

EXPLORING THE ROLE OF TEACHER AUTONOMY IN ENHANCING INSTRUCTIONAL INNOVATION IN MIDDLE SCHOOLS

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ABSTRACT

This study explores the role of teacher autonomy in enhancing instructional innovation among middle school teachers in Kohat District, Pakistan. Using a quantitative, descriptive-correlational research design, data were collected from 141 male teachers through a structured questionnaire measuring teacher autonomy and instructional innovation. Descriptive statistics, Pearson correlation, and linear regression analyses were conducted to examine the relationship between the variables. The results revealed a moderate to high level of perceived teacher autonomy and instructional innovation, with a strong positive correlation between them ($r = .68, p < .01$). Regression analysis indicated that teacher autonomy significantly predicts instructional innovation, explaining 46% of the variance in innovative teaching practices. These findings suggest that empowering teachers with professional freedom, supported by collaborative leadership and professional development, can foster creativity, adaptability, and improved instructional practices. The study underscores the importance of policy reforms and school-level strategies to enhance teacher autonomy and promote innovative teaching in middle schools.

Keywords: Teacher Autonomy, Instructional Innovation, Middle School

INTRODUCTION

Teacher autonomy has increasingly been recognized as a vital element in improving the quality of teaching and learning in schools. It refers to the professional freedom teachers have to make decisions related to instructional methods, classroom management, assessment practices, and curriculum adaptation. When teachers are entrusted with decision-making authority, they tend to demonstrate higher levels of professional commitment, motivation, and ownership of their work. Such autonomy empowers teachers to respond effectively to students' diverse learning needs, particularly in middle schools where

learners experience rapid cognitive, emotional, and social development (Ingersoll & Merrill, 2017; OECD, 2019).

Middle schools occupy a crucial position in the education system as they serve as a bridge between primary and secondary education. At this stage, students require engaging and innovative instructional approaches to maintain motivation and support deeper learning. Instructional innovation involves the use of new teaching strategies, creative pedagogical practices, and flexible learning environments that promote critical thinking and problem-solving skills.

Teachers who enjoy greater autonomy are more likely to experiment with innovative instructional practices such as project-based learning, collaborative learning, and technology-integrated instruction, as they feel trusted and professionally valued (Fullan, 2016; Darling-Hammond et al., 2020).

Research suggests that teacher autonomy plays a significant role in fostering instructional innovation by encouraging risk-taking and professional experimentation. In schools where teachers are restricted by rigid policies and centralized control, innovation is often limited, as teachers may fear failure or administrative consequences. Conversely, autonomy allows teachers to adapt instructional strategies based on classroom realities, student feedback, and contextual demands. Studies have shown that autonomous teachers demonstrate higher levels of creativity and instructional adaptability, which directly contribute to improved classroom practices and student engagement (Ryan & Deci, 2017; Robinson, 2018).

However, teacher autonomy alone is not sufficient to ensure sustained instructional innovation. Its effectiveness depends on supportive school leadership, collaborative school culture, and access to professional development opportunities. School leaders play a crucial role in creating environments where autonomy is balanced with guidance, accountability, and shared goals. When autonomy is supported by constructive feedback and collegial collaboration, teachers are more likely to implement innovative practices confidently and consistently, leading to long-term instructional improvement (Leithwood et al., 2020; Harris & Jones, 2019).

Given the growing emphasis on innovation in education, exploring the role of teacher autonomy in middle schools is both timely and necessary. Understanding how autonomy influences teachers' instructional choices can provide valuable insights for policymakers, school leaders, and educators seeking to improve teaching quality. This study aims to examine the relationship between teacher autonomy and instructional innovation in middle schools, with the goal of identifying practices that empower teachers and

enhance learning experiences for students (OECD, 2021; Hargreaves & O'Connor, 2018).

In Pakistan, particularly within public sector middle schools, instructional practices are often shaped by centralized curricula, examination-driven systems, and hierarchical administrative structures. These factors can limit teachers' professional autonomy and restrict their ability to adopt innovative instructional approaches. Many teachers are expected to strictly follow prescribed textbooks and lesson plans, leaving little room for pedagogical experimentation or adaptation to students' diverse learning needs. Research in the Pakistani education context indicates that excessive administrative control and limited decision-making authority can negatively affect teachers' motivation, creativity, and instructional effectiveness, thereby constraining classroom innovation (Halai, 2017; Khan & Iqbal, 2021).

Despite these challenges, recent educational reforms and policy initiatives in Pakistan have begun to emphasize teacher empowerment, professional development, and learner-centered instruction. National education policies and donor-supported programs increasingly recognize the importance of granting teachers greater autonomy to improve instructional quality and student engagement. In middle schools, where students face critical academic and developmental transitions, teacher autonomy can play a transformative role by enabling the use of interactive teaching strategies, formative assessment, and contextualized learning activities. Exploring teacher autonomy in the Pakistani middle school context is therefore essential for identifying practical pathways to enhance instructional innovation and strengthen overall educational outcomes (Government of Pakistan, 2017; UNESCO, 2020).

