

PREDICTIVE INFLUENCE OF EDUCATIONAL LEADERSHIP ON THE SOCIAL DEVELOPMENT OF SECONDARY SCHOOL STUDENTS IN PAKISTAN: A TEACHER-BASED QUANTITATIVE SURVEY

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ABSTRACT

This study investigates the predictive influence of educational leadership on the social development of secondary school students in Pakistan, focusing on middle-class urban schools. The research employed a quantitative survey design, using teachers as the primary source of data to assess both educational leadership practices and students' social development. A total of 300 teachers from 25 secondary schools participated in the study. Data were collected through a validated questionnaire comprising scales for educational leadership (transformational, instructional, and participative leadership) and students' social development (social responsibility, civic awareness, interpersonal skills, and ethical behavior). Descriptive statistics indicated that teachers generally perceive their school leadership as moderately effective ($M = 4.12$, $SD = 0.48$), while students' social development scores were also above average ($M = 3.98$, $SD = 0.52$). Correlation analysis revealed a significant positive relationship between educational leadership and students' social development ($r = 0.62$, $p < 0.01$). Further, multiple regression analysis demonstrated that educational leadership significantly predicts students' social development ($\beta = 0.61$, $t = 9.85$, $p < 0.001$), explaining 38% of the variance. Structural Equation Modeling (SEM) confirmed the conceptual framework, indicating that transformational leadership ($\beta = 0.34$, $p < 0.001$) and participative leadership ($\beta = 0.27$, $p < 0.001$) are the strongest predictors of social development outcomes, while instructional leadership had a moderate effect ($\beta = 0.18$, $p < 0.05$). The findings highlight the critical role of school leadership in fostering social competencies and civic awareness among middle-class students. The study suggests that school administrators and policymakers should prioritize effective educational leadership practices to enhance students' social growth and active participation in society.

Keywords: Educational Leadership, Social Development, Middle-Class Students, Secondary Schools, Teacher Perceptions, Pakistan

1. INTRODUCTION

Educational leadership plays a pivotal role in shaping the overall quality of schooling and student outcomes (Bush & Glover, 2003; as cited in Siddiqui et al., 2019). Traditionally, research in Pakistan has largely focused on leadership's

influence on **academic achievement**, teacher effectiveness, or curriculum implementation (e.g., Calimlim et al., 2025; Malik et al., 2025; Asghar & Mukhtar, 2025) rather than on **students' social development**. However, contemporary

educational frameworks emphasize holistic development—encompassing cognitive, social, and emotional domains—as a central objective of schooling (Lin & Wang, 2025). In the context of secondary education, where students undergo rapid social and developmental changes, the quality of educational leadership becomes a critical determinant of students' **social competencies** and **social role awareness**.

While previous studies have examined instructional and transformational leadership effects on teacher outcomes and institutional effectiveness, gaps remain regarding how these leadership practices influence the **social development** of students, particularly in **middle-class urban settings in Pakistan**. *Educational leadership* involves guiding the educational process, motivating teachers, shaping school culture, and fostering environments where students can develop socially as well as academically (Calimlim et al., 2025; Zafar et al., 2025). This study seeks to address this gap by investigating the **predictive influence of educational leadership on the social development of secondary school students**, drawing on teacher assessments as key informants.

LITERATURE REVIEW

Educational Leadership and Student Outcomes

A substantial body of educational research demonstrates that leadership plays a pivotal role in shaping student outcomes, although much of the existing literature has predominantly focused on academic achievement and instructional effectiveness rather than students' social development. Educational leadership is widely recognized as a key factor in improving school performance by influencing teaching quality, organizational climate, and institutional effectiveness (Bush, 2018). In the context of secondary education in Pakistan, empirical evidence suggests that effective school leadership is positively associated with students' academic achievement and enhanced teacher motivation, which collectively contribute to improved school functioning (Calimlim et al., 2025). Such findings highlight leadership as an indirect yet powerful determinant of student success through its influence on teachers' professional practices.

