

Investigating the Impact of Leadership Quality and Educational Practices on Student Outcomes through Teacher Attitude and Behavior in Pakistani Educational Institutions: An Applied Science Perspective

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ABSTRACT

The present study stresses how leadership quality and educational practices affect student outcomes through the way teacher attitudes and behavior are expressed in Pakistani educational institutions. The quantitative data for this study were collected via random sampling from investors in different cities of Pakistan. A simple random sampling technique was adopted recruiting 1000 teachers from different levels of educational institutions in various areas of Pakistan for data analysis. Therefore, the study considered several factors to ensure that a representative sample, which reflects the large population of Pakistan's teachers, was taken, allowing for more accurate generalizations based on the study findings. The Partial Least Squares (PLS) method was employed to analyze the data gathered for this study. The latter concluded that educational practices and leadership grades play a significant role in improving student learning. It emphasized the relationship between educational institution management, teachers' mindsets and actions, and student learning results. These relationships can enhance educational outcomes, leadership development, and teacher preparation. Implications include policy considerations, teacher pedagogical training, leadership skills, and pursuing a more student-centered and holistic educational approach.

*Keywords-*leadership quality; educational practices; teacher attitude; teacher behavior; student outcomes; educational institutions; Pakistan

I. INTRODUCTION

The concept of leadership is broad, including many distinct attributes of a successful leader [1]. Leadership in schools makes a difference in upgrading teaching quality, getting the institution closer to its stated goals, and allowing educators to have a more significant effect on their students' education. Recognizing the importance of education in generating human capital and achieving strategic goals, governments worldwide have prioritized educational reform and improvement. As a result, education rightfully occupies the top spot on the list of national issues. Administrators must collaborate with various stakeholders to ensure the school's success and to provide effective leadership [2]. Leaders at educational institutions have a critical role in pushing initiatives that increase teacher

efficiency, speed up information dissemination, and maximize the use of existing learning resources and networks [3]. Principals in successful schools commit a significant amount of time to teach, are always present on campus, and are entirely invested in their students' academic achievement. In addition, the former direct and oversee the teaching staff to optimize their effectiveness in the classroom, facilitating school in this way to fulfil its goals more competently.

One of the most essential elements in an individual's personality is their attitude or proclivity to be either optimistic or pessimistic, while their attitude comprises positive or negative sentiments towards others. Therefore, teachers' actions and words reflect their feelings about the school they work at, students, and their profession in general. Investment in children's education is viewed as the cornerstone of a nation's

strength, and teachers' views significantly impact the school culture [4-9]. Educators play a critical role in shaping pupils' brains and personalities greatly influencing student accomplishment, classroom success, and country growth [10].

Pakistan's educational system is plagued by several difficulties, such as classroom congestion, lack of career opportunities for teachers, low compensation, and the influence of society and politics on the educational policy. These challenges affect the attitudes and behaviors of public-school instructors leading to teacher absenteeism, poor motivation, resistance to change, and an urgent need for innovative educational methodologies. These concerns erode academic quality and, by implication, a nation's economic security [3, 11]. The role of leadership in schools is critical in overcoming these challenges. The decisions made and the resources available to teachers, principals, central administrators, and policymakers all have a substantial effect on their everyday lives and work environments. Conversely, poor leadership may worsen the situation by prohibiting educators from performing to the best of their ability, and so restricting their professional advancement [9, 12]. The educational system of Pakistan, which is focused on Urdu and English, has to deal with the problems of insufficient funds, shortage of teaching staff, and old educational methods. School access remains a problem, especially for marginalized groups. Many reforms that involve standardizing school curricula, improving buildings, gender equity, and quality teacher education are being implemented now. However, issues like gender gaps, inadequate buildings, and curriculum uniformity still persist affecting educational systems negatively. The educational practices followed in Pakistan's schools, namely the curriculum, evaluation procedures, teacher training programs, and overall school culture have a significant impact on teachers as well. As a result, improving the educational environment in Pakistan necessitates a more in-depth understanding of how leadership and educational practices interact to influence teachers' attitudes and behavior since the origin of the problem with the delivery of quality education is directly related to the latter. This study not only highlights the importance of the issue and the possible influence of research on Pakistani educational system, but also emphasizes the importance of addressing teacher attitudes and behaviors in the context of leadership and educational practices is obvious, providing a solid foundation for research.