Previous research conducted in Pakistan has largely concentrated on teacher autonomy within primary education or higher education institutions, while empirical investigations at the middle school level remain limited. Moreover, there is a noticeable absence of region-specific studies that examine the relationship between teacher autonomy and instructional innovation in the Kohat District. This lack of localized empirical evidence restricts a comprehensive understanding of how autonomy

influences teaching practices in middle schools. To address this gap, the present study undertakes a quantitative investigation focused specifically on middle school teachers in this context. While international research consistently highlights the positive role of teacher autonomy in promoting instructional innovation, middle school teachers in Pakistan—particularly in the Kohat District—often work within rigid administrative and curricular frameworks that may limit innovative teaching practices. The scarcity of empirical data examining the influence of teacher autonomy on instructional methods in this localized setting further challenges the formulation of context-relevant educational policies. Therefore, this study seeks to examine the relationship between teacher autonomy and instructional innovation among middle school teachers through a quantitative approach. Following objectives are made to achieve:-

1. To assess the perceived level of autonomy among middle school teachers in Kohat.
2. To measure the extent of instructional innovation practiced.
3. To determine the relationship between teacher autonomy and instructional innovation.

LITERATURE REVIEW

Concept of Teacher Autonomy in Education

Teacher autonomy refers to the extent to which teachers are empowered to make independent decisions regarding instructional planning, classroom management, assessment strategies, and curriculum adaptation. It is widely regarded as a core component of teacher professionalism, as it reflects trust in teachers' expertise and judgment. Scholars argue that autonomy enhances teachers' sense of responsibility and ownership, which in turn positively influences instructional quality and classroom effectiveness (Ingersoll & Merrill, 2017; OECD, 2019).

From a theoretical perspective, teacher autonomy is closely linked with self-determination theory, which emphasizes autonomy as a fundamental psychological need that supports motivation and engagement. When teachers experience autonomy, they are more likely to demonstrate intrinsic motivation, persistence, and professional creativity. This motivational aspect is particularly

significant in middle schools, where teachers face diverse student needs and complex instructional demands (Ryan & Deci, 2017; Hargreaves & O'Connor, 2018).

However, the degree of teacher autonomy varies across education systems and is often influenced by governance structures, accountability mechanisms, and leadership styles. In highly centralized systems, teachers may experience restricted autonomy due to rigid curricula and standardized assessments. Such limitations can reduce teachers' willingness to experiment with new instructional approaches, highlighting the importance of balancing accountability with professional freedom (Fullan, 2016; Leithwood et al., 2020).

Instructional Innovation in Middle School Education

Instructional innovation involves the adoption of new pedagogical strategies, teaching methods, and learning tools designed to improve student engagement and learning outcomes. In middle school settings, innovation is particularly crucial as students transition from basic learning to higher-order thinking skills. Innovative instruction supports inquiry-based learning, collaboration, and problem-solving, which are essential for adolescent learners (Darling-Hammond et al., 2020; Robinson, 2018).

Research suggests that instructional innovation is not limited to the use of technology but also includes creative lesson design, formative assessment practices, and learner-centered approaches. Middle school teachers who implement innovative strategies are better able to address students' cognitive and emotional needs, leading to improved motivation and academic performance. Such innovation requires flexibility and professional discretion, which are closely associated with teacher autonomy (Harris & Jones, 2019; OECD, 2021).

Despite its importance, instructional innovation often faces barriers such as time constraints, lack of resources, and rigid administrative expectations. Teachers may be hesitant to adopt innovative practices if they fear negative evaluations or lack institutional support. Studies indicate that schools that encourage experimentation and provide professional support are more likely to sustain innovative teaching

practices over time (Fullan, 2016; Leithwood et al., 2020).

Relationship between Teacher Autonomy and Instructional Innovation

A growing body of international research highlights a strong relationship between teacher autonomy and instructional innovation. Teachers who are granted greater decision-making authority are more inclined to explore creative instructional strategies and adapt teaching methods to suit classroom contexts. Autonomy fosters a sense of professional confidence, which encourages teachers to take instructional risks and implement innovative practices (Ryan & Deci, 2017; Darling-Hammond et al., 2020).

Empirical studies further suggest that teacher autonomy serves as a mediating factor between school leadership and instructional innovation. Supportive leadership that promotes autonomy can enhance teachers' innovative behavior by creating a culture of trust and collaboration. In such environments, teachers are more willing to share ideas, reflect on practices, and engage in continuous instructional improvement (Harris & Jones, 2019; Hargreaves & O'Connor, 2018).

