 as the principal timetabling practices that are predominantly used in private secondary schools in Kwara state. All other timetabling practices are less than a 2.50 rating scale. This indicates that principals generally adopt time tabling planning, allocation, implementation and evaluation in private secondary schools in Kwara state.

**Table 1.** Mean and standard deviation showing principals' current timetabling practices employed by private secondary schools in Kwara State

S/N	Time table practices	Mean	SD	Rank
1	Timetabling planning practice	3.53	0.68	1 <sup>st</sup>
2	Timetabling allocation practice	3.50	0.65	2 <sup>nd</sup>
3	Timetabling replacement practice	2.10	0.22	7 <sup>th</sup>
4	Timetabling evaluation practice	3.22	0.27	3 <sup>rd</sup>
5	Timetabling adjustment practice	2.16	0.39	6 <sup>th</sup>
6	Timetabling implementation practice	2.78	0.53	4 <sup>th</sup>
7	Timetabling cancellation practice	2.34	0.48	5 <sup>th</sup>

**Research Question Two:** What is the level of school effectiveness in private secondary schools in Kwara State?

**Table 2.** Mean and standard deviation on level of school effectiveness of timetabling practices in private secondary schools in Kwara State?

(N = 276)

S/N	ITEMS	Mean	SD	Remark
1	Our students consistently achieve high scores on standardized assessments	3.37	0.82	Highly Effective
2	The school's graduation rate is above the national average	3.23	0.71	Effective
3	A significant percentage of students are accepted into higher education institutions after graduation.	3.57	0.92	Highly Effective
4	The school regularly implements interventions for students at risk of academic failure.	2.12	0.19	Not Effective
5	Analysis of student performance data informs instructional practices effectively.	3.23	0.71	Highly Effective
	<b>Grand Mean</b>	<b>3.04</b>		
6	Students actively participate in classroom discussions and activities	3.68	0.82	Highly Effective
7	Teacher satisfaction and morale have increased as a result of well-maintained records.	3.56	0.70	Highly Effective
8	The students are involved in extracurricular activities offered by the school.	3.54	0.96	Highly Effective
9	Students feel a sense of belonging and community within the school environment.	3.30	0.83	Highly Effective
10	The school encourages student feedback on teaching practices and school policies.	3.03	0.71	Moderately Effective
	<b>Grand Mean</b>	<b>3.28</b>		
11	Our teachers are well-qualified and deliver the curriculum effectively	3.38	0.88	Highly Effective
12	Teachers engage in ongoing professional development to improve their instructional skills.	2.77	0.07	Moderately Effective
13	The relationship between teachers and students is positive and supportive.	3.32	0.84	Highly Effective
14	Teachers utilize a variety of teaching methods to cater to diverse student needs.	3.11	0.05	Highly Effective
15	Provide adequate instructional resources and materials for teachers.	2.99	0.44	Moderately Effective
	<b>Grand Mean</b>	<b>3.12</b>		
16	The school provides a safe and conducive environment for learning	3.01	0.06	Effective
17	Cleanliness and maintenance of school facilities are regularly monitored	3.10	0.08	Effective
18	Students have access to adequate recreational areas and equipment	2.31	0.56	Not Effective
19	The social climate of the school promotes respect and inclusion among students.	2.18	0.80	Not Effective
20	The school effectively addresses bullying and other social issues	2.68	0.12	Moderately Effective
	<b>Grand Mean</b>	<b>2.64</b>		
21	The curriculum is relevant and aligned with national education standards	3.66	0.07	Highly Effective
22	The school offers a variety of subjects that prepare students for future opportunities.	3.58	0.80	Highly Effective
23	There is regular review and updating of the curriculum to meet emerging needs.	2.74	1.21	Moderately Effective
24	The teaching materials used are current and reflective of best practices.	2.99	0.44	Moderately Effective
25	Interdisciplinary teaching approaches are encouraged within the curriculum.	2.68	0.12	Moderately Effective

