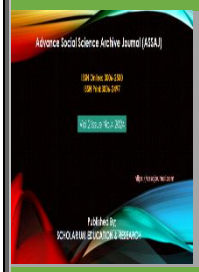

Advance Social Science Archive Journal
Available Online: https://assajournal.com
Vol.3 No.1,January-March,2025.Page No.1810-1840
Print ISSN: 3006-2497 Online ISSN: 3006-2500
Platform & Workflow by: Open Journal Systems

IMPACT OF PRINCIPAL`S INSTRUCTIONAL LEADERSHIP ON TEACHER EFFICACY AT SECONDARY SCHOOL LEVELS IN KHYBER PAKHTUNKHWA

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ABSTRACT

The research explores the connection among the variables, the independent variable instructional or pedagogical leadership and the dependent variable teacher self-efficacy (teacher self-confidence), alongside assessing the validity and reliability of the variables in the government sector high secondary schools within the four districts of the province Khyber Pakhtunkhwa, Pakistan. Specifically, the research investigates the influence of independent variable instructional leadership on the dependent variable teacher self-efficacy. Employing a quantitative approach, two questionnaires, the IMRS and TSE scales, were utilized for data collection. The snowball sampling method was put to use in a sample of 523 participants comprising 189 principals and 334 teachers. The statistical analysis of the population confirms the resemblance. The outcomes reveal that the independent variable instructional leadership has notable influences on the dependent variable teacher self-efficacy, boosting an environment conducive to constructive feedback on predefined goals. This, in turn, permits teachers to develop and sustain a great level of self-efficacy. The study highlights the essential role of principals in boosting teacher self -abilities. These outcomes have notable implications for school administrators, policy-makers, and educators, providing a foundation for effective leadership enhancement programs and institution improvement drives aimed at elevating instructional quality. Finally, this research underscores the significance of student learning attainments and overall educational quality, which in innately linked to instructional leadership.

Key words: leadership, instructions, Efficacy.

Introduction

1.1 Overview

Instructional leadership over the last fifty years worldwide has been recognized as an important, critical, decisive factor in quality teaching and enhancing teacher self-efficacy within educational sector institutions. All stakeholders, practitioners, scholars, and institutions concur that school managers (principals are crucial to boosting student delivery (Fullan2007). Instructional leadership is decisive for enhancing quality teaching and putting into use curriculum, classroom management, and concentration on the reinforcement of teachers (Hallinger, 2018). (Leithwood et al., 202o) emphasized that effective instructional leadership stimulates team-based school culture, increases teachers` inspiration, and straightens instructional strategies with education targets, which ultimately leads to better outcomes. The role of instructional leadership in education has achieved substantial concentration in recent times, especially in the context of teacher efficacy (Ahn &Bowers, 2024). This pedagogical (instructional) leadership indicates that principals direct and support the teachers to enhance teaching practices and student learning (Alanoglu, 2020.). According to (Khun-Inkeeree et al., 2020), instructional leadership is involved in curriculum development, professional development, and classroom supervision to boost teachers`productivity and student attainment. Compared to other leadership, such as distributive and transformative Instructional leadership is unique and separate from them. It puts more attention on instructions (Wang et al., 2020) (Xin& Tahir, 2024). Self-efficacy is recommended for teachers` confidence in skillfully overseeing the tasks, commitments, and teaching and student learning challenges. It influences their determination, instructional techniques, and persistence in overcoming classroom difficulties (Tschannen-Moran &Hoy, 2001). According to Zee and Koemen,. (2016), recent studies underscore intense self-efficacy in teachers tied to increased student outcomes and more remarkable responsiveness in adopting innovative teaching methods.

According to Hallinger and Wang (2015), a considerable amount of evidence underscores the essentiality of competent instructional leader in crafting a shared vision, fostering hopeful institutional values (Heck &Hallinger, 2014), and establishing a favorable academic setting (May & Supovitz, 2011). Furthermore, instructional leadership has materialized as an essential aspect in enhancing institution effectiveness and pupil achievement. (Hallinger 2018), instructional or pedagogical leadership engaging, establishing appropriate academic milestones, observing scholastic processes, and contributing to professional skills enhancement opportunities for instructors. The principal task emphasized by instructional leadership

is crafting the institution`s instructional environment and ensuring the availability of mandatory resources and aid to deliver heightened quality education. A study by Leithwood et al. (2020) underscores that instructional (pedagogical) leadership approvingly influences teachers` enthusiasm, classroom practices, and students` learning, especially in underperforming schools. Moreover, instructional leadership supporting an environment of collective and sustained advancement is necessary for coping with the developing needs of the education setup. On top of that, instructional leadership is important for shareholders and the value of schools. A study by Robinson (2020) showed that a visionary instructional leader`s primary concerns are the equitable entrance to learning opportunities and handling the diversified needs of the students. They also build conditions that enable teachers to modernize and demonstrate up-to-date teaching skills. Nevertheless, its gains, hurdles such as heavy responsibilities and minimal training for principals, usually restrict productive approaches to instructional leadership, highlighting the demand for systematic help and professional development for school leaders. According to Bandura (1977), teachers` efficacy is a notable factor in teachers` enthusiasm, toughness, and instructional practices. Teachers with upraised own self-competence are more likely to follow modernized teaching approaches, go through hurdles, and create a positive learning environment, instantly changing students` gains (Tschannen-Moran &Hoy, 2001). Another study by Zee and Koeomen (2016) further emphasized the teacher`s own efficacy connected to teachers` ability to reshape varied students` needs and apply inclusive practices. Besides, high self-efficacy provides teachers comfort and job satisfaction, declining burnout and turnover rates (Klassen & Chiu, 2011). Principals are instructional leaders answerable for ensuring productive teaching and learning, curriculum development, and upskilling (Ma & Marion, 2021). Some combined studies on both the variables of instructional leadership and teachers` efficacy is a wide-ranging and turn around both the developed and developing contexts. Studies in developing countries like HongKong (Li et al, 2016), Thailand (Piyaman et al, 2017), china (Liu & Hallinger, 2018), and Turkey, (Karacebay et al, 2022) have contributed to a growing body of knowledge and showed the influence of instructional leadership on teacher self-efficacy (Liu & Hallinger, 2018; Liu et al., 2024). Others have investigated no significant connection or only a moderate effect (Alangolu, 2022; Dutta & Saheny, 2022). Besides the extensive research, the under mechanisms of this association are poorly understood. Due to the lack of localized research investigating the association between instructional leadership and teachers` self-efficacy within the unique socio-cultural and limited resource educational environment. All the prevalent studies from the Western context and Asian contexts do not sufficiently tackle the challenges of Pakistan`s centralized education system and socioeconomic disparities, which precisely

influence leadership approaches and teachers' self-efficacy, underscoring the demand for context-specific insight.

