

Instructional Leadership Practices of Heads of Department and Lecturers' Effectiveness in Ghanaian Universities: Moderating role of Gender

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Abstract: *Building conducive university learning environment requires effective instructional leadership practices that ensure attainment of university set targets. However, provision of instructional leadership has been an issue to some heads of department in Ghanaian universities. This study examined how heads of department instructional leadership practices impact on lecturers' effectiveness through moderating role of gender. The study employed cross sectional survey design with 327 lecturers from one private and two public universities selected through proportionate sampling technique. Data were gathered using structured questionnaire. SMART Partial Least Squares Structural Equation Modelling (PLS -SEM) version 3.3.1 was used to test the two hypotheses postulated. The findings established significant and positive impact of instructional leadership practices on lecturers' effectiveness. The relationship between instructional leadership practices and lecturers' effectiveness was significantly and partially moderated by gender. It was suggested that Universities Management should institutionalize instructional leadership roles for HoDs by clearly specifying teaching-related responsibilities in regulations and job descriptions. The findings again highlighted the need for University Management to organise training and development programmes that should prepare HoDs to apply instructional leadership in ways that effectively support lecturers across gender differences.*

Keywords: Instructional leadership practices, lecturers, effectiveness, Heads of Department, Gender

INTRODUCTION

The relevance of instructional leadership practices in university education has increased tremendously globally as universities seek to improve lecturing quality and student outcomes. In Ghana, rising manpower needs require universities to train graduates with relevant skills and competencies to address national development challenges. University education is therefore

widely recognised as key contributor to achieving Sustainable Development Goal (SDG) 4 on quality education and SDG 8 on economic growth. These demands increase the need for effective instructional leadership practices that strengthen lecturers teaching effectiveness. Teaching effectiveness significantly influences students' academic achievement and plays a crucial role in achieving university and national development goals ((Suleiman et al., 2024; Mulaudzi, 2023). Lecturers teaching effectiveness is closely linked to their professional competences particularly subject mastery and ability to transfer knowledge effectively to students. However, ability to fulfil these responsibilities is influenced by the support lecturers receive from Heads of Department (HoDs) through instructional leadership.

Lecturer effectiveness is explained as the ability to use a range of strategies that lead to improved student learning and is essential for good educational outcomes. However, lecturer effectiveness may be constrained by insufficient knowledge, limited resources and broader systemic challenges (Feyisa & Edosa, 2023). For this reason, lecturers teaching requires on going guidance and instructional support from academic leaders. Heads of Department can provide learning resources, model high teaching standards, and reinforce the idea that teaching and learning are central to university work (Day et al., 2016; Kipasika, 2024).

In contemporary settings, the expansion of tertiary education has intensified the demand for instructional leadership. Instructional leadership generally involves communicating high expectations to lecturers and creating a supportive work environment that enable improved teaching and learning (Ng, 2019). It also requires ongoing attention to the quality of lecturing and is closely associated with effective university management. When instructional leadership is effective, it enhances teaching quality and students' learning outcomes (Antonioni & Lu, 2018). Consistent with this, the instructional leadership practices used in this study included planning and delivery lectures, providing direct support, evaluating lecturers' performance, and supporting staff development programmes. These practices are considered important for shaping instructional environment and promoting quality lecturing in the university settings (Asante, 2020). Furthermore, HoDs instructional leadership practices may strengthen lecturers' collaborative efforts to improve lecturing and overall university performance (Goddard et al., 2015). Research has shown that instructional leadership practices directly influence lecturing quality and students' achievement (Asante, 2020) and they improve educational outcomes through effective teaching and learning process (Olatunji, et al., 2016). Instructional leadership tailored toward lecturers' professional needs and instructional delivery may strengthen motivation and support lecturers' retention (Kilag & Sasan, 2023; Tahir & Fatima, 2023).

In the University system, leadership responsibilities are shared across roles such as Vice Chancellors, Pro-Vice Chancellors, Deans, and HoDs. These leaders help create environment that supports lecturers' development and students' success by setting high and realistic expectations guiding academic direction (Maponya, 2020; Ampofo, et al., 2019). Specifically, HoDs are mandated to manage, lead, and develop departments to achieve excellence in departmental activities. They are also expected to demonstrate vision, exercise leadership and empower lecturers

to achieve the agreed-upon departmental strategy (Abugre, 2018). Since lecturers aim to provide quality teaching to produce quality graduates, they depend on instructional guidance from HoDs to improve lecturing effectiveness.

However, lecturer effectiveness in Ghanaian universities is still challenged by several factors. Lecturers may struggle to improve lecturing due to unclear guidance and limited access to professional development opportunities. Zhou and Wang (2025) suggest that limited professional support can weaken lecturers' teaching effectiveness. Consequently, the effective implementation of instructional leadership practices by HoDs remain a concern in some institutions (Asante, 2020). Although HoDs may be held accountable for improvement in lecturers' instructional delivery, supporting lecturers to provide effective lecturing remains an issue. These issues have increased the need to know how HoDs instructional leadership practices impact on lecturers' effectiveness and how the relationship between these two variables is moderated by gender.