	<b>Grand Mean</b>	<b>2.88</b>		
26	Students demonstrate creativity and critical thinking skills in their projects and assignments.	3.61	0.11	Highly Effective
27	The school promotes emotional intelligence and social skills development among students.	2.74	1.21	Moderately Effective
28	Students receive support in developing life skills, such as teamwork and communication.	3.40	0.80	Highly Effective
29	Students exhibit confidence in their abilities and self-esteem as learners.	3.24	0.51	Highly Effective
30	The school arranges activities that promote holistic development in students.	3.90	0.43	Highly Effective
	<b>Grand Mean</b>	<b>3.01</b>		
31	The school regularly seeks feedback from students regarding their learning experiences.	2.90	0.43	Moderately Effective
32	We have a formal process for collecting feedback from parents about school services.	3.23	0.83	Highly Effective
33	The staff actively uses feedback to make adjustments in teaching practices.	3.11	0.99	Highly Effective
34	The school implements changes based on stakeholder feedback to enhance effectiveness.	2.74	1.21	Moderately Effective
35	There is transparency in how feedback is reported and addressed in the school.	2.52	0.18	Moderately Effective
	<b>Grand Mean</b>	<b>2.99</b>		

Table 2 presents a descriptive analysis of the level of school effectiveness in public secondary schools in Kwara State, Nigeria. The average mean score of 3.31 suggests that these schools exhibit a moderately high level of effectiveness, meeting a reasonable standard in terms of their performance and the quality of education they provide. The highest score for academic achievement is 3.60, indicating a strong emphasis on students' achievement and performance in standardized examinations. Students' engagement, participation, and motivation are moderately high, indicating that students are generally engaged in teaching and learning activities. Highly motivated teachers have a low score for teacher quality and support, suggesting areas for improvement in teacher training, experience, and support systems. Curriculum relevance is above the overall average, suggesting that schools are generally aligning their curriculum with current needs and requirements. School security and safety are the lowest among the top six indicators, suggesting a need for improvement in this area. Leadership orientation and effective staff disposition are generally effective, and schools generally have access to modern resources that support their academic and extracurricular programs. School community relationships are high, indicating strong engagement, partnerships, and support from the community. Enrolment figures and tertiary institution enrolment are above the overall average, suggesting that schools are attracting students and producing successful graduates in higher education. Low truancy, drop-out rates, and class repeating are above the overall average, indicating that these schools generally manage to retain students and minimize truancy and repetition. The standard deviations (SD) for most indicators are relatively similar, ranging from 0.52 to 0.70, suggesting variation across schools in their effectiveness in specific areas. Further research should investigate factors contributing to variations in school effectiveness and recommend strategies for maximizing the performance of these schools.

### Hypotheses Testing

**H0:** There is no significant relationship between Principals' time-tabling practices and private school effectiveness in Kwara State.

**Table 3.** Pearson Correlation on the relationship between Principals' time-tabling practices and private school effectiveness in Kwara State.

Variables	N	Mean	SD	df	r.cal	p-value	Decision
Principals' Time Tabling Practices	276	2.84353	1.142	274	0.6339	0.091	Rejected
School Effectiveness		3.0882	.900				

Table 3 shows Pearson Product Moment Correlation results on the relationship between Principals' time-tabling practices and private school effectiveness in Kwara State. The results of the analysis revealed that the calculated r-value was 0.6339 under a degree of freedom of 274 with a p-value of 0.091. However, the calculated r-value (0.6339) showed that there is a positive relationship between Principals' time-tabling practices and private school effectiveness in Kwara State. Therefore, the hypothesis which says there is no significant relationship between the principals' time-tabling practices and private school effectiveness in Kwara State is rejected.