The aims of the study are to explore the connection among the variables of the study, instructional leadership, teachers` self-efficacy, and mediate variables of teachers` qualification and experience, and the validity and reliability of the standardized questionnaire

Literature Review

Instructional Leadership

Hallinger and Hecks (2010), defined instructional leadership as an essential element of persistent leadership, prioritizing curriculum development, and the role of principals in directing teaching and learning mechanisms. It engages principals affecting the school environment to ensure the impactful curriculum provision. Other researchers, for example, Barth (1990) and Harris (2001), consider instructional leadership as a systematized approach similar to that of Cohen and Miller (1980), who narrate that it is the ability of a principal to look after the learning process and provide proper instructional guidance. Instructional leadership usually observes the innate quality of an individual (Hallinger et al., 2015). It covers a variety of behaviors and practices that affirmatively impact school and student outcomes (Hallinger & wang, 2015). Essential procedures include arranging academic goals and planned curriculum, evaluating learning methodology, and supporting instructional leadership improvement (Hallinger, 2011). Those principals who lake convincing instructional leadership may focus scarcely on teaching tasks; passing over broader administrative responsibilities can lead to misconceptions about their influence on pupil outcomes (Murphy, 1988; Zheng et al., 2017). Instructional leadership is particularly noted for the best shaping of quality education and learning of students (Liu et al., 2016). Result-oriented instructional leadership also boosts a culture of professional development enhanced among teachers. The head of the institution is responsible for appreciating those teachers who prioritized student learning and involved them in continuous professional growth (Piyaman et al., 2017). Instructional leadership, for example, guidance and classroom monitoring, further stimulates teachers` learning and development (Liu et al., 2016). A Principal who disseminates their instructional leadership practices proficiently and keeps a deep comprehension of classroom management to create a helpful school environment that boosts teaching and learning (Goddard et al., 2015).

Teacher Self-Efficacy (TSE)

Bandura (1977) narrated in his cognitive theory that teacher self-efficacy indicates an individual`s perspectives in their ability to sort and carry out an action to attain specific goals in an educational context TSE refers to revealing teachers` qualities in their capacity to enhance student learning through effective teaching practices (Bandura, 1994; Tschannen-Moran et al., 1998). Top-tier self-efficacy encourages teachers to set challenging goals, persist through difficulties, and continue emotional control. Minimal self-efficacy can affect performance and bring about challenges in classroom management and instruction (Tschannen-Moran, 2001; Battersby & Cave, 2014). Research regularly indicates that TSE is closely connected to classroom management, quality of teaching, and student learning output (Goddard et al., 2004).

The Connection between the variables (Instructional leadership and Teacher self-efficacy)

The connection between the two variables has been comprehensively investigated by the researchers, consistently underscoring the positive change of effective leadership on instructors` confidence and professional practices. To illustrate, Salazar (2014). found a powerful association between the variables, instructional leadership and collective teacher efficacy, and student output, stressing the significance of principals safeguarding instructional time and also being visible in school. Sallee (2014), identified that demonstrating that a strong relationship axist between instructional leadership and teacher-efficacy, with communication, visibility, support, and respect being crucial leadership traits. Similarly, McFarland (2014) further reinforced these findings, with key instructional leadership practices, for example, fostering an encouraging environment, defining a vision of the institution, also setting ambitious goals that positively influence teacher efficacy. Pearce (2017) examined the connection and influence of both the variables instruction leadership and teacher efficacy at the elementary level, underscoring the importance of a focus vision, classroom involvement and constructive feedback, and leader visibility in steering instructors` viewpoints of their efficacy. The above studies collectively support the use of tools like IMRS and TSES (instructional management rating scale and teacher self-efficacy scale), which measure leaders` instructional perceptions and efficacy, providing valuable insight for educational research and practices.

Research has expanded globally on instructional leadership and TSE, with studies exploring the concepts in diverse cultures and educational contexts. Research conducted by Liu and Hallinger (2018) highlighted the contribution of effective

leadership in motivating and supporting instructors` professional development. In China, it was found that principal time management and self-efficacy influence teachers `learning significantly. Hallinger et al. (2018) tackle the lack of research in developing regions, focusing on Iran and confirming the positive influence of instructional leadership on collective teacher efficacy and school efforts. Likewise, Cansory and Parler (2018) investigated that instructional leadership strongly enhances the self and collective efficacy of teachers in Turkey. Niemted (2020) unveils the straight association of instructor self and collective efficacies and group skills in Indonesia. Nevertheless, Liu et al. (2021) observed that while the blunt impact of leader instruction on the efficacy and job satisfaction of teachers may be minimal, distributed leadership demonstrates a stronger effect. Some studies have suggested a slightly moderate relationship (Dutta & Sahney,2022; Sariprap et al., 2022). Tahir and Fitima (2023) further support these findings by linking these leadership practices, for example, providing feedback, establishing goals, and promoting collaborative seeking environments for positive school culture and teacher development. In a nutshell, Hallinger and Wang (2015) the literature stresses a causal link between both variables, which is instructional leadership and teacher efficacy. Hallinger and Wang (2015), underscore that leadership increases teachers` confidence and performance when providing support and feedback and strengthens teachers` belief in their abilities. Motivating teachers through guidance and feedback further increases the efficacy of teachers, which successfully increases quality and pupil learning outcomes. These findings emphasize the significance of instructional leadership in increasing the effectiveness and growth of teachers.