Notwithstanding several efforts to address these issues, distinguished gaps exist in the literature. In Ghana, most prevailing studies (Creary, 2025; Abonyi et al., 2024; Awodiji, 2024; Kusumaningrum et al., 2025; Abbas & Shabbir, 2025; Çevik et al., 2023; Berhanu, 2025; Bada et al., 2024; Joan et al., 2025; Akram et al., 2024; Supriadi et al., 2025; Shaoan, 2026; Butt, 2025; Mukhtar et al., 2026; Mokhtar & Abd Razak, 2024; Gechere et al., 2025; Lai et al., 2025; Maryati et al., 2025; Aboudahr et al., 2023) mainly focused on basic schools, senior high schools and colleges of education. However, the area remains underexplored in the context of university education. Examining the underexplored university context is essential to ensure that evidence-based strategies are aligned with the realities of tertiary teaching, and to strengthen teaching and learning quality.

Additionally, studies such as (Awodiji, 2024; Çevik et al., 2023) accounted for gender, but they did not use gender as a moderating variable. In contrast, other studies (Abonyi et al., 2024; Burton, 2021) treated gender as a moderator; however, they did not investigate gender moderation in the context of university education as this study seeks to. This distinction is necessary in the literature because gender differences may shape how instructional leadership practices influence lecturers' effectiveness in the universities.

The present study seeks to fill the existing gaps by examining the impact of HoDs' instructional leadership practices on lecturers' effectiveness in Ghanaian universities and evaluate how gender moderates this relationship. By exploring this relatively underexamined area in university education, this study makes a clear and distinctive contribution to both research and practice. First, the study provides focused empirical evidence in the universities by linking HoDs instructional leadership practices to two concrete dimensions of lecturers' effectiveness: instructional delivery and student engagement outcomes. By adapting conventional measures of effectiveness to education-specific indicators, the study fills an important empirical gap, as prior research has largely emphasized general in basic schools, senior high schools and colleges of education contexts, with limited attention to departmental leadership dynamics in the universities. Second,

grounded explicitly in Contingency Theory (CT), the study clarifies the conditions under which instructional leadership practices translate into lecturers' effectiveness rather than treating leadership practices as universally effective, the study conceptualizes them as context-dependent variables whose impact varies based on situational factors particularly gender. By operationalizing HoDs' instructional leadership practices and examining the moderating role of gender, the study extends contingency theory into the university education context and explains why similar leadership approaches may produce different outcomes across male and female lecturers.

Understanding how instructional leadership practices impact on effectiveness of lecturers through moderating role of gender is crucial for guiding strategies to minimize low-quality lecturing and improve performance and professional growth of lecturers. Therefore, the paper sought to assess the impact of instructional leadership practices on effectiveness of lecturers. The study assessed whether the impact would be fully moderated by gender. Based on these objectives, the researcher hypothesized that instructional leadership practices would positively impact on effectiveness of lecturers. It was further hypothesized that the link between instructional leadership practices and effectiveness of lecturers would be moderated by gender.

LITERATURE REVIEW

Contingency Theory

The study is anchored in contingency theory which holds the idea that the of leadership practice depends on a situation and the interaction of multiple factors. The theory states that the most important factor is how leaders react to diverse issues that may challenge the functionality of the institution. The contingency theory assumes that there is no one best leadership practice to deal with a situation that an institution may encounter, therefore, leaders should adapt different leadership approaches for specific needs and circumstances of their institutions (Robbins & Coulter, 2018).

From the contingency theory perspective, instructional leadership matters because it provides a structured and supportive instructional environment creating clearer direction, stronger academic accountability, and more consistent instructional support for lecturers (Gading, 2024; Valerio & Ching, 2024). When HoDs actively provide instructional leadership, lecturers are more likely to benefit from guidance and monitoring that improve how they teach, plan, and sustain instructional quality.

The theory helps achieve expected direct effect of examining HoDs' instructional leadership practices on lecturers' effectiveness in Ghanaian universities. The theory helps to evaluate whether the relationship between HoDs' instructional leadership practices and effectiveness differs by gender. If moderation is found, it would support the core CT claim that leadership effectiveness is conditional and that gender helps explain which instructional leadership becomes more (or less) effective in promoting lecturer effectiveness outcomes (Abonyi et al.,2024; Awodiji, 2024). Affiliated with these understandings, the conceptual framework (presented in Figure 1) is

accessible to examine the relationship among instructional leadership practices, lecturers' effectiveness and gender in CT principles.