### **Discussion of findings**

This study was conducted on the principals' timetabling practices and school effectiveness in Ilorin metropolis secondary schools, Kwara State, Nigeria. The findings indicate that principals' predominant timetabling practices in private secondary schools in Kwara State include planning, allocation, implementation and evaluation with mean scores above 3.00. This suggests a structured approach to time management in these schools. In contrast, replacement, adjustment and cancellation received lower mean scores, indicating these practices are less emphasized. Previous research supports these findings, showing that effective timetabling is closely linked to improved academic performance and organizational efficiency (Larabi-Marie-Sainte et al., 2021; Oude Vrielink et al., 2019). Schools that prioritize planning and evaluation tend to experience better resource management and student outcomes (Huang et al., 2020; Özdemir, 2019). However, the low scores in replacement and adjustment practices highlight a gap in flexibility among principals, which can hinder responsiveness to unforeseen changes (Yurkofsky, 2022). This study contributes to the existing literature by emphasizing the importance of adaptive practices in timetabling, suggesting that principals may need training in dynamic time management strategies. The analysis of school effectiveness reveals a moderately high overall mean score of 3.31. Notably, academic outcomes and student engagement scored highly, indicating that students in these schools perform well academically and actively participate in school activities. The results align with previous studies that link high student engagement to better academic results (Schnitzler et al., 2021). However, the relatively lower scores in the school environment and curriculum quality suggest areas needing improvement. The findings regarding the school environment reflect concerns noted in earlier research by Davis and Elliott (2023), which highlighted that a safe and supportive environment is critical for enhancing student learning. The low scores in environmental factors and the curriculum's relevance indicate ongoing challenges in providing a holistic educational experience.

This study's focus on the nuanced aspects of school effectiveness adds depth to the existing literature by underscoring that while academic performance is crucial, non-academic factors like school climate and curriculum relevance also significantly impact overall effectiveness. The findings suggest that while certain practices are well established, there is a significant need for improvement in adaptability and the school environment. The findings of the research hypothesis revealed that there is a positive significant relationship between timetabling planning practices adopted by schools' principals and school effectiveness in senior secondary schools in Kwara State, Nigeria. That is timetabling planning practices adopted by school principals influenced school effectiveness. The finding of this study is in line with the statements of Scheerens (2016) who affirmed that secondary school system effectiveness depends on an active process where activities within the school are planned. The finding of this study is also in agreement with that of Selvaraj et al (2021) who conclude that the school system is effective when information generated within or received from outside the school is always put on record or documented. The finding of this study also corroborates with the statements of Amie-Ogan and Tagbo (2021) who opined that when school timetables are created and maintained appropriately, execution of management functions will be easy and this enhances school effectiveness. The outcomes of this study also corroborate with the statements of Tagbo (2024) who agreed that timetable planning and keeping is vital to the school system as it generates its information and experiences an influx of information and an outflow of the same to society which demands accountability. The results of this study show that timetabling planning practice is essential to principals' record-keeping practices in secondary schools in Kwara State, Nigeria.

### **CONCLUSIONS**

The timetabling practices employed by principals to enhance school effectiveness in secondary schools in Kwara State, Nigeria encompass: timetabling planning, timetabling allocation, timetabling implementation, and timetabling evaluation. This study concluded that the timetabling practices employed by secondary school principals significantly relate to school effectiveness in Secondary Schools in Kwara



State, Nigeria. The study concludes that principals implement timetabling practices to enhance the administration of secondary schools in Kwara State, Nigeria. This study's findings and conclusions lead to the following recommendations: secondary school principals should consistently adopt and refine practices related to timetabling planning, allocation, implementation, and evaluation by incorporating feedback from teachers and students. To improve school performance, secondary schools in Kwara State must prioritize ongoing professional development for teachers, ensure sufficient teaching resources, and uphold a safe, inclusive, and conducive learning environment. Principals must prioritize structured timetabling practices that align with the objectives of the school. Training programs focused on efficient time management and scheduling are essential for school administrators to facilitate effective implementation. Schools' ought to implement monitoring frameworks to oversee the execution of timetables and promptly resolve issues such as missed classes or scheduling conflicts.

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