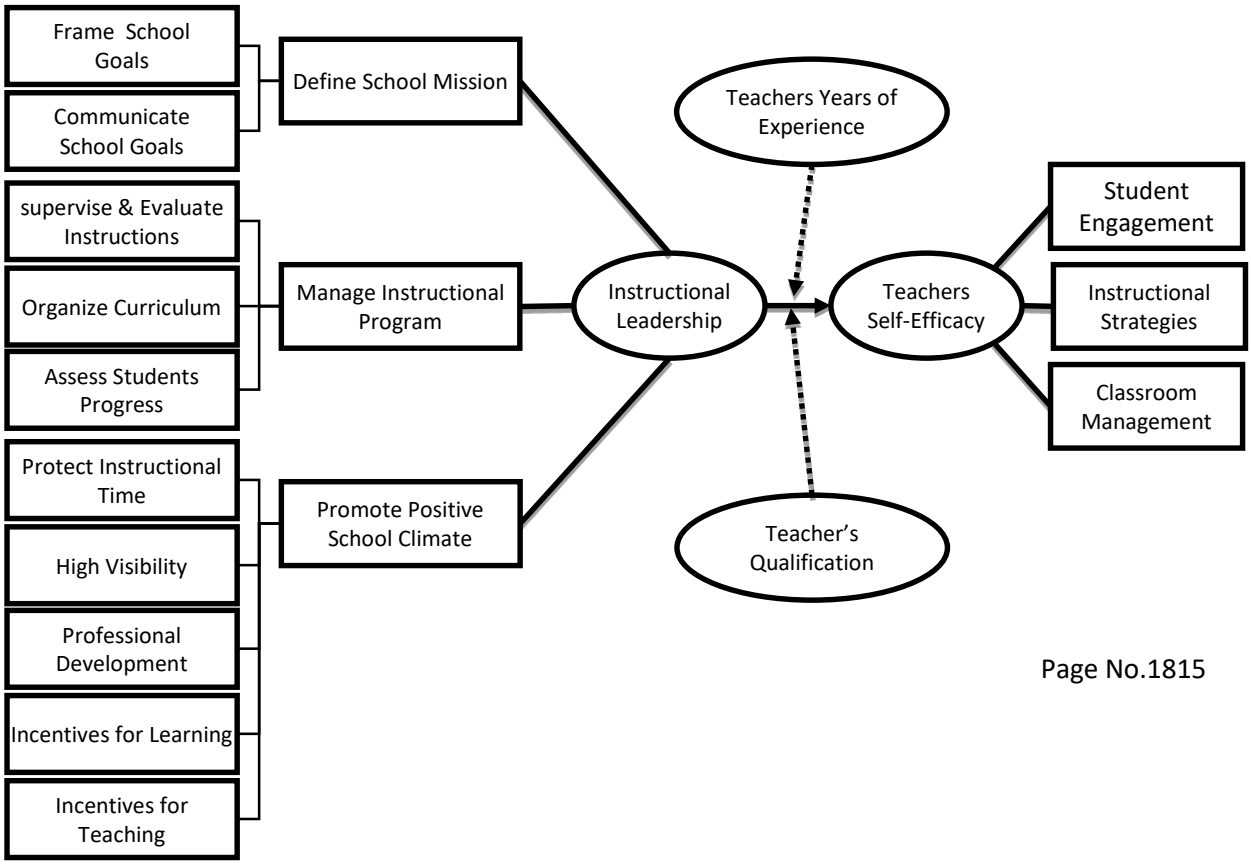

Figure 2.1: Conceptual Framework 1

Theoretical Framework		
S No	Variables Name	Variables As
1	Principal Instructional leadership (PIL)	Independent variable
2	Teacher Self Efficacy (TSE)	Dependent variable
3	Teachers' Experience and Qualifications	Mediator Variables

Therefore, the thesis develops its hypothesis based on the conceptual framework (Figure 1 above)

Methodology

This study investigated the connection between the instructional practices of school leaders and teacher(instructors) self-efficacy at the public secondary school in Khyber Pakhtunkhwa (KP), Pakistan, employing a quantitative, correlational research design. Two validated instruments were utilised:

The first instrument, the instructional management rating scale by Hallinger (2011) to measures the principals` perceptions about their behaviors, and another instrument, TSES by Tschannen-Moran and Hoy (2001), judges the efficacy of school teachers. The collection contains 189 principals and 334 school teachers from four districts of Kp (Kohat, Mardan, Peshawar, and Malakand). Using a rigorous snowball technique. The data collection methods included personal visits, postal surveys, and email questionnaires to ensure a high response rate. SPSS and AMOS tools, widely recognized for their capabilities in statistical analysis and structural modelling, were used for data analysis. The whole process is pursued in three steps: (1)data preparation and descriptive analysis, which involved scrutinising questionnaires for completeness (ensuring at least 95% response rates) and summarising participant characteristics using descriptive statistics (means and standard deviations); (2) establishing sample homogeneity, confirming that principals and teachers shared conceptual alignment on the variables of interest; and (3) confirmatory factor analysis (CFA**)** using AMOS to

validate the reliability and validity of the IMRS and TSES scales. For testing of hypotheses utilizing SEM with multi-group comparisons and correlation coefficients, investigate, association or link between exogenous (Independent) and endogenous (Dependent) variables, as well as the moderating effects of teachers` qualifications and years of experience (Allison, 199; Blumen, 2009). This detailed technique provided robust insight into how this leadership practice affects the efficacy of teachers and provides an in-depth grasp of efficient leadership in KPs` secondary school system.

Results

This study presents the findings of research, which aimed to investigate the effects of secondary school principals' instructional leadership roles and behaviors on instructors' self-efficacy with the positive moderation of teachers` qualifications and experience. The present study comprised a sample of 189 secondary school principals and 334 (total of 523) secondary school teachers hailing from four districts within the Khyber Pakhtunkhwa province, namely Peshawar, Mardan, Kohat, and Malakand. In the first section, the chapter provides an overview of the demographic analysis of the principal and teachers` data. The researcher employed a robust quantitative approach by using validated instruments.

Sample homogeneity

The approach towards to integrating the responses of teachers and principals is consistent with the scholarly recommendation that the approach towards instructional leadership must be contextualized and aligned with the key environmental factors for better student learning outcomes (Hallinger & Bryant, 2013; Bellibaş et al., 2020). The study acknowledges the scholarly thought suggesting the decontextualization of school leadership (Murphy, 1988; Spillane & Diamond, 2007). However, consistent with Neumerski (2013) and Hallinger & Bryant (2013), the authors of this research study believe that instructional leadership must be taken as an integrated whole that coordinates the behaviors of the educators and school administration with the contextual socioeconomic requirements of the school. Therefore, an integrated, synchronized conceptualization of instructional leadership and associated activities is mandatory for better learning outcomes (Bellibaş et al., 2020). The composite questionnaire included a categorical question for each of the measures to check for homogeneity. For IMRS, the questions included Instructional Management Rating Scales measure the principal’s leadership role and behavior. Similarly, for TSE, it measures teachers’ self-efficacy in the learning process. As discussed earlier, the sample respondents included both principals and teachers; therefore, the thesis checks

the homogeneity of responses from both sub-groups to ensure rigorous analysis of the data. 150 responders were chosen at random by the author from each group of principals and teachers. The respondents were asked if they agreed with the researcher's standard definitions of IMRS and SES. There were two possible answers: yes and no. The distribution of the categorical variable is the same for the two subgroups—principals and teachers—according to the null hypothesis in the homogeneity test. Stated differently, the reactions of the principals and teachers are consistent.

Table 1: Chi-square test Homogeneity Statistics for IMRS and TSE

Chi-square test Homogeneity Statistics for IMRS			
	Values	Df	Sig.
Pearson Chi-Square	0.368	2	0.962
Likelihood ratio	3.433	2	0.634
No. of Valid Cases	300		
Chi-square test Homogeneity Statistics for TSE			
	Values	Df	Sig.
Pearson Chi-Square	0.868	2	0.166
Likelihood ratio	3.968	2	0.245
No. of Valid Cases	300		

Table 1 indicates the statistics for meaningful variations between principals` and teachers` responses over the instruments, i.e, IMRS; TSES. The test outcomes highlight for both the variables that the chi-squared value is significantly lower than the critical values (0.368/3.62 and 0.868/4.32, respectively). The p-value for both variable scales is 0.962 and 0.166. which means no considerable variations on the replies of teachers` and principals` on the scales, the study rejects the null hypothesis

Reliability Analysis

Ensuring a scale's validity and reliability is crucial to accurately and consistently measure the intended construct. Research emphasises validating adopted scales to verify accuracy, avoid biases, enhance dependability, increase generalizability, strengthen credibility, identify contextual or cultural differences, and ensure sensitivity to detect subtle variations (Hendrick et al., 2013). The instrument IMRS was generated by Halliger and Murphy (1985). A reliable instrument used for assessing instructional leadership in different contexts. In Table 2 display the results underscore upper-level internal consistency

Table 2: Reliability test for IMRS

Variables	Reliability coefficients
Define School Mission	.869
Manage Instructional Program	.839
Promote School Climate	.918
Whole No	.949

Table 3: Reliability Test for SES

Subscale		Reliability Coefficients
Student Engagement		.713
Instructional Strategies		.753
Classroom Management		.738
Whole No	2	.887

In Table 2. Table 3 displays the results that highlight high reliability; the reliability of the measure of the scale was 0.949.