A. Objectives

The objectives of this study are:

1. To assess the influence educational practices have on student outcomes in the educational institutions of Pakistan.
2. To evaluate the impact of leadership quality on student outcomes in the educational institutions of Pakistan.
3. To review the mediating effect of teacher attitudes and behavior on education quality in the educational institutions of Pakistan.

B. Research Questions

The research questions are:

1. Is there any relationship between leadership and teacher attitude and behavior in Pakistan?
2. How do educational practices influence teacher attitude and behavior in Pakistan?
3. Does teacher attitude and behavior impact the quality of education in Pakistan?

II. METHODOLOGY

A. Conceptual Framework

The study framework, depicted in Figure 1, was created after comprehensively examining the pertinent academic literature.

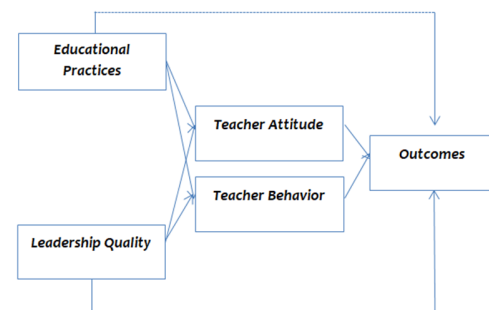


Fig. 1. The conceptual framework.

B. Hypothesis Development

- H1: Educational practices have a significant impact on student outcomes in educational institutions in Pakistan.
- H2: Educational practices have a significant impact on teacher attitudes in educational institutions in Pakistan.
- H3: Educational practices have a significant impact on teacher behavior in educational institutions in Pakistan.
- H4: Leadership quality significantly impacts student outcomes in educational institutions in Pakistan.
- H5: Leadership quality substantially affects teacher attitude in educational institutions in Pakistan.
- H6: Leadership quality crucially influences teacher behavior in educational institutions in Pakistan.
- H7: Teacher attitude essentially impacts student outcomes in educational institutions in Pakistan.
- H8: Teacher behavior significantly impacts student outcomes in educational institutions in Pakistan.
- H9: Teacher attitude importantly mediates leadership quality and student outcomes of the educational institutions in Pakistan.
- H10: Teacher behavior significantly mediates Pakistani educational institutions' educational practices and student outcomes.

- H11: Teacher attitude has a significant mediating effect between the educational practices and student outcomes of the educational institutions in Pakistan.
- H12: Teacher behavior has a significant mediating effect between leadership quality and student outcomes in the educational institutions of Pakistan

C. Data Collection Process

This quantitative study investigates the impact of Educational Practices (EP), Leadership Quality (LQ) on outcomes (OC), and teacher attitudes and behaviors. Initially, the method, population, and sample size were decided. The tools employed, including the validation process, experiments, and data analysis, were thoroughly investigated. This study's target population was teachers and administration from educational institutions, such as schools, colleges, and universities around Pakistan. As a consequence, simple random sampling procedures were employed to steer broad purposes in the population, with each member of the latter having an equal chance to be chosen as a sample member. According to [13], simple random sampling can create a representative sample. In this particular study the former removed subjectivity from the selection process by implementing approved tools to collect data from various educational institutions in Karachi, Lahore, and Islamabad, while self-administered questionnaires were delivered and collected for processing. Authors in [14] argued that the aforementioned method often results in a higher response rate. In the specific study there was a total of 1,000 questionnaires distributed with 900 of them being returned. Considering previous research in the same field [15-17], this study's response rate of 90% is reasonable. In the present work, a comprehensive survey instrument was designed to gather information on teachers' attitudes and behaviors as well as on perceptions of leadership quality and educational practices. The survey included both closed-ended questions (using Likert scale items) and open-ended questions to catch a diverse range of responses and ideas. The data collection process was carried out systematically and rigorously, thereby enhancing the credibility and validity of the study findings.