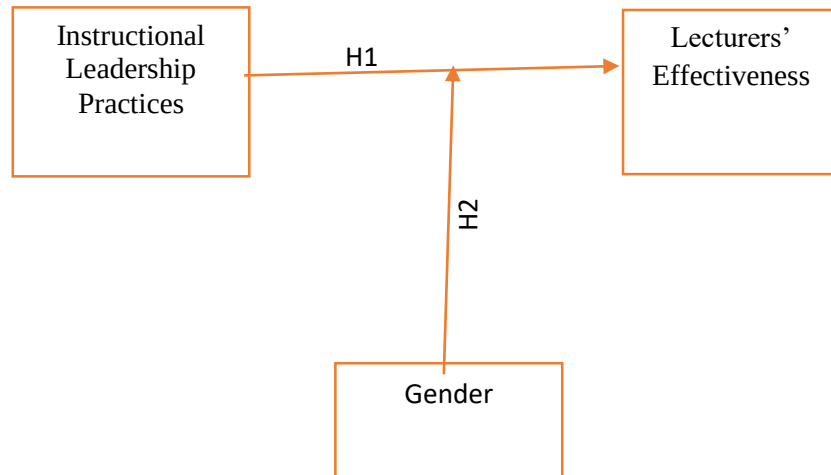


Figure 1. Conceptual Framework
Source: Author's Construct, 2026

Hypothesis Development

Instructional Leadership Practices and Effectiveness of Lecturers

Instructional leadership practices refer to actions taken by school leaders to guide, support, and improve teaching and learning processes (Gading, 2024; Kilag & Sasan, 2023). These practices typically include activities such as providing academic support and offering feedback that strengthens instructional quality (Okafor et al., 2024; Gading, 2024). Through these activities instructional leaders influence how lecturers teach, how lecturing is improved, and how effectively lecturers accomplish instructional responsibilities such as aligning teaching with curriculum expectations, improving instructional strategies, and strengthening assessment practices (Kilag & Sasan, 2023; Ayanda & Yaw, 2025).

As instructional leadership practices become more systematic and consistent, the effectiveness of lecturers is more likely to improve. Research suggests that instructional leadership practices enhance lecturer effectiveness by promoting instructional clarity and accountability, ensuring continuous professional support, and fostering improvement in pedagogical methods (Agyeman & Aphane, 2025; Oliva & Bautista, 2025; He et al., 2024). When lecturers receive guidance, supervision, and constructive feedback, they can refine their teaching practices, increase students learning focus, and improve lesson delivery and instructional planning (Yusuf et al., 2025; Concepcion & Labitad, 2024). This relationship supports the view that effective instructional leadership strengthens lecturers' instructional competencies, which ultimately enhances performance and teaching effectiveness as evidenced in prior empirical studies (Alanoglu, 2022; Gechere et al., 2025).

Moreover, instructional leadership contributes to lecturer effectiveness by encouraging a learning-oriented environment, strengthening staff development initiatives, and improving the use of teaching resources and academic planning processes (Tarso et al., 2026; Rifai et al., 2025). Empirically, a strong instructional supervision culture improves lecturers' motivation and commitment, reduces instructional inconsistencies, and supports better educational outcomes through improved teaching quality (Akpalu et al., 2025; Naguit, 2024; Go & Rey, 2024). Based on the above evidence and insight, the following hypothesis is formulated:

Hypothesis 1: HoDs Instructional leadership practices have positive and significant impact on lecturers' effectiveness.

Moderating Role of Gender

Gender refers to socially constructed roles, expectations, and perceptions that shape how individuals relate to one another within organizations (Gurung, 2025; Hundera & Mudde, 2024). In academic department of the university, HoD's instructional leadership practices are expected to improve lecturers' effectiveness through improved instructional planning, better delivery, and stronger alignment of teaching with curriculum expectations. However, the impact of leadership practices may vary depending on gender dynamics (Luo, 2024; Masibo et al.,2024;). This is because lecturers may interpret, respond to, and benefit from instructional supervision differently based on gender-related expectations, communication patterns, and workplace interaction experiences (Moon & Lim, 2025; Hikmah et al.2025).

The moderating role of gender is supported by leadership and organizational research indicating that leadership practices do not influence subordinate outcomes in a uniform way across all individuals; rather, subordinate responses can differ depending on gender (Byun et al.,2026; Larsson et al.,2023). Empirical studies have shown that gender can shape how instructional leadership practices translate into effectiveness, suggesting that the strength of the leadership practices and effectiveness relationship may change across gender groups (Chen et al.,2024; Ren & Mavros, 2024; Chen & Rong, 2023). Based on the theoretical reasoning and empirical insight, the following hypothesis is proposed:

Hypothesis 2: Gender moderates the relationship between HoDs Instructional leadership practices and lecturers' effectiveness.

METHODOLOGY

Research design and Approach

This study utilized cross sectional survey design to find out the opinions of lecturers on instructional leadership practices of heads of department with the aim of ascertaining the impact of instructional leadership practices on effectiveness of lecturers. The design has quantitative characteristics, involving the collection of structured and systematic data that were analyzed to address statistical issues (Cohen et al., 2018).

The population involved 1410 lecturers from public and private universities in Ghana. The universities were selected through stratified random sampling. The universities were grouped into two strata namely; public and private and simple random sampling technique was used to select two public and one private universities from each stratum. To enable selection of the required number of lecturer-respondents from the population of 1410, Yamane's (1967) sample size determination approach was employed. The formula is given as follows: $n = N / \sqrt{1 + N(e)}$ ^ 2, N = Sampling Frame (1410), n = sample or sample size, e = error margin (0.05). After substituting the figures, the study arrived at 311.6 rounded to 312 as the sample size for lecturers selected from the three universities: After determination of the ideal sample size, proportionate sampling technique was applied to select 194 (62%) and 71 (23%) respondents from the two public universities and 47 (15%) respondents from the private university. In total, 312 sample size was used for the study.