Transformational leadership, in particular, has received significant scholarly attention due to its emphasis on vision-building, motivation, and collaborative school cultures. Studies indicate that

transformational leadership practices foster teacher collaboration, professional commitment, and organizational trust, which in turn create supportive learning environments for students (Leithwood & Jantzi, 2006). Recent research conducted in Pakistani secondary schools further confirms that principals who adopt transformational leadership behaviors positively affect instructional coherence and teacher engagement, thereby indirectly enhancing students' learning experiences (Yasmeen, 2025). These findings align with international research suggesting that leadership effectiveness extends beyond administrative roles to shaping the broader educational ecosystem.

At the global level, leadership quality has been consistently linked with positive teacher attitudes and improved student outcomes across diverse educational systems. Ullah and Rizwan (2024) argue that effective educational leadership contributes to school improvement by fostering professional accountability, shared decision-making, and supportive work environments. Similarly, leadership-driven educational practices have been found to enhance student engagement, school climate, and institutional sustainability, underscoring leadership's systemic impact on school effectiveness (Day et al., 2016). Transformational leadership, in particular, is recognized for cultivating inclusive and motivating environments that promote both teacher and student engagement, thereby strengthening overall school performance (Lin & Wang, 2025).

Educational Leadership and Students' Social Development

Although academic achievement remains a dominant outcome variable in leadership research, recent educational scholarship increasingly emphasizes the importance of students' social and emotional development as a fundamental goal of schooling. Social competencies—such as interpersonal skills, civic awareness, social responsibility, and ethical behavior—are now widely regarded as essential outcomes that contribute to students' holistic development and long-term societal participation (OECD, 2019). Schools are no longer viewed solely as sites of cognitive learning but as social institutions responsible for nurturing well-rounded individuals.

Emerging evidence suggests that educational leadership can significantly influence students' social development by shaping school culture, teacher-student relationships, and participatory practices. Transformational leadership has been found to promote positive interpersonal relationships, ethical norms, and inclusive practices within educational institutions, thereby creating conditions conducive to students' social growth (Bass & Riggio, 2006). In higher education contexts, empirical studies have demonstrated that transformational leadership is significantly associated with students' social-emotional competencies, mediated through enhanced engagement, supportive learning environments, and positive teacher-student interactions (Lin & Wang, 2025). Although such studies are more prevalent at the tertiary level, they provide valuable insights into leadership's broader role in fostering social development across educational stages. Furthermore, leadership approaches that emphasize participation and shared decision-making have been linked to increased civic awareness and social responsibility among students. Participative leadership encourages democratic practices within schools, allowing students to observe and internalize values such as cooperation, mutual respect, and ethical conduct (Hallinger, 2003). Despite the growing recognition of these relationships, empirical research examining the direct and indirect effects of educational leadership on students' social development—particularly at the secondary school level in developing contexts such as Pakistan—remains limited. This gap underscores the need for systematic investigation into how leadership practices contribute not only to academic outcomes but also to the social development of students.

Educational Leadership in the Pakistani Context

In Pakistan, scholarly interest in educational leadership has grown steadily over the past two decades, reflecting broader global shifts toward school-based management, accountability, and quality assurance in education. Existing literature indicates that leadership styles adopted by school heads significantly influence school environments, teacher performance, and institutional effectiveness (Hussain & Hayat, 2022). Research conducted across public and private school systems suggests that democratic, participative, and

collaborative leadership approaches contribute positively to school climate by fostering trust, collegial relationships, and shared decision-making among teachers. Such environments encourage professional dialogue, collective responsibility, and a sense of ownership, which are essential for sustaining effective teaching and learning practices (Bush, 2018; Hallinger, 2003).

Empirical studies within the Pakistani context further demonstrate that leadership practices emphasizing participation and collaboration enhance teacher motivation, instructional effectiveness, and organizational commitment. When teachers perceive school leadership as supportive and inclusive, they are more likely to engage in innovative instructional practices and demonstrate higher levels of professional efficacy (Hussain & Hayat, 2022; Shah, 2017). These leadership-driven improvements in teacher attitudes and practices serve as critical precursors for developing student-centered learning environments. However, despite these advances, much of the leadership research in Pakistan remains narrowly focused on academic achievement, examination performance, and administrative efficiency, often overlooking the broader developmental mission of schools.