D. Data Analysis

By considering both construct reliability and the Fornell-Larcker AVE criterion for convergent validity, authors in [18] claimed that convergent validity can be established when all three of the subsequent conditions are met, All standardized factor loadings λ must be equal to or larger than 0.7 for CR values to be considered as such, and AVE values must be 0.5 or greater. Therefore, HTMT, Fornell-Larker criteria, and cross-loading determine the discriminant validity. This study used the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique to investigate the proposed hypotheses. Previous research has found that PLS prevents the highly restrictive assumptions that underlie the utmost possibility of this technique and protects against deceptive alternatives and factor uncertainty. Furthermore, unlike covariance-based SEM approaches, PLS-SEM is not influenced by sample size limits and can be employed with large sample sizes [19].

E. Measurement Model

This study employs the methodological approach of [1, 20],

and its findings are divided into two sections. Following the recommendations of [20], first, the initial values of the measurement model were identified by examining criteria, such as item reliability, internal item consistency, convergent validity, and discriminant validity. Authors in [20] equivalently accomplished to recommend structural model assessment values to identify the significance of path standard deviation, variance explanation, magnitude effect, and predictive power.

III. RESULTS AND DISCUSSION

A. Demographics

The application and collection of demographic data within the field of psychological sciences possesses the capacity to facilitate the rectification of inequities resulting from unjust social conditions. Table I presents the demographic data of the study, including sex, age, teaching level, education, and experience. Out of 900 respondents, 623 (69.22%) were male, and 277 (30.77%) were female. The majority were in the age range of 31-40, with 374 (47.15%) teaching positions. The highest education level was a master's degree (463, 51.44%), followed by a bachelor's degree (125, 13.88%), M.Phil. (180, 20.00%), and PhD (132, 14.67%). Most respondents had 11-20 years of experience (44.44%), followed by 1-10 years (325, 36.11%) and 21-30 years (172, 19.11%). The Table also presents the highest education level earned among respondents.

TABLE I. RESPONDENT DEMOGRAPHIC DATA

Variable	Frequency	Percentage
Sex		
Male	623	69.22%
Female	277	30.77%
Age		
21-30	125	13.88%
31-40	349	38.77%
41-50	261	29.00%
51-60	165	18.33%
Teaching Level		
University	201	22.33%
Colleges	325	36.11%
Schools	374	47.15%
Education		
Bachelors	125	13.88%
Master	463	51.44%
M.Phil.	180	20.00%
PhD	132	14.67%
Experience		
1-10	325	36.11%
11-20	400	44.44%
21-30	172	19.11%

B. Descriptive Statistics

The Smart-PLS software calculated skewness and kurtosis values as a first step in the normality test. Table II depicts the results of the descriptive statistics for the variables. The average values of the leadership quality, educational practices, teacher attitude, teacher behavior, and student outcomes of Pakistan educational institutions are detailed in this Table. Acceptable values for asymmetry and kurtosis to establish a normal univariate distribution fall within the range of -2 to +2 [1]. Authors in [20] contend that skewness and kurtosis values fall within the range of -2 to +2 and -7 to +7.14, respectively, which are indicative of normal data.