Data were gathered using structured questionnaire because it is less costly in terms of time and money (Nayak & Narayan, 2019). The study used one independent variable; Instructional Leadership Practices (ILP) of HoDs, one dependent variable; Lecturers Effectiveness (LE) and a moderating variable (gender). Measurement items for ILP of HoDs were 4-point scale adapted from California Charter Schools Association (2017). Some sample items include; There is support for lecture planning by my HoD; My HoD provides guidance on effective lecture delivery; My HoD facilitates staff development activities; There is evaluation of lecturers' teaching performance by my HoD. Measurement items for lecturer effectiveness were adapted from (Hisham et al., 2025). Sample items include: I provide appropriate interaction during lectures; I create classroom circumstances to promote my students' interest in learning; I have adequate knowledge on the content of my course; I always relate theories to practice; With the exception of bio-data, all the variables were measured on a five-point likert-type scale, ranging from 1- strongly disagree to 5- strongly agree. The highest value '5' represented high response.

Data Analysis

Prior to main data analysis, preliminary analysis was conducted out to assess the model fit and predictive strength of all the scale items using various goodness-of-fit indices. Item-level analysis with modification indices was carried out to identify potential problematic loadings (low factor loadings and high measurement error-covariance). The constructs' validity and reliability were also evaluated, focusing on convergent validity.

The main data were analysed using Smart Partial Least Square 3.82 (PLS-SEM) Bias-corrected bootstrapping method and 95% confidence interval was applied to test the direct impact of instructional leadership practices on lecturers' effectiveness and indirect effect of the moderating variable (gender). Path analysis models were conducted to assess the direct influence of instructional leadership practices on lecturers' effectiveness. In each model, lecturers' bio-data were included as exogenous covariates, and their influence on the moderating and outcome

variables were controlled. The findings from the analysis led to establishing the impact of instructional leadership practices on lecturers' effectiveness.

RESULTS

Measurement Model

The measurement model was assessed by evaluating indicator loadings, internal consistency reliability, and convergent validity. Results are shown in Table 1 and Figure 2 displays the results of the PLS-SEM algorithm.

Table 1 : Measurement model

Constructs	Items	Loadings	CA	CR (rho_a)	CR (rho_c)	AVE
LE	LEIOC1	0.751	0.686	0.694	0.808	0.514
	LEIOC3	0.746				
	LEKSU1	0.663				
	LESMK3	0.705				
LIP	ILPEP3	0.797	0.962	0.966	0.967	0.747
	ILPLP10	0.874				
	ILPLP7	0.881				
	ILPLP8	0.855				
	ILPLP9	0.894				
	ILPPS1	0.880				
	ILPPS2	0.780				
	ILPPS3	0.842				
	ILPSPE1	0.948				
	ILPSPE2	0.882				

Source: Research Data, 2026

Note: LE = Lecturers Effectiveness; ILP = Instructional Leadership Practices; CA = Cronbach Alpha; CR = Composite Reliability; AVE = Average Variance Extracted.

The outer loadings for the items exceeded minimum threshold of 0.60, indicating acceptable item reliability. All items which did not load well were deleted. Lecturers Effectiveness (LE) exhibited loadings ranging from 0.663 to 0.751, with a Cronbach Alpha (CA) 0.686, rho A of 0.694, composite reliability (CR) of 0.808, and average variance extracted (AVE) of 0.514 (see Table 2), indicating moderate reliability and construct validity (Hair & Alamer, 2022; Hair et al., 2019). Instructional Leadership Practices (ILP) demonstrated strong internal consistency, with loadings between 0.780 and 0.948, a CA of 0.962, rho A of 0.966, CR of 0.967, and an AVE of 0.747, confirming high reliability and strong convergent validity (Hair et al., 2019; Legate. Hair & Ringle, 2024). The results suggest that the constructs meet the necessary reliability and validity criteria, supporting their suitability for further structural model analysis. Figure 2 displays the results of the PLS-SEM algorithm.

