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Research Article

An Examination of the Relationship among Instructional Leadership Skills, Teachers' Self-Efficacy, and School Effectiveness in Secondary Schools in Zamfara State, Nigeria

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Abstract. This study examined the relationship among instructional leadership skills, teachers' self-efficacy, and school effectiveness in secondary schools in Zamfara State, Nigeria. The main objective was to determine the extent of instructional leadership demonstrated by principals, assess teachers' self-efficacy, and evaluate school effectiveness. The study adopted a descriptive survey design, with 370 respondents selected through stratified random sampling from public secondary schools. Data were collected using structured questionnaires and analyzed using descriptive statistics and Pearson Product Moment Correlation (PPMC). Findings revealed that principals' instructional leadership skills were generally high, while teachers' self-efficacy was moderate. School effectiveness in the sampled

schools was found to be high, indicating that leadership practices and teacher engagement positively influence school outcomes. The correlation analyses demonstrated very strong positive relationships between instructional leadership and school effectiveness ($r = 0.941$, $p < 0.01$), as well as between teachers' self-efficacy and school effectiveness ($r = 0.966$, $p < 0.01$), confirming that both variables are significant predictors of school performance. The study concludes that effective instructional leadership not only directly enhances school outcomes but also indirectly improves school effectiveness by fostering teachers' confidence and professional competence. Based on these findings, it is recommended that principals receive continuous leadership training, teachers be supported through mentorship and professional development programs, and schools implement collaborative and evaluative mechanisms to sustain high instructional quality and school performance. The study contributes to understanding how leadership practices and teacher self-efficacy jointly influence educational effectiveness in the Nigerian secondary school context.

Keywords: Instructional leadership, Teachers' self-efficacy, School effectiveness, Secondary schools, Zamfara State

INTRODUCTION

The quality of schooling and students' academic outcomes has been shown to depend heavily on effective leadership and teacher performance, particularly in secondary schools where instructional demands are complex. Instructional leadership defined as principals' purposeful actions to guide curriculum, teaching practices, and teacher development has emerged as a pivotal factor influencing both teacher attitudes and school outcomes (Hallinger & Murphy, 1985; Bellibas et al., 2025). Research shows that principals who enact strong instructional leadership practices create supportive environments that enhance teachers' confidence in their professional roles and instructional decisions (Zhang et al., 2025). Teacher self-efficacy, grounded in Bandura's social cognitive theory, refers to a teacher's belief in their capability to organize and execute the actions required to achieve desired teaching and learning goals. It consistently predicts instructional effectiveness, classroom management, and student engagement (Tschannen-Moran et al., 1998; Zhang et al., 2025). Empirical studies have identified a significant positive relationship between instructional leadership and teachers' self-efficacy, suggesting that leaders who provide clear instructional direction and developmental support can strengthen teachers' beliefs in their professional competence (Kılınç et al., 2023; Gümüş & Bellibaş, 2025).

Moreover, both instructional leadership and teacher self-efficacy have been found to contribute to broader indicators of school effectiveness, including improved teacher performance and student outcomes across educational contexts (see meta-analytic findings; Ozdogru et al., 2025). Despite these advances, the mechanisms linking leadership practices, teacher efficacy beliefs, and overall school effectiveness remain underexplored in many secondary school settings, particularly in non-Western contexts. Therefore, this study investigates the relationships among these variables to deepen understanding of how instructional leadership skills may enhance teachers' self-efficacy and, in turn, promote school effectiveness. Empirical evidence consistently demonstrates a strong association between principals' instructional

leadership practices and teachers' self-efficacy. For instance, Ozturk, Ozdemir, and Sahin (2020) reported a statistically significant positive relationship between instructional leadership behaviours of principals and teachers' self-efficacy across both primary and secondary school settings. Their findings indicate that effective leadership practices enhance teachers' motivation and task-oriented behaviours, thereby promoting instructional improvement through activities such as instructional goal setting and teacher self-evaluation.