However, the relationship between autonomy and innovation is context-dependent and influenced by systemic and cultural factors. In developing countries, including Pakistan, centralized control and examination-oriented systems often limit teacher autonomy, reducing opportunities for innovation. This underscores the need for context-specific research to understand how autonomy can be effectively leveraged to enhance instructional innovation in middle schools (Halai, 2017; Khan & Iqbal, 2021).

Conceptual Model

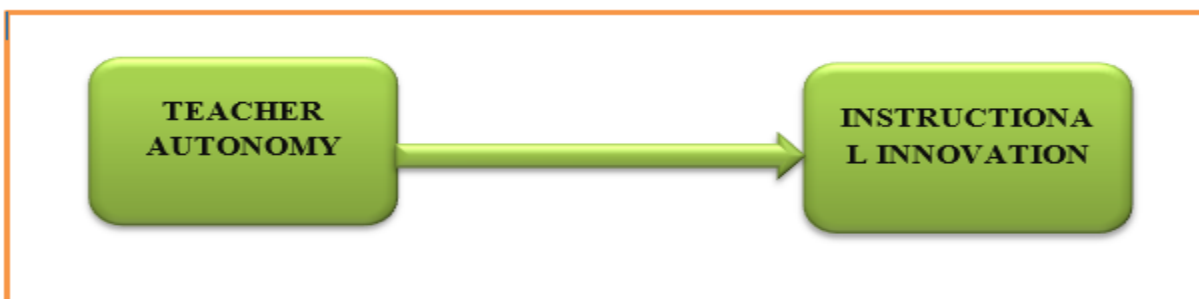


Figure 1: Conceptual Model

Teacher Autonomy and Instructional Innovation in the Pakistani Context

In Pakistan, the education system is largely centralized, with prescribed curricula, standardized textbooks, and examination-driven instructional practices. These structural characteristics often limit teachers' autonomy, particularly at the middle school level. Studies conducted in Pakistani public schools indicate that teachers frequently rely on traditional teaching methods due to limited decision-making authority and administrative pressures (Halai, 2017; Government of Pakistan, 2017).

Despite these constraints, recent policy reforms have emphasized improving teaching quality through professional development and learner-centered approaches. National education policies increasingly recognize the role of empowered teachers in achieving meaningful educational reform. However, the practical implementation of teacher autonomy remains inconsistent, especially in rural and semi-urban districts such as Kohat, where empirical research is limited (UNESCO, 2020; Khan & Iqbal, 2021).

The scarcity of quantitative studies examining the relationship between teacher autonomy and instructional innovation in Pakistani middle schools highlights a significant research gap. Most existing studies focus on primary or higher education levels, leaving middle school contexts underexplored. Addressing this gap is essential for developing evidence-based policies that support teacher empowerment and instructional innovation in Pakistan's middle schools (OECD, 2021; Halai, 2017).

RESEARCH METHODOLOGY

This study adopts a quantitative, descriptive-correlational research design to investigate the relationship between teacher autonomy and instructional innovation among middle school teachers in Kohat District. The quantitative approach is appropriate for measuring variables objectively and examining relationships through statistical analysis. The target population comprises 217 male teachers working in government-run male schools within the district. The focus on male institutions is consistent with the study's defined scope and contextual objectives. To determine a representative sample, Yamane's (1967) formula for finite populations was applied using a margin of error of 0.05, resulting in a sample size of approximately 141 teachers. Accordingly, 141 respondents were selected from the population using suitable sampling techniques to ensure adequate representation. Data for the study were collected through a structured questionnaire consisting of three sections. The first section gathered demographic information, including teaching

experience and school characteristics. The second section measured teacher autonomy using an adapted version of the Teacher Autonomy Scale developed by Pearson and Hall (1993), while the third section assessed instructional innovation through items adapted from Runhaar et al. (2013) and the OECD's Teaching and Learning International Survey (TALIS) framework. All questionnaire items were rated on a five-point Likert scales ranging from strongly disagree to strongly agree. Data analysis involved both descriptive and inferential statistical techniques. The validity of the questionnaire was estimated through Content Validity Ratio (CVR) which revealed that all items were found valid and the reliability of the questionnaire was estimated by .836. Pearson correlation analysis examined the relationship between teacher autonomy and instructional innovation. Additionally, linear regression analysis was conducted to determine the predictive influence of teacher autonomy on instructional innovation, providing a deeper understanding of the relationship between the study variables.