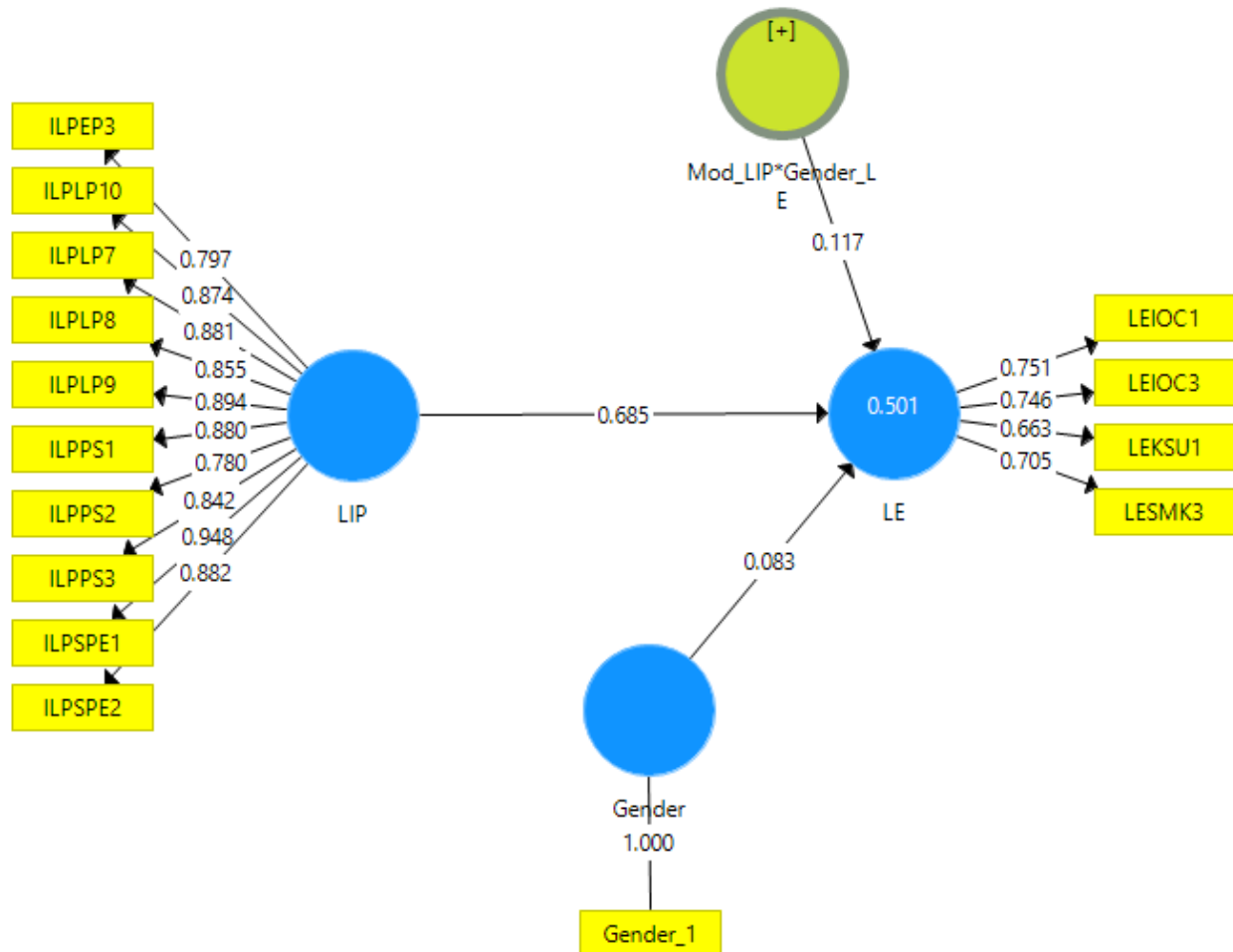


Figure 2: “Algorithm results of PLS-SEM”

Source: Created by Author, 2026

Discriminant Validity

Discriminant validity was assessed using the Fornell-Larcker criterion and the Heterotrait- (HTMT) ratio to ensure that the constructs are conceptually distinct. Table 2 presents the results.

Table 2: Discriminant Validity

Fornell-Larcker criterion		
Constructs	LE	ILP
LE	0.717	
ILP	0.694	0.864
HTMT ratio		
Constructs	LE	LIP
LE		
ILP	0.839	
		+
ILP	0.839	-

Source: Research Data, 2026

Note: LE = Lecturers Effectiveness; ILP = Instructional Leadership Practices

According to the Fornell and Larcker's (1981) criterion, the square root of the average variance extracted (AVE) for each construct should be greater than its correlations with other constructs. Lecturers Effectiveness (LE) had a square root of AVE of 0.717, while Instructional Leadership Practices (ILP) recorded 0.864, both exceeding the inter-construct correlation of 0.694, thereby confirming discriminant validity. Additionally, the HTMT ratio for LE and LIP was 0.839 (see Table 3), which fell below the recommended threshold of 0.90 (Henseler et al., 2015), further supporting discriminant validity. The results indicate that the constructs are empirically distinct, affirming their suitability for structural model analysis.

Model Fit Indices

The model fit was evaluated using key fit indices, such as the Standardized Root Mean Square Residual (SRMR), squared Euclidean distance (d_ULS), geodesic distance (d_G), Chi-Square, and the Normed Fit Index (NFI).

Table 3 : Model Fit Summary

Model fit indices	Saturated Model	Estimated Model
SRMR	0.055	0.055
d_ULS	0.360	0.362
d_G	0.161	0.162
Chi-Square	224.346	224.773
NFI	0.924	0.923

Source: Research Survey, 2026

From Table 3, the SRMR value of 0.055 for both the saturated and estimated models fell below the recommended threshold of 0.08, indicating a good model fit. The d_ULS and d_G values were low, further suggesting an acceptable approximation of the model to the data. The Chi-Square values for the saturated (224.346) and estimated (224.773) models were comparable, reinforcing

model stability. Additionally, the NFI values of 0.924 and 0.923 (see Table 3), which were above the threshold of 0.90, demonstrated strong model fit (Ringle et al., 2023). These results confirm that the measurement model adequately represents the data, supporting its validity for structural analysis

Structural Model

The structural model was assessed using path coefficients (β), significance levels, effect sizes (f^2), and predictive power (R^2 and Q^2). Figure 3 shows the bootstrapping results of Partial Least Square (PLS)-SEM for hypotheses one and two (Instructional leadership practices and lecturers' effectiveness) and (gender moderating the link between instructional leadership practice and effectiveness of lecturers).