In a similar vein, a large-scale cross-sectional study conducted in China revealed robust positive correlations between principals' instructional leadership and teachers' self-efficacy in key areas including classroom management and student engagement, underscoring the importance of leadership skills in strengthening teachers' confidence in their professional capabilities (Zhang et al., 2025). Bada, Tengku Faekah Tengku Ariffin, and Hasniza Binti Nordin (2024) found that instructional leadership practices of secondary school principals in the North-Central geopolitical zone were significantly and positively related to teachers' effectiveness. The study emphasized that leadership dimensions such as articulating a clear school mission, managing instructional programmes, and fostering a positive learning climate were strong predictors of improved teacher performance. Supporting this finding, a study conducted among secondary school teachers in Southeast Nigeria reported a very high level of association between principals' instructional supervision and teacher effectiveness, further confirming the positive influence of leadership practices on teaching quality in secondary schools (Ezumah et al., 2025).

Further research has examined instructional leadership as a key determinant of teachers' professional development, which is closely linked to self-efficacy. In this regard, He, Guo, and Abazie (2024) established that principals' instructional leadership significantly predicted secondary school teachers' professional development in Nigeria, highlighting its role in enhancing instructional capacity and teaching confidence. Similarly, evidence from Ethiopia's Wolaita Zone revealed that principals' instructional leadership and teachers' self-efficacy were significantly correlated with both teacher confidence and student academic performance, suggesting that strong leadership contributes not only to instructional quality but also to overall school effectiveness, even in resource-constrained environments (Gechere et al., 2025). Studies on school effectiveness further emphasize the broader impact of leadership practices beyond teacher-level outcomes. Dahiru and Almustapha (2022) reported that secondary schools in Zamfara State exhibited a generally high level of school effectiveness, indicating that leadership routines and teacher engagement play a vital role in achieving positive effectiveness indicators within the local context. Likewise, Umar, Kenayathulla, and Hoque (2021) found that principals' leadership practices significantly explained variations in school effectiveness outcomes in Nigerian secondary schools, particularly in areas related to instructional quality and organizational performance.

However, a correlational study conducted in Kwara State revealed significant positive relationships between principals' instructional responsibilities and secondary school effectiveness, suggesting that instructional leadership fosters a supportive learning environment, enhances teacher professional growth, and ultimately

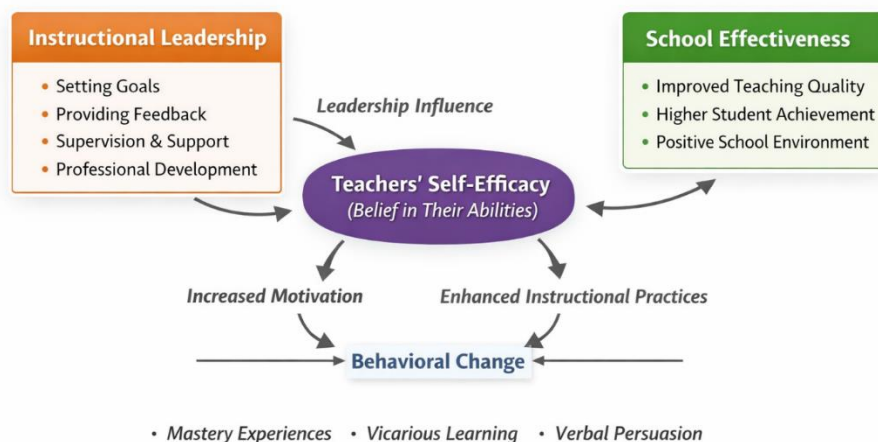
improves school effectiveness (Olaifa & Awodiji, 2023). Moreover, systematic reviews and meta-analytic studies confirm that leadership behaviours influence both teacher self-efficacy and student achievement, either directly or indirectly through teachers' beliefs, thereby highlighting the interconnected and mediating roles of leadership and self-efficacy across diverse educational systems (Klassen & Tze, 2023).