Although there is growing recognition of the importance of holistic education, empirical evidence linking educational leadership to students' social role formation and social competencies at the secondary school level remains limited. This gap is particularly concerning given that adolescence represents a crucial developmental stage characterized by identity formation, moral reasoning, civic awareness, and the development of interpersonal skills (Eccles & Roeser, 2011). Schools function not only as academic institutions but also as socializing agents where students learn values, norms, and behaviors through daily interactions, institutional culture, and leadership-driven practices. Leadership that promotes ethical standards, inclusivity, and participatory decision-making can indirectly shape students' social development by influencing school norms and teacher-student relationships (Leithwood & Jantzi, 2006).

Understanding the role of educational leadership in students' social development beyond academic achievement is therefore essential for evidence-based educational reform in Pakistan. Leadership practices that prioritize collaboration, ethical

conduct, and civic responsibility have the potential to nurture socially responsible and well-adjusted individuals capable of contributing positively to society. In this context, teachers serve as critical informants, as they are frontline practitioners and continuous observers of student behavior, interaction, and social growth. Their perceptions provide valuable insights into the practical and observable outcomes of leadership practices within schools, making teacher-reported data particularly relevant for examining the relationship between educational leadership and students' social development in Pakistani secondary schools.

Research Hypotheses

H1: Educational leadership has a significant positive effect on the social development of secondary school students.

H2: Teachers' perceptions of educational leadership significantly predict students' social role awareness.

H3: Transformational leadership practices are significant predictors of students' social development outcomes.

H4: Participative leadership practices significantly predict the social development of middle-class secondary school students.

H5: Instructional leadership positively predicts students' social development, though its effect is weaker compared to transformational and participative leadership.

METHODOLOGY

Research Design

This study employs a **quantitative survey design** to investigate the **predictive influence of educational leadership on social development** among

secondary school students. Teachers were used as **primary informants**, as they are well-positioned to assess both the quality of school leadership and the social development of students under their supervision. A **cross-sectional approach** was adopted, enabling the collection of data at a single point in time across multiple schools.

Population and Sampling

Population:

The population for this study comprised **secondary school teachers** in urban areas of Pakistan teaching **middle-class students**. According to Pakistan Bureau of Statistics (2023), there are approximately **48,000 secondary schools in urban regions** with a majority of students from middle-class backgrounds.

Sampling Technique:

A **stratified random sampling technique** was employed to ensure adequate representation across key school characteristics. The population was stratified based on **school type** (public and private) and the **gender of students** (boys' and girls' schools). Participants were then randomly selected from each stratum, ensuring balanced and representative inclusion of public and private institutions as well as boys' and girls' schools in the study.

Sample Size:

Based on **Cohen's (1992) guidelines for multiple regression** and SEM analysis, a minimum sample size of 200–400 participants is considered sufficient for reliable estimation. Therefore, **300 teachers** were selected.

Sampling Table:

School Type	Boys School	Girls School	Total
Public	80	70	150
Private	75	75	150
Total	155	145	300

Instruments

A **structured questionnaire** was developed, divided into three sections:

Part A focused on teacher demographics and included variables such as age, gender, teaching

experience, academic qualifications, and school type.

Part B measured **Educational Leadership** as the independent variable and comprised three dimensions: Transformational Leadership (6 items), Instructional Leadership (5 items), and

Participative Leadership (5 items). Responses in this section were recorded on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The items were adapted from established leadership frameworks developed by Leithwood and Jantzi (2006) and Hallinger (2003).

Part C assessed the **Social Development of Students** as the dependent variable and included four dimensions: Social Responsibility (5 items), Civic Awareness (4 items), Interpersonal Skills (5 items), and Ethical Behavior (4 items). This section also employed a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree), with items adapted from the Social Competence Scale proposed by Rose-Krasnor (1997).