Table 4: Structural Model

Path	B	Sample Mean (M)	SD	T value	P Values	5.0%	95.0%	f^2	R^2	Q^2
H1 : ILP -> LE	0.685	0.686	0.044	15.612	<.001	0.603	0.749	0.934		
Gender -> LE	0.083	0.083	0.045	1.829	0.034	0.010	0.159	0.014	0.501	0.247
H2: Mod_ILP*Gender_LE -> LE	0.117	0.123	0.060	1.950	0.026	-	0.194	0.025		
						0.012				

Source: Research Survey, 2026

Note: R square adjusted = 0.494

As indicated in Table 4, instructional leadership practices (ILP) exhibited a strong positive effect on lecturers effectiveness (LE) ($\beta = 0.685$, $p < .001$), with a high effect size ($f^2 = 0.934$), indicating a substantial contribution to LE. Gender also had a significant but smaller effect on LE ($\beta = 0.083$, $p = 0.034$), with a low effect size ($f^2 = 0.014$).

The moderating effect of instructional leadership practices and gender on lecturers' effectiveness was significant ($\beta = 0.117$, $p = 0.026$), suggesting that gender influence the relationship between instructional leadership practices and lecturers' effectiveness, though with a large effect size ($f^2 = 0.025$) (Kenny, 2018). The model demonstrated strong predictive accuracy, with R^2 value of 0.501 and an adjusted R^2 of 0.494, indicating that 50.1% of the variance in lecturers' effectiveness is explained by the predictors. Additionally, the Q^2 value of 0.247 confirms the model's predictive relevance. These results support the robustness of the structural model and its capacity to explain the relationships among the variables. Fig 3 presents path coefficients diagram.

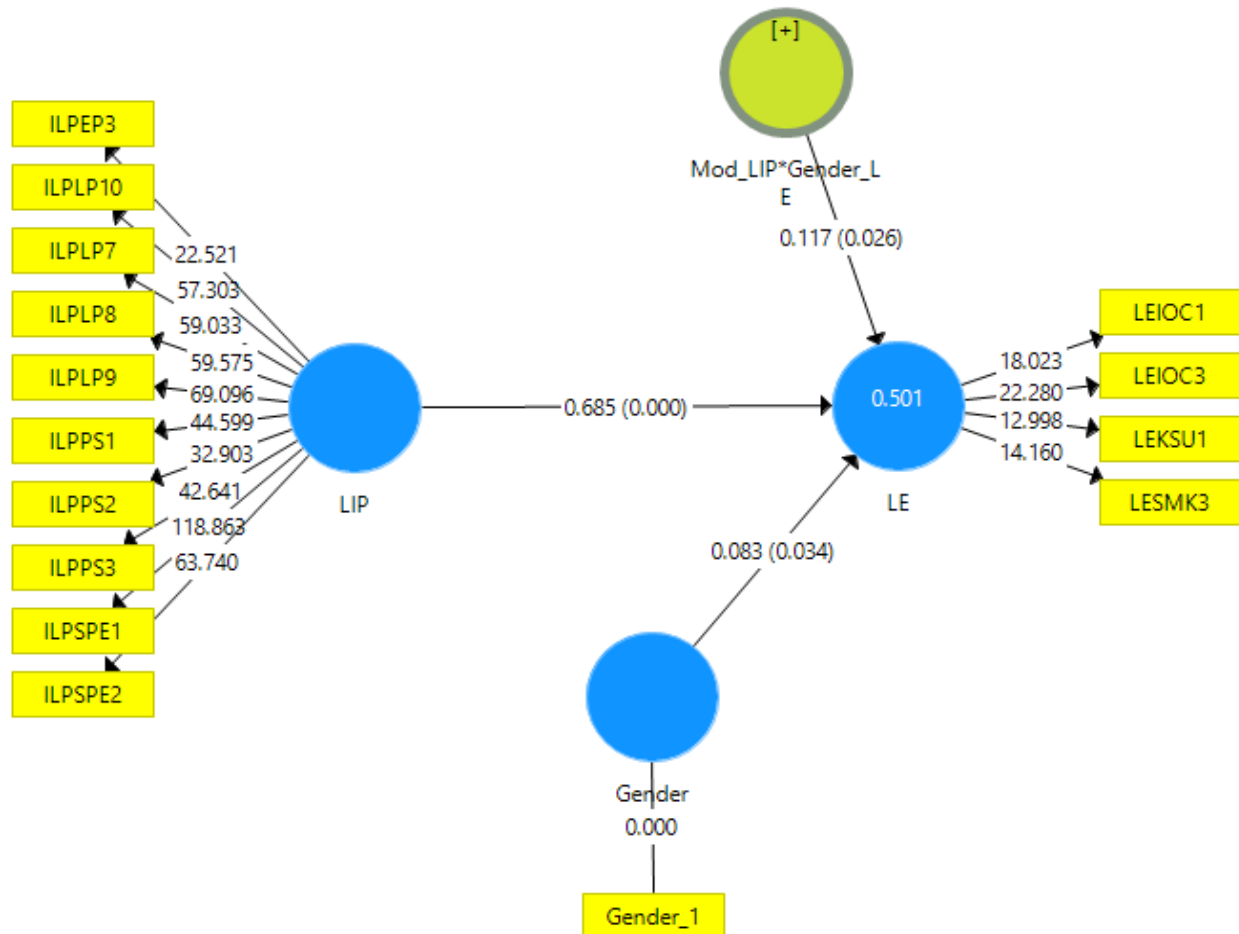


Figure 3: Path Coefficients diagram
Source: Created by Author, 2026

To further test the moderation effect, a simple slope analysis was conducted. Results are presented in figure3.