Theoretical Framework

This study is anchored on Bandura's Social Cognitive Theory (SCT), particularly the concept of self-efficacy, which emphasizes the role of individual beliefs in influencing behaviour and performance (Bandura, 1997). Social Cognitive Theory posits that human behaviour is shaped by the dynamic interaction of personal factors, environmental influences, and behaviour itself. In the context of education, teachers' self-efficacy defined as their belief in their ability to organize and execute the actions required to achieve specific teaching goals is a critical determinant of instructional practices, classroom management, and student engagement (Tschannen-Moran & Hoy, 2001). Principals' instructional leadership can be seen as a key environmental factor in this framework, as leadership behaviours such as setting clear instructional goals, providing guidance and feedback, supervising teaching, and facilitating professional development create supportive conditions that enhance teachers' self-efficacy. According to Bandura (1997), self-efficacy develops through mastery experiences, vicarious learning, verbal persuasion, and emotional arousal. Principals' actions directly provide these experiences: for example, mentoring teachers (vicarious learning), providing constructive feedback (verbal persuasion), and fostering a positive learning climate (emotional support) collectively strengthen teachers' confidence in their instructional capabilities.

Furthermore, Social Cognitive Theory implies that increased teacher self-efficacy influences behaviour, which in the educational context translates into improved instructional quality, greater teacher commitment, and higher levels of school effectiveness. By adopting Bandura's theoretical perspective, this study conceptualizes the relationship between principals' instructional leadership, teachers' self-efficacy, and school effectiveness as an interactive process in which effective leadership practices enhance teachers' beliefs in their professional abilities, which in turn positively impacts teaching quality and school outcomes. Thus, Social Cognitive Theory provides a robust framework for examining how leadership behaviours and teacher beliefs jointly contribute to the effectiveness of secondary schools in Zamfara State.

Bandura's Social Cognitive Theory



The diagram shows that principals' instructional leadership (goal setting, feedback, supervision, professional development) strengthens teachers' self-efficacy, which in turn improves school effectiveness (teaching quality, student achievement, and learning environment). Feedback loops indicate that better teacher performance and school outcomes reinforce leadership practices, illustrating the interactive relationship between leadership, teacher beliefs, and school effectiveness based on Bandura's Social Cognitive Theory.

Statement of the Problem

Despite the critical role of secondary education in national development, secondary schools in Zamfara State continue to face challenges related to instructional quality, teacher motivation, and overall school effectiveness. Previous studies have established that principals' instructional leadership positively influences teachers' self-efficacy and school outcomes (Ozturk, Ozdemir, & Sahin, 2020; Zhang, Siaw, & Jiang, 2025; Bada, Tengku Faekah Tengku Ariffin, & Nordin, 2024). Similarly, research in Nigeria and other contexts has demonstrated that teacher self-efficacy significantly impacts classroom management, instructional delivery, and student engagement (He, Guo, & Abazie, 2024; Gechere, Oumer, & Ouke, 2025). Studies on school effectiveness also indicate that effective leadership and teacher engagement are critical determinants of positive educational outcomes (Dahiru & Almustapha, 2022; Umar, Kenayathulla, & Hoque, 2021). However, most of these studies have examined instructional leadership, teacher self-efficacy, and school effectiveness independently, with limited empirical evidence on how these variables interact within the context of secondary schools in Zamfara State. There is still a knowledge gap regarding the extent to which principals' instructional leadership skills influence teachers' self-efficacy and, consequently, overall school effectiveness in this specific setting. Addressing this gap is essential for generating context-specific insights that can inform policy and practice to enhance teaching quality and student learning outcomes in the state.

Research Objectives

The main objective of this research is to examine the relationship among instructional leadership skills, teachers' self-efficacy in secondary schools in Zamfara State. The specific objectives are as follows:

1. To examine the extent of instructional leadership skills demonstrated by secondary school principals in Zamfara State.
2. To assess the level of teachers' self-efficacy in secondary schools in Zamfara State.
3. To determine the level of school effectiveness in secondary schools in Zamfara State.