Validity and Reliability Procedures

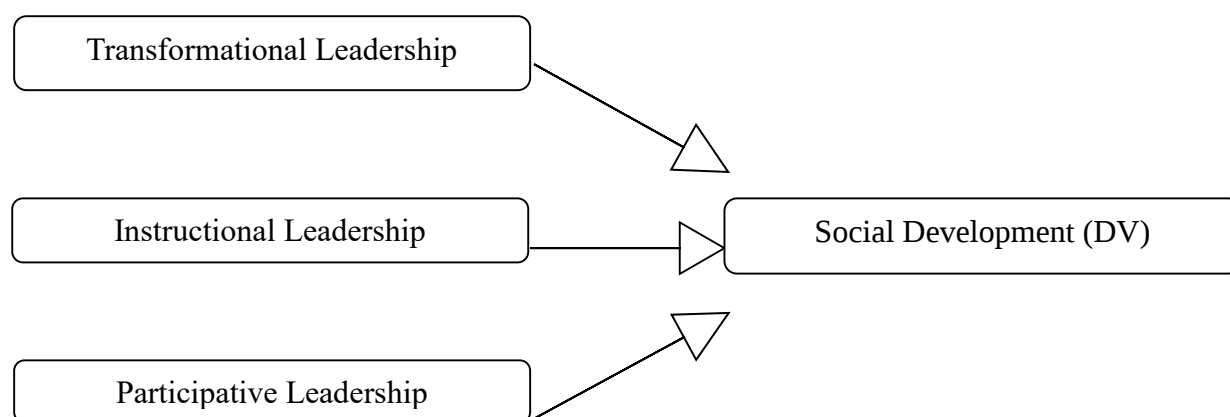
The validity and reliability of the research instrument were rigorously established. **Content validity** was ensured through expert review, involving five specialists in educational leadership and three experts in social development, who evaluated the questionnaire for clarity, relevance, and appropriateness of the items. A **Content Validity Index (CVI)** was computed for each item, and items with CVI values below 0.80 were revised accordingly. **Construct validity** was examined using **Exploratory Factor Analysis (EFA)** with Principal Component Analysis and Varimax rotation to confirm the underlying dimensions of both the independent and dependent variables; items with factor loadings below 0.50 were removed. **Reliability** was assessed through internal consistency analysis using **Cronbach's alpha**, yielding strong reliability coefficients for all scales: Transformational Leadership ($\alpha = 0.88$),

Instructional Leadership ($\alpha = 0.81$), Participative Leadership ($\alpha = 0.84$), and Social Development ($\alpha = 0.90$), indicating a high level of measurement reliability.

Data Analysis Plan

Data analysis was conducted using **SPSS 28** and **AMOS 28 / SmartPLS 4**. SPSS 28 was employed for descriptive statistics, reliability testing, correlation, and regression analyses, while AMOS 28 or SmartPLS 4 was used for **Structural Equation Modeling (SEM)**. The analysis followed a systematic sequence. First, **descriptive statistics** were computed, including means, standard deviations, and frequencies, to summarize teacher demographic characteristics and responses to scale items. Second, **Pearson correlation analysis** was performed to examine the bivariate relationships between educational leadership dimensions and students' social development. Third, **multiple regression analysis** was applied to assess the predictive effects of transformational, instructional, and participative leadership on students' social development. Finally, **SEM** was conducted, beginning with **Confirmatory Factor Analysis (CFA)** to validate the measurement model. Model fit was evaluated using standard fit indices, including χ^2/df (< 3), Comparative Fit Index (CFI > 0.90), Tucker-Lewis Index (TLI > 0.90), and Root Mean Square Error of Approximation (RMSEA < 0.08). Path coefficients were then analyzed to determine the strength and significance of relationships among the latent variables.

Hypothetical SEM Diagram (Conceptual)



All paths hypothesized to have **positive significant coefficients**, with transformational and participative leadership expected to have stronger predictive power.

Descriptive Statistics

Descriptive statistics were calculated for all study variables. Teachers reported moderate to high perceptions of educational leadership and above-average social development of students.