Validity of the Measurement Scales

The data's validity was examined using SPSS AMOS, confirmatory factor analysis, structural equation modelling, and model fit to look for operational validity of the two constructs. According to Daniel et al. (1998), SEM is a complete statistical procedure that employs a confirmatory method and consists of a set of linear equations for evaluating the hypothesis on the link between observable and latent variables (Chin, 1998). As stated by Chin (1998), the primary objective of SEM is to determine "the extent to which a hypothesized model 'fits' or, in other words, adequately describes the sample data." Because they require precise definitions of the constructs, their operationalizations, and the functional relationships among the constructs, Daniel et al. (1998) suggested that cause and effect models developed through SEM approaches may have several advantages: (1) the approaches make the constructs, assumptions, and hypothesized relationships in an investigator's theory explicit; (2) they add a degree of precision to the investigator's theory; (3) they authorize a more inclusive demonstration of complex theories; and, finally, (4) they present a formal framework for constructing and testing both theories and measures. The choice of sample size is crucial now because most of the estimate techniques for structural equation modeling and evaluating proportional model indicators are sensitive to sample size.

Three main steps comprised the thesis's data analysis: first, the author of this thesis used the item to structure correlation for both IMRS and TSES constructs as well as the overall model and the scales for the two constructs to determine the instrument's reliability. Second, convergent validity was examined by analyzing the t-values for the item loadings and means to demonstrate validity. A comparison between the constructs of a measuring scale/model and the entire structural model was analyzed, along with associated correlations between the AVE and the constructs (Fornel & Larker, 1981; Hair et al., 1998). The author used model fit indices such as Chi-square, CFI, and RMSEA to assess each of the performance, brand, and market orientation components. Ultimately, using structural equation modeling with SPSS (AMOS), comprehensive model analysis is carried out to ascertain the type and degree of associations utilizing path coefficients and standardized regression weights. By comparing the Chi-square output of the unconstrained model with that of the performance implications, the co-efficient was used to determine the difference between the two, and if the higher value was greater than the degree of freedom, it was deemed to be significantly larger.

Confirmatory Factor Analysis of IMRS

Using confirming factor analysis via Amos, the author assessed the validity of the measuring constructs and models in two main phases, thereby addressing its first two objectives and their associated research hypotheses**.**

> ***Hypothesis 1:*** *The Principals' Instructional Leadership Management Rating Scale is valid and reliable in the secondary school context.*

The investigation follows a two-stage approach to validate the estimation and structural models. First, the separate validity of each valuation model for the Instructional Management Rating scale (IMRS**)** constructs and Teacher Self-Efficacy (TSE**)** was inspected (Figures 2 & 3). Afterward, the structural model was appraised using all constructs shown in Figure 4. As refined in Table 3, empirical validity was found, as the item-to-frame correlation coefficients beat the intercorrelations between the IMRS dimensions. Moreover, confirmatory factor analysis (CFA**)** fixed to the second-order factor model (Figure 2) approved that: the average variance extracted (AVE**)** for all major constructs exceeded the threshold of **0.50**, and the factor loadings for the three IMRS dimensions were also above the proposed **0**.50 benchmark (Table 4). These results show sound evidence for the model's convergent and discriminant validity.

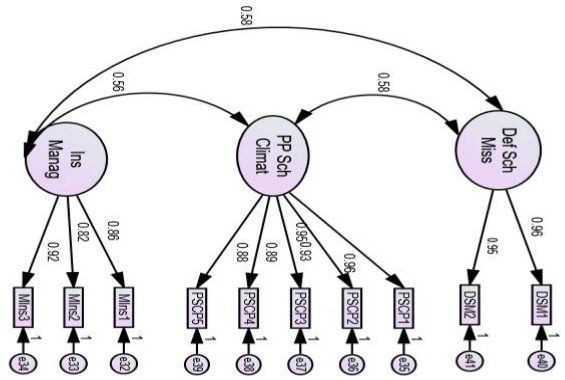

Figure 2: Factor structure of the IMRS constructs 1

Table 4 : Validity Statistics for IMRS

Promote a positive school climate	Standardized Factor Loadings	Factor Loadings Squared	*t-values*	Significance (P-value	**AVE**
					0.65
PSCP1	0.96	0.92	8.026	***	
PSCP2	0.95	0.86	6.643	***	
PSCP3	0.93	0.9	5.456	***	
PSCP4	0.89	0.79	5.545	***	
PSCP5	0.88	0.77	6.042	***	
Correlation P. Posit. Sch. Climate - Def. Sch. Mission				**0.48**	

Correlation P. Posit. Sch. Climate –Instruct. Manager.				**0.43**	
Def. School's Mission					***0.51***
DSM1	0.96	0.92	7.754	***	
DSM2	0.95	0.9	6.660	***	
Correlation Def. Sch. Mission. –Instruct. Manage				**0.44**	
Instruct. Manager.					***0.61***
MIns1	0.86	0.7396	7.345	***	
MIns2	0.82	0.6724	6.987	***	
MIns3	0.92	0.8464	9.956	***	

Multiple lines of evidence robustly support convergent validity. As shown in Table 3, the statistical significance of item means (all *t*-values significant at $p < .01$) further empirically supports the validity of this approach. Moreover, Figure 3 shows that all items exhibit strong factor loadings ($\lambda > 0.5$) on their specific constructs, conforming to established thresholds for convergent validity (Anderson & Gerbing, 1982). This authentication is supported by the average variance extracted (AVE**)** for each construct, which exceeds the recommended benchmark of 0.50 (Hair et al., 1992), thereby strengthening the inter-item reliability of the measurement model.Model fit was analyzed employing multiple indices to explain the restraint of individual measures. While the chi-square shows a statistically significant discrepancy between the model and the data, this outcome is elucidated with caution due to the test's well-documented sensitivity to sample size (Jöreskog, 1996; Bollen, 1990). More reliable fit indices, nevertheless, proposed acceptable model performance: RMSEA (0.056) fell within the range of adequate fit (≤ 0.06), CFI (0.963) and TLI (0.96) surpassed the 0.95 threshold for excellent fit, NFI (0.931) and RMR (0.90) further supported the model's plausibility.

The outcomes confirm the first hypothesis, supporting the validity and reliability of Principals' Instructional Leadership Management Rating Scales within the secondary school context.

Confirmatory Factor Analysis of the TSE Scale

To test the second hypothesis by using teachers` data for TSE construct the measurement model fit indicated in (Figure 3)

> ***Hypothesis 2:*** *The Teacher's Self-Efficac y Scale is valid and reliable in the secondary school context.*

This research study practically validated the Teacher Self-Efficacy (TSE) scale, creating dual validity, consistent with the validation approach used for the Instructional Management Rating Scale (IMRS). Shown in Table 5, the analysis includes:t-values for individual scale items, Standardized factor loadings, and Average Variance Extracted (AVE) compared to inter-construct correlation coefficients. The outcomes strongly reinforce the second hypothesis, which accredits that the Teacher Self-Efficacy Scales exhibit strong psychometric validity and reliabilit**y** within secondary school settings.