Research Questions

The following research questions guided the study:

1. To what extent do secondary school principals in Zamfara State demonstrate instructional leadership skills?
2. What is the level of teachers' self-efficacy in secondary schools in Zamfara State?
3. What is the level of school effectiveness in secondary schools in Zamfara State?

Research Hypotheses

The following null hypotheses were formulated guided the study at 0.05 level of significant:

1. H_{01} : There is no relationship among instructional leadership skills, teacher's self-efficacy and school effectiveness.
2. H_{02} : There is no significant relationship between instructional leadership skills and school effectiveness in secondary schools in Zamfara State.

RESEARCH METHODOLOGY

This study employed a descriptive survey research design to investigate the relationship among instructional leadership skills, teachers' self-efficacy, and school effectiveness in secondary schools in Zamfara State, Nigeria. The population of the study comprised all principals and teachers in public secondary schools across the state, providing a diverse and representative sample for examining leadership and teaching practices. A total of 370 respondents were selected using a stratified random sampling technique, ensuring proportional representation from different schools, local government areas, and teaching levels. Data were collected through structured questionnaires specifically designed to measure the extent of principals' instructional leadership, the level of teachers' self-efficacy, and indicators of school effectiveness, using a 4-point Likert scale ranging from "strongly disagree" to "strongly agree." The instruments were validated through expert review and a pilot study to ensure reliability and clarity. Quantitative data were analyzed using descriptive statistics, including mean, standard deviation, minimum, maximum, and range, to determine the levels of instructional leadership skills, teachers' self-efficacy, and school effectiveness. In addition, Pearson Product Moment Correlation (PPMC) was employed to test the hypothesized relationships among the variables at a 0.05 level of significance. This approach enabled the study to empirically assess the extent to which principals' instructional leadership influences teachers' confidence and, in

turn, enhances overall school effectiveness. By integrating rigorous sampling, validated measurement instruments, and appropriate statistical analyses, the methodology ensures that the findings are both reliable and generalizable within the context of secondary education in Zamfara State.

Results

Table 1: Result of Descriptive Statistics of Level of Instructional Leadership Skills in Zamfara State

Variables	N	Mean	Std. Dev.	Minimum	Maximum	Range	Decision
Instructional Leadership Skills	370	3.78	0.84	1.00	4.00	3.00	High

Source: Research computation from field survey, (2026).

The descriptive statistics in Table 1 show that the level of instructional leadership skills among secondary school principals in Zamfara State is high, with a mean score of 3.78 on a 4-point scale. The standard deviation of 0.84 indicates moderate variability among principals' responses. The scores range from a minimum of 1.00 to a maximum of 4.00, giving a total range of 3.00, which suggests that while some principals scored lower, most demonstrated strong instructional leadership skills. Overall, this finding indicates that principals in the state generally exhibit effective leadership behaviours that are likely to support teacher performance and school outcomes.

Table 2: Result of Descriptive Statistics of Level of level of teachers' self-efficacy in secondary schools in Zamfara State

Variables	N	Mean	Std. Dev.	Minimum	Maximum	Range	Decision
Teachers' Self-Efficacy	370	3.64	0.86	1.00	4.00	3.00	Moderate

Source: Research computation from field survey, (2026).

The descriptive statistics in Table 2 indicate that the level of teachers' self-efficacy in secondary schools in Zamfara State is moderate, with a mean score of 3.64 on a 4-point scale. The standard deviation of 0.86 suggests some variability in teachers' confidence levels across the schools. Scores ranged from a minimum of 1.00 to a maximum of 4.00, giving a total range of 3.00, which shows that while some teachers reported low self-efficacy, the majority expressed moderate confidence in their teaching abilities. This suggests that although teachers generally feel capable in their roles, there is still room for strengthening their professional confidence and instructional competence.

Table 3: Result of Descriptive Statistics of Level of school effectiveness in Secondary Schools in Gusau Local Government Area, Zamfara State

Variables	N	Mean	Std. Dev.	Minimum	Maximum	Range	Decision
Instructional Leadership Skills	370	3.78	0.84	1.00	4.00	3.00	High

Source: Research computation from field survey, (2026).