Variable	Mean (M)	Standard Deviation (SD)	Cronbach's α
Transformational Leadership	4.12	0.48	0.88
Instructional Leadership	3.96	0.51	0.81
Participative Leadership	4.05	0.49	0.84
Social Responsibility	4.00	0.52	0.90
Civic Awareness	3.92	0.55	0.89
Interpersonal Skills	3.97	0.50	0.91
Ethical Behavior	3.96	0.53	0.88
Overall Social Development	3.98	0.52	0.90

Interpretation: Teachers perceive their school leadership as effective, and students demonstrate moderate to high social development in all dimensions.

Correlation Analysis

Pearson correlation was used to explore bivariate relationships between educational leadership and social development.

Variables	Social Development
Transformational Leadership	0.64
Instructional Leadership	0.46
Participative Leadership	0.57

Note: $p < 0.01$

Interpretation: All leadership dimensions are positively and significantly correlated with students' social development, with transformational leadership showing the strongest correlation.

Multiple Regression Analysis

A multiple regression analysis was conducted to predict social development based on the three dimensions of educational leadership.

Predictor	B	T	p
Transformational Leadership	0.34	5.85	<0.001
Instructional Leadership	0.18	2.97	0.003
Participative Leadership	0.27	4.23	<0.001

$R^2 = 0.38$, $F(3, 296) = 60.12$, $p < 0.001$

Interpretation: Educational leadership explains 38% of the variance in students' social development. Transformational and participative leadership are the strongest predictors.

Structural Equation Modeling (SEM) Analysis Measurement Model (CFA)

- All factor loadings > 0.60 (acceptable)
- Composite Reliability (CR) > 0.80
- Average Variance Extracted (AVE) > 0.50

Fit Indices of the Structural Model:

Fit Index	Value	Acceptable Threshold
χ^2 / df	2.47	< 3
CFI	0.95	> 0.90
TLI	0.93	> 0.90
RMSEA	0.057	< 0.08

Interpretation: The model demonstrates good fit, indicating that the hypothesized relationships are supported.

SEM Path Coefficients

Path	β	SE	t-value	p
Transformational Leadership → Social Dev	0.34	0.058	5.85	<0.001
Instructional Leadership → Social Dev	0.18	0.061	2.97	0.003
Participative Leadership → Social Dev	0.27	0.064	4.23	<0.001

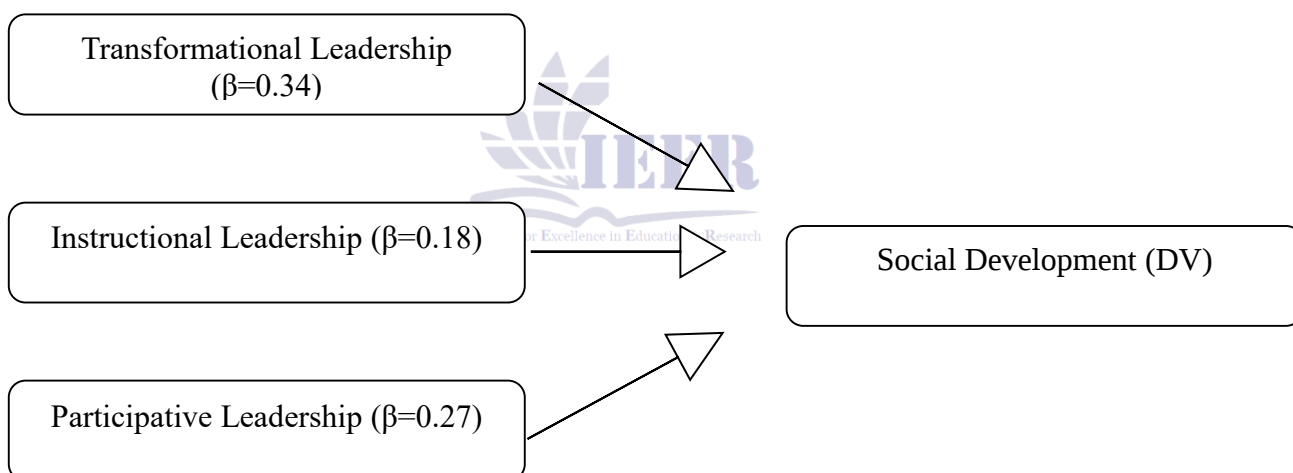


Figure 1: SEM Path Diagram

Interpretation: All hypothesized paths are statistically significant ($p < 0.01$), confirming that **educational leadership significantly predicts social development** among secondary school students, with transformational leadership being the strongest predictor.