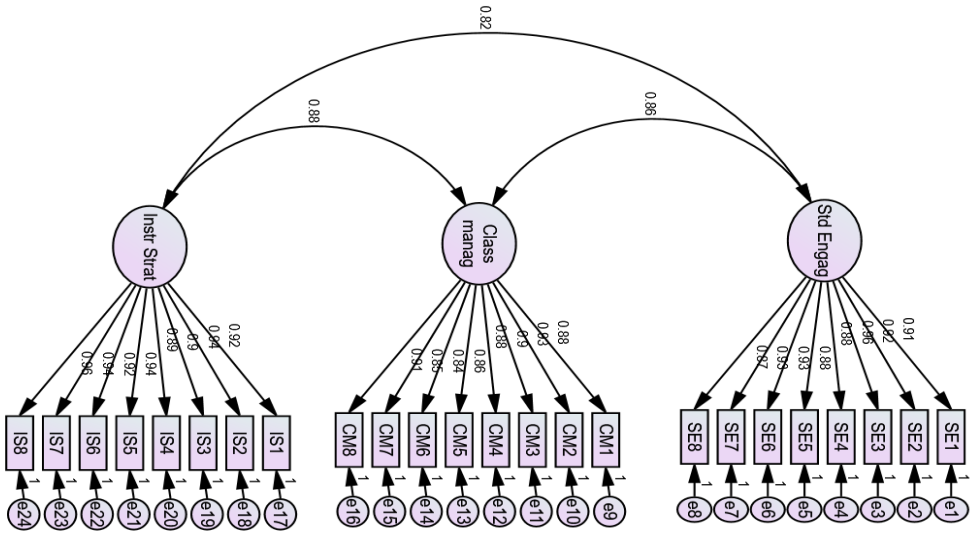

Figure 3: Factor structure of TSE constructs 1

Table 5: Discriminant Validity Teacher Self Efficacy Scale

Student Engagement	Standardized Factor Loadings	Factor Loadings Squared	t-values	Significance (P-value)	**AVE**
					0.83
SE1	0.91	0.8281	5.434	***	
SE2	0.92	0.8464	6.089	***	
SE3	0.96	0.9216	4.364	***	
SE4	0.88	0.7744	7.249	***	
SE5	0.88	0.7744	8.234	***	
SE6	0.93	0.8649	6.666	***	
SE7	0.93	0.8649	4.232	***	
SE8	0.87	0.7569	4.233	***	
Correlation Stud. Engagement – Class Management				**0.48**	
Correlation Stud. Engagement – Instruct. Strategies				**0.41**	
Class Management					***0.78***
CM1	0.88	0.7744	6.089	***	
CM2	0.93	0.8649	4.445	***	
CM3	0.9	0.81	5.579	***	

CM4	0.88	0.7744	8.049	***	
CM5	0.86	0.7396	7.224	***	
CM6	0.84	0.7056	4.006	***	
CM7	0.85	0.7225	4.000	***	
CM8	0.9	0.81	6.664	***	
Class. Management – Instructional Strategies				**0.51**	
Instructional Strategies					***0.86***
IS1	0.92	0.8464	5.080	***	
IS2	0.94	0.8836	4.880	***	
IS3	0.9	0.81	7.648	***	
IS4	0.89	0.7921	8.232	***	
IS5	0.94	0.8836	6.424	***	
IS6	0.92	0.8464	6.060	***	
IS7	0.94	0.8836	7.022	***	
IS8	0.96	0.9216	7.676	***	

As priorly noted, all three domains of the Teacher Self-Efficacy (TSE) scale manifest empirical validity, as their Average Variance Extracted (AVE) values transcended the squared inter-factor correlations (Fornell & Larcker, 1981). Beyond

this, discriminant validity was upheld by indicator reliability was significantly higher than correlations between different constructs (see Figure 3 and Table 5). The fit statistics for both the Instructional Materials Rating Scale (IMRS) and TSE showed acceptable fit: χ^2/df = 2.617 (below the threshold of 3) GFI = 0.91, AGFI = 0.93 (≥ 0.90 = good fit) NFI = 0.94, CFI = 0.97 (≥ 0.95 = excellent fit) RMSEA = 0.08 (≤ 0.08 = reasonable fit)

(SEM Approach)

The model validity is illustrated in Figure 4, and the data in Table 6 support the model validity was earlier validated. The Table was concentrated on these results, which are highly significant (P< 0.01). So the results are reliable. beyond this, all parts reflect the convergent validity of the model.

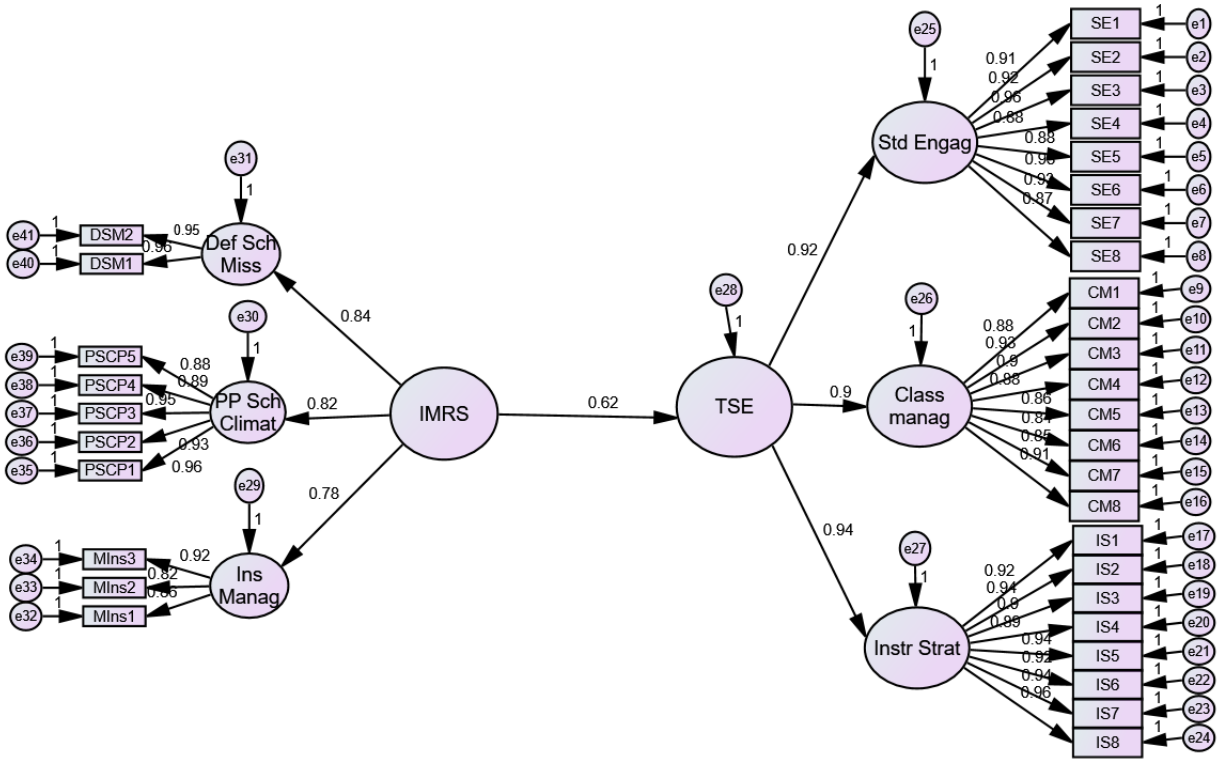

Figure.4: Structural Model 1

Table 6: Validity of the Structural Model

IMRS	Standardized Factor Loadings	Factor Loadings Squared	t-values	Significance (P-value
Def. Sch. Mission	0.84	0.7056	3.760	***
P. Positive Sch. Climate	0..82	0.6724	3.265	***
Instruct. Management.	0.78	0.6084	5.774	***
AVE				***0.81***
TSE				
Student Engagement	0.92	0.55	4.965	***
Class Management	0.90	0.41	6.556	***
Instructional Strategies	0.94	0.27	4.360	***
AVE				***0.92***

Table 7 shows the test results of the third hypothesis of our study, which is a two-step analysis followed firstly investigated that the variables instructional leadership and teacher efficacy have a significant connection, which was statistically confirmed (P< 0.01) shown in Table 6. Secondly, tested that teachers` qualifications and work experiences (Moderate) have an association with the construct.