The descriptive statistics in Table 3 show that the level of school effectiveness in secondary schools in Gusau Local Government Area, Zamfara State, is high, with a mean score of 3.78 on a 4-point scale. The standard deviation of 0.84 indicates moderate variation among schools. Scores ranged from a minimum of 1.00 to a maximum of 4.00, resulting in a total range of 3.00, which suggests that while some schools scored lower, most schools demonstrate strong effectiveness. This indicates that secondary schools in the area generally perform well in terms of teaching quality, student outcomes, and organizational functioning.

Hypotheses Testing

Table 4: Summary of Pearson Product Moment Correlation (PPMC) Statistics Analysis on the Relationship between instructional leadership skills and school effectiveness in secondary schools in Zamfara State.

Variables	N	M	SD	r	Sig. (2 tailed)	Remark
Teachers' Self-Efficacy	370	3.64	0.86	.966**	.000	Significant
School Effectiveness	370	3.62	0.87	.966**	.000	Significant

Source: Research computation from field survey, (2026).

Table 4 presents the Pearson Product Moment Correlation (PPMC) results examining the relationship between teachers' self-efficacy and school effectiveness in secondary schools in Zamfara State. The correlation coefficient ($r = 0.966$, $p < 0.01$) indicates a very strong and positive relationship between teachers' self-efficacy and school effectiveness. This means that higher levels of teachers' self-efficacy are closely associated with higher levels of school effectiveness. The significance value ($p = 0.000$) confirms that this relationship is statistically significant, suggesting that teachers' confidence in their instructional abilities plays a critical role in determining the effectiveness of secondary schools in the state.

Table 5: Summary of Pearson Product Moment Correlation (PPMC) Statistics Analysis on the Relationship between instructional leadership skills and school effectiveness in secondary schools in Zamfara State.

Variables	N	M	SD	r	Sig. (2 tailed)	Remark
Instructional Leadership Skills	370	3.78	0.84	.941**	.000	Significant
School Effectiveness	370	3.62	0.87	.941**	.000	Significant

Source: Research computation from field survey, (2026).

Table 5 shows the Pearson Product Moment Correlation (PPMC) analysis examining the relationship between instructional leadership skills of principals and school effectiveness in secondary schools in Zamfara State. The correlation coefficient ($r = 0.941$, $p < 0.01$) indicates a very strong and positive relationship, suggesting that higher levels of principals' instructional leadership are strongly associated with higher levels of school effectiveness. The significance value ($p = 0.000$) confirms that this relationship is statistically significant. This implies that when principals effectively set goals, provide supervision, give feedback, and support professional development, schools are more likely to achieve better outcomes in terms of teaching quality, student performance, and overall organizational functioning. In essence, strong instructional leadership by principals plays a critical role in enhancing the effectiveness of secondary schools in the state.

Discussion of the Findings

The analysis of the descriptive statistics and correlation results provides important insights into the interplay between instructional leadership skills, teachers' self-efficacy, and school effectiveness in secondary schools in Zamfara State.

The findings from Table 1 indicate that the level of instructional leadership skills among secondary school principals in the state is high ($M = 3.78$, $SD = 0.84$). This suggests that principals generally demonstrate strong leadership behaviours, including setting instructional goals, supervising classroom activities, providing feedback, and facilitating professional development. These findings align with Ozturk, Ozdemir, and Sahin (2020), who reported that effective principals exhibit behaviours that positively influence teacher motivation and task-focused performance. Similarly, Zhang, Siaw, and Jiang (2025) emphasized that principals' instructional leadership strengthens teachers' confidence and their capacity to deliver quality instruction. This high level of leadership skills in Zamfara State schools provides a conducive environment for enhancing both teacher performance and school outcomes.