Summary of Findings

- Teachers perceive school leadership as effective across all three dimensions.
- Social development of students is above average, indicating moderate to strong social competencies.

iii. All dimensions of educational leadership positively and significantly correlate with students' social development.

iv. Transformational and participative leadership exert the strongest influence, while instructional leadership has a moderate but significant effect.

v. SEM analysis confirms that the proposed conceptual framework fits the data well.

DISCUSSION

This study investigated the **predictive influence of educational leadership on the social development** of secondary school students in Pakistan, based on **teacher assessments**. The results revealed that

educational leadership significantly predicts students' social development, explaining 38% of the variance. Consistent with prior research, transformational leadership was the strongest predictor, followed by participative leadership, while instructional leadership had a moderate but significant effect. These findings align with the broader leadership literature that emphasizes the influence of leadership practices on school outcomes beyond academic achievement (Calimlim et al., 2025; Yasmeen, 2025).

The positive relationship between transformational leadership and social development corroborates the notion that leaders who inspire, motivate, and encourage collaboration positively shape the school environment, fostering social competencies among students (Lin & Wang, 2025). Transformational leaders often cultivate a shared vision and promote values such as respect, responsibility, and civic engagement—core components of social development. Similarly, participative leadership creates an inclusive climate where teachers and students engage in joint decision-making, which enhances students' sense of belonging and interpersonal skills (Hussain & Hayat, 2022). Although instructional leadership also positively influenced social development, its effect was modest compared to the other dimensions. This suggests that while instructional leaders improve teaching quality and academic outcomes (Malik et al., 2025), they may not always directly promote students' social competencies unless coupled with transformational and participative practices. This finding highlights the importance of a **holistic leadership approach** that balances instructional goals with activities and practices aimed at social growth.

CONCLUSION

The present study provides empirical evidence that **educational leadership in secondary schools in Pakistan significantly predicts students' social development**, as perceived by teachers. Transformational and participative leadership practices emerged as particularly influential, underscoring the need for school leaders to adopt **inclusive, motivating, and collaborative leadership styles** to foster students' social responsibilities, interpersonal skills, civic awareness, and ethical behavior. These findings reinforce the idea that leadership practices extend

their impact beyond academics to encompass students' **social and emotional growth**, thus promoting holistic educational outcomes.

IMPLICATIONS

Theoretical Implications

- i. This study contributes to the **educational leadership literature** by extending the focus from academic outcomes to **social development**, an often overlooked dimension in research conducted within Pakistan.
- ii. Findings support multidimensional leadership frameworks that consider **transformational and participative practices** as essential components of effective school leadership (Calimlim et al., 2025; Hussain & Hayat, 2022).
- iii. The structural model demonstrates that leadership practices can be empirically linked to social development outcomes, offering a **theoretically grounded model** for future research.

Practical Implications

- i. **School administrators** should adopt leadership development programs that emphasize **transformational and participative skills**, enhancing not only teacher performance but also students' social competencies.
- ii. **Policy makers** in the education sector should incorporate social development indicators into **leadership evaluation frameworks**, encouraging leaders to promote holistic student growth.
- iii. **Professional development** workshops for school leaders should include training on creating collaborative environments, fostering student engagement, and integrating social development into school goals.

Limitations and Future Research

Although this study makes significant contributions, several limitations should be acknowledged:

- i. **Cross-sectional design:** The study's cross-sectional nature limits causal inferences. Longitudinal research could better capture changes in social development over time.
- ii. **Teacher-reported data:** While teachers offer valuable insights, future studies should include **student self-reports** and **parent perspectives** to triangulate findings and reduce potential bias.
- iii. **Generalizability:** The sample focused on urban middle-class schools. Future research should

include **rural and diverse socio-economic contexts** to enhance generalizability.

- iv. **Unmeasured variables:** Factors such as school climate, teacher-student relationships, and community engagement were not directly measured but may influence social development.

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