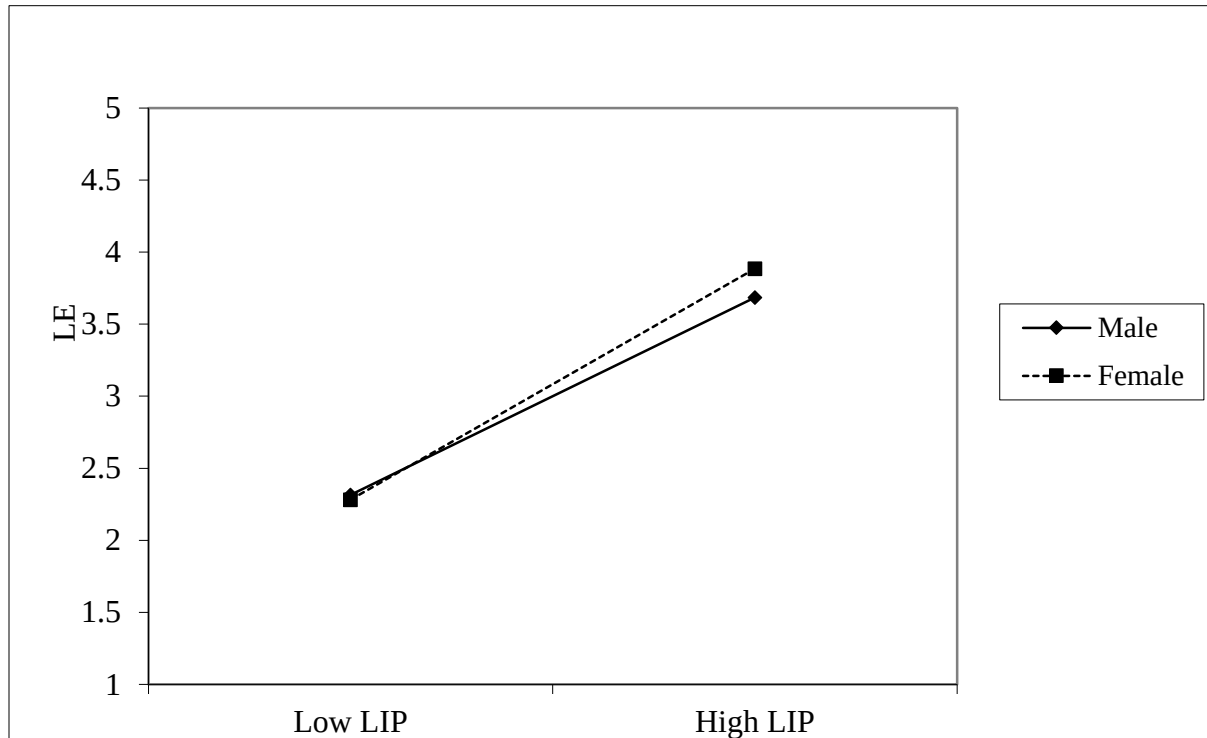


Figure 4: Interaction plot for Gender moderating the link between ILP and LE

Source: Research Data, 2026

From figure 4, the interaction plot showed that as instructional leadership practices increase, lecturers' effectiveness also increases for both males and females, indicating a positive relationship. However, the slope was steeper for female lecturers and the effect appears slightly stronger as evidenced by higher lecturers' effectiveness scores at high instructional leadership practices compared to males. This indicates a stronger relationship between instructional leadership practices and lecturers' effectiveness for females. While both groups started at similar lecturers effectiveness level, when instructional leadership practices were low, the gap widened at high instructional leadership practices suggesting a potential moderation effect of gender. This implies that female lecturers may benefit more from higher instructional leadership practices in terms of effectiveness compare to males, indicating that gender partially moderated this relationship.

DISCUSSION

The reactions of lecturers on HoD's instructional leadership practices call for discussion. By using Smart PLS-SEM, two hypotheses were tested. The first hypothesis revealed that instructional leadership practices had positive and significant impact on lecturers' effectiveness. This means that the more heads provide instructional leadership, the more lecturers improve their lecturing activities. Lecturers who receive instructional leadership are likely to enhance their effectiveness.

It could be inferred from the finding that university lecturers in Ghana depend largely on HoD's instructional leadership for their effectiveness to be achieved in areas such as planning, organizing and delivery of lectures, staff development programmes, evaluation of performance and provision of direct personal support. These practices play crucial role in promoting quality delivery of lectures which result in good educational outcomes of students. Lecturers' issues regarding their effectiveness will call for application of a particular instructional leadership practice to deal with the issue. This supports contingency theory used in this study that the use of instructional leadership practices depends on a situation at hand. The finding corroborates with existing studies (Tarso et al., 2026; Rifai et al., 2025; Akpalu et al., 2025; Naguit, 2024; Go & Rey, 2024) that instructional leadership had positive outcome on teachers' effectiveness as in relationship to studies conducted in elementary schools, secondary schools and colleges. The finding again is in line with McBrayer et al. (2020); Ahmad et al. (2020); Rwothumio et al. (2021)'s findings that instructional leadership had positive outcome on teachers' effectiveness. The finding supports Asante (2020)'s finding that provision of resources has impact on teachers' effectiveness.