Table 2 shows that the level of teachers' self-efficacy is moderate ($M = 3.64$, $SD = 0.86$), indicating that while teachers generally feel competent in their roles, there is variation in their confidence levels. This finding is consistent with previous research in Nigeria, where Bada, Tengku Faekah Tengku Ariffin, and Nordin (2024) reported that teacher self-efficacy is influenced by the degree of support and guidance received from school leaders. Moderate self-efficacy suggests that some teachers may still require additional professional support to fully realize their instructional potential, highlighting the importance of continuous professional development and supportive supervision.

The results from Table 3 indicate that school effectiveness in Gusau Local Government Area is high ($M = 3.78$, $SD = 0.84$). This shows that secondary schools in the area generally perform well in terms of teaching quality, student outcomes, and organizational functioning. This finding echoes Dahiru and Almustapha (2022), who found that school effectiveness in Zamfara State is significantly influenced by leadership practices and teacher engagement. High effectiveness implies that

leadership strategies and teacher performance are generally aligned to produce positive educational outcomes.

The correlation analyses provide further insights into the relationships among the study variables. Table 4 reveals a very strong positive correlation between teachers' self-efficacy and school effectiveness ($r = 0.966$, $p < 0.01$). This suggests that higher levels of teachers' confidence in their professional abilities are closely associated with better school performance. This result is supported by Klassen and Tze (2023), who found that teachers' self-efficacy significantly predicts instructional quality, classroom management, and student achievement. In practical terms, schools where teachers feel capable are more likely to deliver effective instruction and foster positive learning environments.

Table 5 shows a very strong positive correlation between instructional leadership skills and school effectiveness ($r = 0.941$, $p < 0.01$), indicating that principals' leadership behaviours significantly impact school outcomes. This is in line with the findings of He, Guo, and Abazie (2024) and Gechere, Oumer, and Ouke (2025), who emphasized that principals' instructional leadership directly contributes to teacher development, classroom effectiveness, and overall school performance. Principals who set clear goals, supervise instruction, provide feedback, and support professional growth create conditions that enhance both teacher effectiveness and school performance.

Overall, the findings suggest that instructional leadership and teachers' self-efficacy are critical determinants of school effectiveness. Principals' leadership not only directly influences school outcomes but also indirectly affects school effectiveness through its impact on teachers' self-efficacy. This is consistent with Bandura's Social Cognitive Theory (1997), which posits that environmental factors, such as leadership practices, interact with individual beliefs to influence behaviour and performance. In the context of Zamfara State, effective instructional leadership fosters teacher confidence, which in turn promotes higher levels of school effectiveness.

CONCLUSION

The findings of this study indicate that instructional leadership skills of principals and teachers' self-efficacy are critical determinants of school effectiveness in secondary schools in Zamfara State. Principals in the state generally demonstrate high levels of instructional leadership, creating an enabling environment for teaching and learning. Teachers exhibit moderate self-efficacy, suggesting that while they are reasonably confident in their professional abilities, there is room for further support. The analyses revealed very strong positive correlations between instructional leadership, teachers' self-efficacy, and school effectiveness, highlighting that effective leadership practices not only directly influence school outcomes but also enhance teachers' confidence, which in turn contributes to improved instructional quality and organizational performance. Overall, the study underscores the importance of strong leadership and empowered teachers in achieving high-performing secondary schools.

Recommendations

1. Organize regular leadership training programs to enhance principals' skills in goal-setting, instructional supervision, and professional development facilitation.
2. Implement mentorship programs and workshops that provide teachers with mastery experiences, constructive feedback, and opportunities for professional growth to boost their confidence and instructional effectiveness.
3. Schools and educational authorities should ensure that teachers have ongoing access to training, seminars, and peer-learning opportunities to improve classroom management and student engagement.
4. Encourage principals to create a positive learning climate where teachers and staff collaborate, share best practices, and engage in decision-making to strengthen school effectiveness.
5. Establish systematic evaluation mechanisms that assess both leadership practices and teaching performance, using the findings to inform policy and intervention strategies aimed at improving student outcomes.

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