Table 7: Analysis of the full Structural model

Structural relationships	Standardizes weight	t-values	P-values
IMRS <--- TSE	0.62	5.760	***
Define Sch. Mission <--- TSE	0.43	5.265	***
Promote P. Sch. Climate <--- TSE	0.52	4.236	***

Instructional Management<--- TSE	0.39	3.224	***

Table 7 indicates that both the constructs of the study, which are instructional leadership and teacher efficacy significant at the 1% level (P< 0.01). Moreover that Table 6 explained that all domains have a meaningful positive influence on TSE

Moderating effect of teacher's qualification and years of experience on the relationship between instructional leadership and teacher's self-efficacy

To investigate the hypothesis 4 that whether teachers` qualifications and work experiences are moderating the link between instructional leadership and TSE. The researcher applied a multi-group invariance testing and focused on factor loading, factor covariance, and consistency across teacher groups, initially to ensure good fit. Separately, a baseline model was developed, which can vary across groups. Statistical tools always work dissimilarly for separate populations. which identified that measurement instruments work differently across groups of population, all parameters are most of the time unrealistic, the targeted invariance test needs substantial resemblance.

Table 8 indicates the outcomes for two moderating variables teachers` qualifications and work experience.

Table 8: Group differences across Qualification

	Chi-square	Df	p-val	Invariant?
Overall Model				
Unconstrained	126.026	164		
Fully constrained	384.233	197		
Number of groups		3		
Difference	258.207	33	.015	No

Table 9: Group Differences across Years of Experience

	Chi-square	Df	p-val	Invariant?
Overall Model				
Unconstrained	195.265	82	.007	
Fully constrained	312.38	93		
Number of groups	117	3		No

The statistics of Tables 8 and 9 support the hypothesis that 4 discloses that subgroups of teachers` qualifications and teachers` work experiences significantly moderate the relationship between the instructional leadership and teacher efficacy

4.10 Discussion

This study found an important positive association between the study constructs, particularly instructional leadership and teacher self-efficacy, as measured by the Instructional Management Rating Scale (IMRS). It highlights the impression, "alterable school-level factors" boost student learning and create a better school environment. The study explores the theoretical model to investigate the moderate effects of teachers' qualifications, and work experience. It builds on prior research on these variables. The author emphasizes the need for more studies in non-Western, developing contexts, such as Pakistan, to create a global knowledge base and foster shared learning among educators worldwide. This call to action should motivate educators, researchers, and policymakers to contribute to the global knowledge. The findings align with earlier research on two constructs, instructional leadership and teacher efficacy, which underscores the link between these constructs and the improvement of school and leaders' values. The researchers` regularly work has exhibited efficient instructional leadership that joins both moral aims and outcome accountability. Dayer`s (1986) initial work presents noteworthy instructional leadership managing their practice through educational values. The moral values of leadership have been manifest in empowering teachers professionally (Leithwood et al., 2020). Edmond (1978) expanded on his work that the principal of a good-performing institution should have ownership of the learning outcomes of students. Hallinger and Heck (1998) further extended their work by explaining that principal leadership increases the results by up to 25% . A study by Grisson et al. (2021) principals who spend more time on instruction receive feedback.

The study grasps how instructional leadership and teacher self-efficacy combinedly enhance teacher commitment and collective efficacy, correlate with previous research (Brinson & Steiner, 2007; Goddard et al., 2000, 2004). The results underscore that principals with active instructional leadership involved in classroom observations, feedback, and resource support amplify their impact on teacher motivation and school-wide efficacy. This augments Barth's (1990) statement that trust in teachers' professional competencies increases a positive school climate, where educators feel valued and empowered

Conclusion

This study set out to investigate the impact of instructional leadership on teacher self-efficacy in the public sector secondary schools the province of KP, Pakistan. It also aimed to determine the positive moderating effect of a teacher's qualification and years of experience on these relationships. To address these research questions and their associated hypothesis, data from a wide range of institutions were collected and analyzed using Structural Equation Modeling (SEM) through SPSS AMOS, a robust and widely accepted research methodology. The thesis first established the validity and reliability of the research using CFA on the data collected through a composite questionnaire based on the IMRS and TSE scales. In line with the initial objectives and their associated hypotheses, both the scales of IMRS and TSE proved valid and reliable in the research's social-cultural context. These findings have significant practical implications for the field of instructional leadership and teacher self-efficacy. Later, the impact of IMRS on TSE and the positive moderation effect of teachers` qualifications and years of experience were determined to address hypotheses three and four, respectively.

Based on the findings given the research questions and their associated hypotheses, this thesis concludes that the role of a school administrator is not primarily focused on implementing efficient educational methods. Instead, their main job lies in constantly adhering to established norms and fostering the introduction of novel emotions and presentations. Therefore, principals should disseminate evidence about their efforts in enhancing student achievement and increasing instructors' performance within the school setting. Consequently, the foremost responsibility of school principals entails ensuring the efficient operation of the educational institution. This is consistent with previous scholarly research (Ronfeldt et al., 2015; Day et al., 2016) that shows that effective school leadership has significantly impacted teacher efficacy, resulting in improved instructional practices and organisational advancement. Consistently, this thesis concludes that instructional leaders are charismatic and knowledgeable

individuals who focus on creating a positive culture. They establish clear guidelines for the school, promote stakeholder participation in its development, and choose the tactics and initiatives that best serve the institution's academic goals.

Additionally, instructional leadership emphasises school principals' focus on the teaching-learning process while avoiding time-consuming managerial and administrative tasks energies teachers and improves their effectiveness. As research suggests, instead of just imprinting, instructional leaders urge instructors to base judgments on data development or student accomplishment (Brewster & Klump, 2005; Stronge et al., 2008). The thesis also concludes that instructional leaders push teachers to employ intelligent educational technologies to raise the standard of instruction and anticipate that they will have excellent classroom management abilities.

Therefore, the thesis further concludes that the goals of instructional leadership are to advance influential teachers, progress the teaching profession, and enhance deep learning in classrooms. Instructional leaders provide a healthy learning environment, oversee the curriculum, and communicate the school's mission. They collaborate closely with teachers as instructional leaders and use various techniques to give feedback on student performance in the classroom. Specifically, they concentrate on how educators cultivate the teaching-learning process. Therefore, this research also acknowledges that the effectiveness of instructional leadership depends on how teachers' activities affect students' learning. The thesis also concludes that the primary feature that sets instructional leadership apart from other leadership models is its emphasis on teaching and learning activities. Among the duties of instructional leadership are overseeing the curriculum and instruction, keeping an eye on and rating both teachers and students, identifying areas of learning and teaching deficiency, and creating remedial plans. The author concludes that instructional leadership techniques have a good impact on school climate and that student progress is significantly impacted by principal and teacher competency. Put another way, the impact of instructional leadership behaviours on teachers' self-efficacy and competitiveness significantly affects teacher effectiveness. Therefore, instructional leaders significantly contribute to teachers' professional competence and efficacy, which leads to the school’s overall effectiveness in student success.