Data Analysis

Table 1

Descriptive Statistics of Teacher Autonomy and Instructional Innovation

Variable	N	Mean	Std. Deviation
Teacher Autonomy	141	3.62	0.54
Instructional Innovation	141	3.58	0.57

Table 1 presents the descriptive statistics of the study variables. The mean score for teacher autonomy ($M = 3.62$, $SD = 0.54$) indicates that teachers generally perceive a moderate to high level of autonomy in their professional roles. Similarly, the mean score for instructional innovation ($M = 3.58$, $SD = 0.57$) suggests that teachers moderately engage in innovative instructional practices. The relatively low standard deviation values indicate consistency in respondents' perceptions across the sample.

Table 2

Pearson Correlation between Teacher Autonomy and Instructional Innovation

Variables	Teacher Autonomy	Instructional Innovation
Teacher Autonomy	1	
Instructional Innovation	.68**	1

Table 2 shows the Pearson correlation analysis between teacher autonomy and instructional innovation. The results reveal a strong, positive, and statistically significant relationship between teacher autonomy and instructional innovation ($r = .68$, $p < .01$). This indicates that as the level of teacher autonomy increases,

instructional innovation also tends to increase. The findings support the assumption that autonomy plays an important role in encouraging innovative teaching practices among middle school teachers.

Table 3
Linear Regression Analysis Predicting Instructional Innovation from Teacher Autonomy

Model	B	Std. Error	β	t	p
(Constant)	1.12	0.28	—	4.00	.000
Teacher Autonomy	0.68	0.06	.68	11.33	.000

Table 4
Model Summary

R	R ²	Adjusted R ²	Std. Error
.68	.46	.45	0.42

Tables 3 and 4 present the results of the linear regression analysis conducted to determine the predictive effect of teacher autonomy on instructional innovation. The model explains 46% of the variance in instructional innovation ($R^2 = .46$), indicating a substantial predictive relationship. Teacher autonomy significantly predicts instructional innovation ($\beta = .68$, $p < .001$), demonstrating that higher levels of autonomy contribute meaningfully to innovative instructional practices. The regression model is statistically significant, confirming that teacher autonomy is a strong predictor of instructional innovation among middle school teachers in Kohat District.

Discussion

The results of this study demonstrate a positive and statistically significant relationship between teacher autonomy and instructional innovation among middle school teachers in Kohat District. Teachers who experienced greater autonomy reported higher engagement in innovative instructional practices. This finding is consistent with international research suggesting that autonomy enables teachers to experiment with new teaching strategies and adapt instruction to students' needs (Ryan & Deci, 2017; Darling-Hammond et al., 2020). Similar results were reported by Runhaar et al. (2013), who found that teachers with higher levels of autonomy were more

likely to introduce creative and innovative practices in their classrooms.

The regression analysis further revealed that teacher autonomy significantly predicts instructional innovation, indicating that autonomy is not merely associated with innovation but actively contributes to it. This supports self-determination theory, which posits that autonomy enhances intrinsic motivation and professional engagement (Ryan & Deci, 2017).

Empirical studies conducted by Harris and Jones (2019) and Robinson (2018) also confirm that when teachers have decision-making authority over instructional methods and assessment, they demonstrate greater creativity and commitment to instructional improvement. These findings reinforce the argument that autonomy serves as a catalyst for innovative teaching behavior.

In the Pakistani context, the findings align with existing literature highlighting the restrictive nature of centralized education systems. Studies conducted in Pakistan indicate that rigid curricula, standardized assessments, and hierarchical school leadership often limit teachers' professional autonomy, thereby reducing opportunities for innovation (Halai, 2017; Khan & Iqbal, 2021). However, the significant relationship identified in this study suggests that even within constrained systems like Kohat District, enhancing teacher autonomy can positively influence instructional practices. This finding echoes UNESCO (2020), which

emphasizes teacher empowerment as a key factor in improving instructional quality in developing countries.

Furthermore, the results highlight the importance of supportive school leadership in maximizing the impact of teacher autonomy on instructional innovation. Previous research suggests that autonomy is most effective when accompanied by collaborative school cultures, professional development, and constructive feedback (Hargreaves & O'Connor, 2018; Leithwood et al., 2020). Without institutional support, teachers may struggle to sustain innovative practices despite having autonomy. Therefore, the findings of this study support the view that educational reforms in Pakistan should focus not only on granting autonomy but also on creating enabling environments that encourage innovation and professional growth.

Conclusion and Recommendation

This study concludes that teacher autonomy plays a significant and positive role in enhancing instructional innovation among middle school teachers in Kohat District. Teachers who experience higher levels of professional freedom are more likely to adopt creative teaching strategies, adapt instruction to students' needs, and implement innovative classroom practices. The findings highlight that autonomy, when supported by a collaborative school culture and constructive leadership, can substantially improve the quality of teaching and learning. Based on these results, it is recommended that educational policymakers and school administrators in Kohat and similar contexts implement strategies to increase teachers' decision-making authority in curriculum adaptation, teaching methods, and classroom management, thereby fostering a more innovative and student-centered learning environment.

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