TABLE II. DESCRIPTIVE STATISTICS

Items	No.	Missing	Mean	Median	Scale min	Scale max	Std deviation	Excess kurtosis	Skewness
OC1	0	0	4.049	4	1	5	0.869	1.824	-1.137
OC2	1	0	4.214	4	1	4	0.869	2.551	1.115
OC3	2	0	4.129	4	1	5	0.781	1.654	-0.94
OC4	3	0	4.051	4	1	5	0.761	0.942	-0.714
OC5	4	0	3.982	4	1	5	0.796	0.193	-0.526
OC6	5	0	4.054	4	1	5	0.698	2.568	-0.905
OC7	6	0	4.100	4	1	5	0.648	3.811	-1.063
LQ1	7	0	3.895	4	1	5	0.762	0.721	-0.588
LQ2	8	0	3.915	4	1	5	0.728	1.528	-0.699
LQ3	9	0	3.900	4	1	5	0.796	0.444	-0.606
LQ4	10	0	3.888	4	1	5	0.807	1.840	-0.988
LQ5	11	0	3.969	4	1	5	0.683	2.060	-0.805
EP1	12	0	4.017	4	1	5	0.722	0.475	-0.501
EP2	13	0	4.054	4	1	5	0.728	1.570	-0.812
EP3	14	0	4.085	4	1	5	0.720	0.878	-0.608
EP4	15	0	4.014	4	1	5	0.752	1.152	-0.715
EP5	16	0	3.998	4	1	5	0.756	1.739	-0.828
EP6	17	0	4.059	4	1	5	0.819	1.391	-0.936
EP7	18	0	4.136	4	1	5	0.635	4.454	-1.097
TA1	19	0	3.906	4	1	5	0.867	0.227	-0.476
TA2	20	0	3.937	4	1	5	0.834	1.569	-0.962
TA3	21	0	3.879	4	1	5	0.791	1.782	-0.873
TA4	22	0	3.937	4	1	5	0.796	0.821	-0.699
TA5	23	0	4.035	4	1	5	0.760	3.840	-1.373
TB1	24	0	2.848	3	1	5	1.060	-0.358	0.479
TB2	25	0	2.596	2	1	5	1.036	0.128	0.947
TB3	26	0	2.469	2	1	5	1.110	-0.275	0.654
TB4	27	0	2.279	2	1	5	1.182	-0.053	0.868
TB5	28	0	2.192	2	1	5	1.129	0.163	0.911
TB6	29	0	2.248	2	1	5	1.062	0.579	0.978
TB7	30	0	2.362	2	1	5	1.079	0.650	1.088

LQ= Leadership Quality, EP= Educational Practices, TA = Teacher Attitude, TB = Teacher Behavior, OC= Outcome