Theoretical implication

These outcomes contribute to the study an in-depth understanding that when school leaders apply leadership techniques considering teaching and learning, they enhance the overall development of a school climate as well as teachers' performance. The outcomes of the study integrate with previous academic work grounded in the Social Theory advances by Bandura (1977) and the instructional leadership theory (Hallinger, 2008). By concentrating on the qualities of instructional leadership, the study will give an important contribution to teachers, school leaders, administrators, and policymakers. School administrators consistently contribute to the teacher`s professional development to adjust to school goals of instructional improvement (Bush et al., 2022). The principal, through formative assessment and proper feedback, enhances the efficacy of teachers (Goldhaber et al., 2023)

Practical implications

The outcome of this research work proposed real-life effects for school leaders, policymakers, and teacher educators to enhance instructional leadership and teacher self-efficacy. School leaders should prioritise teacher advancement through continuous professional training, emphasising the urgency of this need, foster a supportive environment by encouraging collaboration and providing constructive feedback, and ensure teachers have accessibility to required resources to improve instructional quality. Policymakers must fund leadership and professional development programs that align with school improvement goals and promote evidence-based instructional practices. Teacher educators should integrate instructional leadership and self-efficacy training into preparation programs to equip future educators with the skills to lead and inspire. Limitations The current research is conducted in pubic sector secondary-level schools in four districts of Khyber Pakhtunkhwa, Pakistan: Peshawar, Mardan, Kohat, and Malakand. The findings might be specific to the particular schools or districts included in the study and might not be applicable to different types of schools or diverse educational contexts.

Limitations

This study was conducted in public sector schools in the province of Khyber Pakhtunkhwa, Pakistan. The district included for the study is from Centre Peshawar and Mardan, from south Kohat, and from north Malakand district.

References

Ahn, J., & Bowers, A. J. (2024). Do teacher beliefs mediate leadership and teacher behaviors? Testing teacher self-efficacy's mediation role between leadership for learning and teacher outcomes. *Journal of Educational Administration*, *62*(2), 197-222.

Alanoglu, M. (2022). The role of instructional leadership in increasing teacher self-efficacy: A meta-analytic review. *Asia Pacific Education Review*, *23*(2), 233-244.

Allison, P. D. (1999). Logistic regression. *Using the SAS system*, *3*.

Anderson, J. C., Gerbing, D. W., & Hunter, J. E. (1987). On the assessment of unidimensional measurement: Internal and external consistency, and overall consistency criteria. *Journal of Marketing Research*, *24*(4), 432-437.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215.

Bandura, A. (1994). Self-efficacy.In V.S. Ramachaudran (Ed.), Encyclopedia of Human Behavior (Vol, 4, pp. 71- 81). New York: Academic Press

Bandura, A., Adams, N. E., & Beyer, J. (1977). Cognitive processes mediating behavioral change. *Journal of Personality and Social Psychology*, *35*(3), 125.

Barth, R. S. (1990). *Improving schools from within: Teachers, parents, and principals can make the difference*. Jossey-Bass Inc., Publishers, 350 Sansome Street, San Francisco, CA 94104-1310.

Battersby, S. L., & Cave, A. (2014). Preservice classroom teachers' preconceived attitudes, confidence, beliefs, and self-efficacy toward integrating music in the elementary curriculum. *Update: Applications of Research in Music Education*, *32*(2), 52-59.

Bellibaş, M. Ş., Gümüş, S., &Kılınç, A. Ç. (2020). Principals supporting teacher leadership: The effects of learning-centred leadership on teacher leadership practices with the mediating role of teacher agency. *European Journal of Education*, 55(2), 200-216.

Bluman, A. G. (2009). Elementary Statistics. A step-by-step approach. (7th edition). USA: McGraw-Hill.

Brinson, D., & Steiner, L. (2007). Building Collective Efficacy: How Leaders Inspire Teachers to Achieve. Issue Brief. *Center for comprehensive school reform and improvement*.

Bush, T., Fadare, M., Chirimambowa, T., Enukorah, E., Musa, D., Nur, H., ... & Shipota, M. (2022). Instructional leadership in sub-Saharan Africa: policy and practice. *International Journal of Educational Management*, *36*(1), 14-31.

Byrne, B. M. (2004). Testing for multigroup invariance using AMOS graphics: A road less traveled. *Structural equation modeling*, *11*(2), 272-300.

Byrne, B. M., Shavelson, R. J., & Muthén, B. (1989). Testing for the equivalence of factor covariance and mean structures: the issue of partial measurement invariance. *Psychological bulletin*, *105*(3), 456.

Cansoy, R., & Parlar, H. (2018). Examining the relationship between school principals' instructional leadership behaviors, Self-efficacy, and collective teacher efficacy. *International Journal of Educational Management*, *32*(4), 550-567.

Cohen, E. G., & Miller, R. H. (1980). Coordination and control of instruction in schools. *Pacific Sociological Review*, *23*(4), 446-473.

Daniel, L. G. (1998). Statistical significance testing: A historical overview of misuse and misinterpretation with implications for the editorial policies of educational journals. *Research in the Schools*, *5*(2), 23-32.

Day, C., Gu, Q., & Sammons, P. (2016). The impact of leadership on student outcomes: How successful school leaders use transformational and instructional strategies to make a difference. *Educational administration quarterly*, *52*(2), 221-258.

Dutta, V., & Sahney, S. (2022). Relation of principal instructional leadership, school climate, teacher job performance and student achievement. *Journal of Educational Administration*, *60*(2), 148-166.

Fullan, M. (2007). Change theory as a force for school improvement. In *Intelligent Leadership: Constructs for Thinking Education Leaders* (pp. 27-39). Dordrecht: Springer Netherlands.

Goddard, R. D., Hoy, W. K., & Hoy, A. W. (2004). Collective efficacy beliefs: Theoretical developments, empirical evidence, and future directions. *Educational Researcher*, *33*(3), 3-13.

Goddard, R., Goddard, Y., Sook Kim, E., & Miller, R. (2015). A theoretical and empirical analysis of the roles of instructional leadership, teacher collaboration, and collective efficacy beliefs in support of student learning. *American Journal of Education*, *121*(4), 501-530.

Goldhaber, D., Hanushek, E., Kane, T., & Wyckoff, J. (2023). Teacher labor market, teaching effectiveness and the implications for teacher compensation. *Policy memo to the Virginia Senate Bill*, *1215*, 2024-01.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). Multivariate Data Analysis. 5th Edn Prentice Hall International. *Upper Saddle River, NJ*.

Hallinger, P. (1982). Instructional management rating scale: Resource manual. *Bangkok: Mahidol University*.

Hallinger, P. (2008, April). Methodologies for studying school leadership: A review of 25 years of research using the principal instructional management rating scale. In *annual meeting of the American Educational Research Association, New York* (p. 48).

Hallinger, P. (2011). Leadership for learning: Lessons from 40 years of empirical research. *Journal of Educational Administration*, *49*(2), 125-142.

Hallinger, P. (2018). Bringing context out of the shadows of leadership. *Educational management administration & leadership*, *46*(1), 5-24.

Hallinger, P., & Bryant, D. (2013). Mapping the terrain of educational leadership and management in East Asia. *Journal of Educational Administration*, 51(5), 618-637.

Hallinger, P., & Heck, R. H. (2010). Collaborative leadership and school improvement: Understanding the impact on school capacity and student learning. School Leadership and Management, 30(2), 95–110.