The second hypothesis found that gender positively and significantly moderated the relationship between heads instructional leadership practices and lecturers' effectiveness. The moderation effect means that the strength of the positive relationship between instructional leadership practices and effectiveness varies based on HoDs gender. This highlights the need for considering dynamics in instructional leadership and lecturers' effectiveness. It could be concluded that acknowledging and addressing moderating effect of gender can promote more effective instructional leadership and improve the effectiveness of lecturers. The finding is in conformity with studies by (Chen et al., 2024; Ren & Mavros, 2024; Chen & Rong, 2023; Larsson et al., 2023) that gender had moderating effect in the relationship between instructional leadership practices and teachers' effectiveness. The finding is not in conformity with (Asante, 2020; Sisman, 2016; Ahmad et al., 2020)'s findings that gender had no moderating effect on the link between instructional leadership practices and teachers' effectiveness.

The impact of instructional leadership practices on lecturers' effectiveness was stronger for female lecturers than their male counterparts. This indicated that gender partially moderated this relationship. This finding means that though both male and female lecturers benefit from instructional leadership, female lecturers are more likely to experience improvement in their effectiveness. Gender difference could be attributed to instructional leadership practices such as gender-specific coping mechanisms and workplace dynamics. This finding is in consonance with (Ahmad et al., 2020; Asante, 2020; Shaked et al., 2018; Hallinger et al., 2016; Vedavathi, 2017)'s finding that female leaders perceived themselves to be performing more effectively in their instructional leadership roles than their male counterparts. This finding is not in support of (Sisman, 2016; Hallinger, 1992)'s finding that both male and female leaders are effective in performing their instructional leadership roles.

CONCLUSIONS

The study found that HoDs instructional leadership practices had a positive and significant impact on lecturers' effectiveness. This implies that the more HoDs provide instructional leadership, the more lecturers improve their lecturing activities and overall effectiveness. The findings further suggest that lecturers in Ghana rely substantially on HoD instructional leadership in key areas such as planning, organizing and delivery of lectures, staff development programmes, evaluation of performance, and provision of direct personal support, all of which contribute to improved quality teaching and better educational outcomes for students. Additionally, the study found that gender significantly moderated the relationship between HoDs' instructional leadership practices and lecturers' effectiveness. This means that the strength of the link between instructional leadership and lecturers' effectiveness varies depending on the HoD's gender. Consequently, the findings highlight the importance of considering gender-based dynamics when applying instructional leadership strategies to support lecturers' development and improve effectiveness.

Practical/Managerial Implications

The findings of the study have some practical and managerial implications for university management, HoDs, and relevant stakeholders. Since HoDs' instructional leadership practices were found to have a positive and significant effect on lecturers' effectiveness, university management should strengthen instructional leadership roles of HoDs through clear institutional expectations and accountability structures that require HoDs to actively support lecturers in their lecturing activities.

Since gender was found to significantly moderate the relationship between instructional leadership and lecturers' effectiveness, university management should adopt leadership and staff support practices that are sensitive to gender-related dynamics. This implies that HoDs training and professional development should not treat instructional leadership as the same for all contexts; rather, it should prepare HoDs to apply instructional leadership in ways that effectively support lecturers across gender differences.

Policy Implications

The study's findings offer several policy implications for higher education governance. Universities should institutionalize instructional leadership roles for HoDs by clearly specifying teaching-related responsibilities in regulations and job descriptions. Support mechanisms such as capacity-building programmes, appropriate resources, and monitoring and evaluation systems should be included to ensure that instructional leadership practices are carried out effectively. Additionally, since instructional leadership practices impact may differ across gender contexts, policies should promote gender-responsive instructional leadership practices. Policy frameworks should therefore require leadership development programmes for HoDs to include gender-awareness and equitable support strategies, so that lecturers receive relevant guidance and development regardless of gender. This can help ensure that lecturers' development and teaching improvement initiatives achieve more consistent outcomes.

Limitations /Future Research

Some of the lecturer-respondents were reluctant to respond to the questionnaire items due to performance of other official duties, the scheduled period for the data collection was affected. To overcome this, an adjustment of time was made to enable all respondents return the completed questionnaire at their convenience at later date. Given the pragmatic approach adopted for the study, all potential challenges were addressed, ensuring the results were not compromised in any way.

Future studies should focus on comprehensive comparative analysis of instructional leadership practices between public and private universities and what accounts for the differences, if any. This analysis will bring clarity to how instructional leadership is practised in public and private universities to inform future instructional leadership practices policy in public and private universities. Future studies should employ longitudinal research design to examine whether the impact of HoDs' instructional leadership practices on lecturers' effectiveness changes across academic periods, staff development cycles, or leadership transitions.

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