Hallinger, P., & Murphy, J. (1985). Assessing the instructional management behavior of principals. *The elementary school journal*, *86*(2), 217-247.

Hallinger, P., Hosseingholizadeh, R., Hashemi, N., & Kouhsari, M. (2018). Do beliefs make a difference? Exploring how principal self-efficacy and instructional leadership impact teacher efficacy and commitment in Iran. *Educational Management Administration & Leadership*, *46*(5), 800-819.

Hallinger, P., Wang, W. C., & Hallinger, P. (2015). The evolution of instructional leadership. *Assessing instructional leadership with the principal instructional management rating scale*, 1-23.

Hallinger, P., Wang, W. C., & Hallinger, P. (2015). The evolution of instructional leadership. *Assessing instructional leadership with the Instructional management Rating Scale*, 1-23.

Hallinger, P., Wang, W. C., Chen, C. W., & Liare, D. (2015). *Assessing instructional leadership with the principal instructional management rating scale*. Cham: Springer International Publishing.

Harris, E. S. (2002). *The relationship between principals' instructional leadership skills and the academic achievement of high-poverty students*. University of South Carolina

Heck, R. H., & Hallinger, P. (2014). Modeling the longitudinal effects of school leadership on teaching and learning. *Journal of educational administration*, *52*(5), 653-681.

Hendrick, T. A., Fischer, A. R., Tobi, H., & Frewer, L. J. (2013). Self-reported attitude scales: current practice in adequate assessment of reliability, validity, and dimensionality. *Journal of Applied Social Psychology*, 43(7), 1538-1552.

Jöreskog, K. G., & Sörbom, D. (1996). *LISREL 8: User's reference guide*. Scientific Software International.

Karacabey, M. F., Bellibaş, M. Ş., & Adams, D. (2022). Principal leadership and teacher professional learning in Turkish schools: Examining the mediating effects of collective teacher efficacy and teacher trust. *Educational studies*, *48*(2), 253-272.

Karakose, T., Kardas, A., Kanadlı, S., Tülübaş, T., & Yildirim, B. (2024). How collective efficacy mediates the association between principal instructional leadership and teacher self-efficacy: Findings from a meta-analytic structural equation modeling (MASEM) study. *Behavioral Sciences*, *14*(2), 85.

Khun-Inkeeree, H., Mahmood, M. H. H., Haji-Mohd-Noor, S. S., Kasa, M. D., Yaakob, M. M., Omar-Fauzee, M. S., & Sofian, F. R. M. (2020). Increasing teachers' self-efficacy through regular teaching and learning supervision. *Universal Journal of Educational Research*.

Klassen, R. M., & Chiu, M. M. (2011). The occupational commitment and intention to quit of practicing and pre-service teachers: Influence of self-efficacy, job stress, and teaching context. *Contemporary educational psychology*, *36*(2), 114-129.

Leithwood, K. (2005). Understanding successful principal leadership: Progress on a broken front. *Journal of educational administration*, *43*(6), 619-629.

Leithwood, K., Anderson, S., Mascall, B., & Strauss, T. (2010). School leaders' influences on student learning: The four paths. *The principles of educational leadership and management*, *2*, 13-30.

Leithwood, K., Harris, A., & Hopkins, D. (2020). Seven strong claims about successful school leadership revisited. *School leadership & management*, *40*(1), 5-22.

Liu, S., & Hallinger, P. (2018). Instructional leadership, Self-efficacy, and teacher professional learning in China: Testing a mediated-effects model. *Educational Edministration Quarterly*, *54*(4), 501-528.

Liu, S., Hallinger, P., & Feng, D. (2016). Learning-centered leadership and teacher learning in China: Does trust matter?. *Journal of Educational Administration*, *54*(6), 661-682.

Liu, Y., Bellibaş, M. Ş., & Gümüş, S. (2021). The effect of instructional leadership and distributed leadership on Self-efficacy and job satisfaction: Mediating roles of supportive school culture and teacher collaboration. *Educational Management Administration & Leadership*, *49*(3), 430-453.

Ma, X., & Marion, R. (2021). Exploring how instructional leadership affects teacher efficacy: A multilevel analysis. *Educational Management Administration & Leadership*, *49*(1), 188-207.

May, H., & Supovitz, J. A. (2011). The scope of principal efforts to improve instruction. *Educational Administration Quarterly*, *47*(2), 332-352.

McFarland, G. S. (2014). Secondary teachers' perceptions of principals' instructional leadership behaviors on self-efficacy for teachers of remedial students (Ed.D.). Available from ProQuest Dissertations & Theses Global. (1727140680).

Murphy, J. (1988). Methodological, measurement, and conceptual problems in the study of instructional leadership*. Educational Evaluation and Policy Analysis*, 10(2), 117-139.

Niemted, W. (2020). The impact of instructional leadership on Indonesian elementary teacher efficacy. Ilkogretim Online, 19(4).

Pearce, M. L. (2017). The Effects of instructional leadership on teacher efficacy. Doctor of Education in Educational Leadership for Learning Dissertations

Piyaman, P., Hallinger, P., &Viseshsiri, P. (2017). Addressing the achievement gap: Exploring principal leadership and teacher professional learning in urban and rural primary schools in Thailand. *Journal of Educational Administration*, *55*(6), 717-734.

Robinson, M. L. (2020). *Instructional Leadership of Elementary School Principals regarding Proficiency in Mathematics*. Walden University.

Ronfeldt, M., Farmer, S. O., McQueen, K., & Grissom, J. A. (2015). Teacher collaboration in instructional teams and student achievement. *American educational research journal*, *52*(3), 475-514.

Salazar, W. H. (2014). The Relationship among Instructional leadership, collective teacher efficacy and student academic achievement in appalachia Eastern Kentucky High Schools. Theses and Dissertations. Paper 314

Sallee, A. M. (2014). Building meaningful relationships and enhancing teacher efficacy: A study of the quality of the leader follower relationship and its impact on teacher efficacy (Ed.D.). Available from ProQuest Dissertations & Theses Global. (1626409958).

Siriparp, T., Buasuwan, P., & Nanthachai, S. (2022). The effects of principal instructional leadership, collective teacher efficacy and teacher role on teacher self-efficacy: A moderated mediation examination. *Kasetsart Journal of Social Sciences*, *43*(2), 353-360.

Tahira, I., & Fatima, N. (2023). Effect of principal's instructional leadership practices on teachers' professional development: A cross-sectional study of secondary school level from selected areas of Lahore, Punjab, Pakistan. *International Journal of Science and Research Archive*, *10*(2), 590-606.

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*(7), 783-805.

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and teacher education*, *17*(7), 783-805.

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and teacher education*, *17*(7), 783-805.

Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of educational research*, *68*(2), 202-248.

Xin, Z., & Tahir, S. B. (2024). Effect of Distributed and Instructional Leadership of Chinese School Principals on the Job Satisfaction of Teachers: A Conceptual Paper. *South Asian Journal of Social Sciences & Humanities*, *5*(4).

Zee, M., & Koomen, H. M. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational research*, *86*(4), 981-1015.

Zheng, Q., Li, L., Chen, H., & Loeb, S. (2017). What aspects of principal leadership are most highly correlated with school outcomes in China?. *Educational Administration Quarterly*, *53*(3), 409-447.