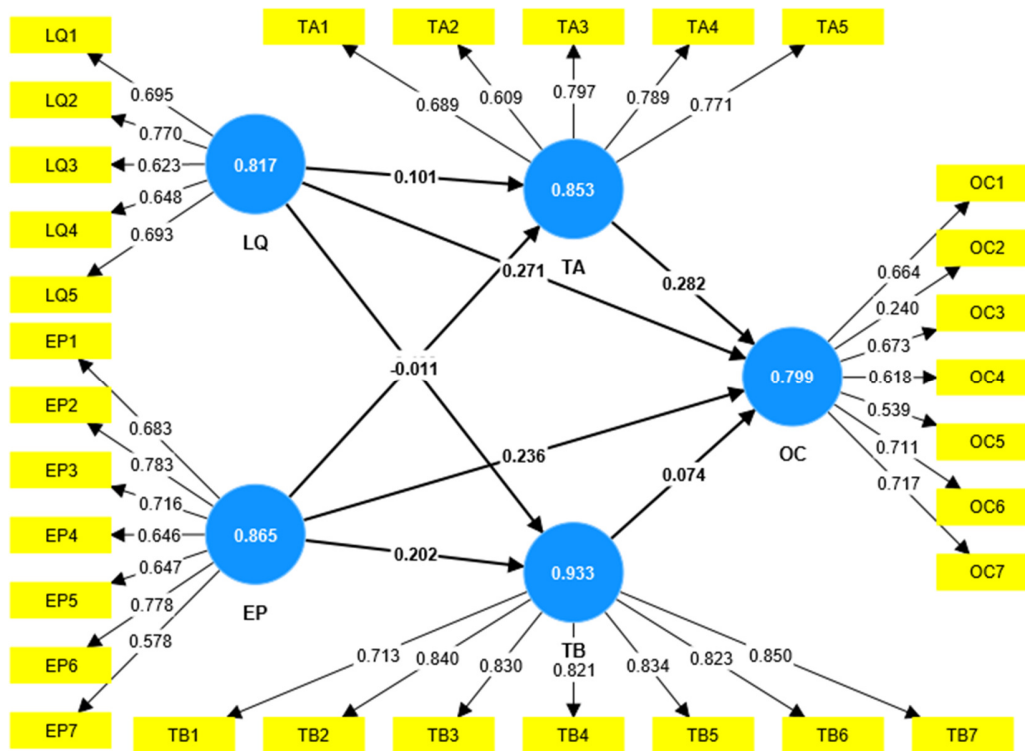


Fig. 2. Measurement model. LQ= Leadership Quality, EP= Educational Practices, TA = Teacher Attitude, TB = Teacher Behavior, OC= Outcome.

C. Convergent Validity Analysis

Convergent validity analysis assures that the scale items in the study are reliable and valid. The researchers utilized Smart-PLS to test for convergent validity (Figure 2). The optimal values for factor loadings, Cronbach's alpha, composite reliability, and Average Variance Extracted (AVE) are [1, 20-

22]: 0.60, 0.70, 0.70, and 0.50, respectively. Cronbach's alpha is greater than 0.80 for all variables, as indicated in Table III. All the constructs in the study had factor loadings larger than 0.60. Each variable has an AVE greater than 0.50 and a CR greater than 0.70. From these values, it is concluded that the study's findings are reliable and valid.

TABLE III. FACTOR LOADINGS, CRONBACH'S ALPHA, COMPOSITE RELIABILITY, AND AVE

Constructs	Items	Factor loading	Cronbach's alpha	rho_A	Composite reliability	AVE
Educational Practices	EP1	0.683	0.818	0.829	0.865	0.501
	EP2	0.783				
	EP3	0.716				
	EP4	0.646				
	EP5	0.647				
	EP6	0.778				
	EP7	0.578				
Leadership Quality	LQ1	0.695	0.723	0.737	0.817	0.523
	LQ2	0.770				
	LQ3	0.623				
	LQ4	0.648				
	LQ5	0.693				
Outcomes	OC1	0.664	0.708	0.746	0.799	0.518
	OC2	0.240				
	OC3	0.673				
	OC4	0.618				
	OC5	0.539				
	OC6	0.711				
	OC7	0.717				
Teacher Attitude	TA1	0.689	0.785	0.802	0.853	0.539
	TA2	0.609				
	TA3	0.797				
	TA4	0.789				
	TA5	0.771				
Teacher Behavior	TB1	0.713	0.917	0.932	0.933	0.668
	TB2	0.840				
	TB3	0.830				
	TB4	0.821				
	TB5	0.834				
	TB6	0.823				
	TB7	0.850				

LQ= Leadership Quality, EP= Educational Practices, TA = Teacher Attitude, TB = Teacher Behavior, OC= Outcome

D. Discriminant Validity

To ensure discriminant validity, the criteria established by [23] as well as the Hetrotrait-Monotrait HTMT ratio and factor loading were put into service. Correlation values were lower than the result of discriminant validity based on the AVE's square root [24-26]. Values of the HTMT ratio should be under 0.85 to meet the criterion. Thus, the most significant attainable HTMT value was (0.441), which was lower than the recommended value of 0.85. The data in Tables IV, V, and VI reveal that all constructs are sufficiently discriminating.

TABLE IV. DISCRIMINANT VALIDITY – HTMT

Constructs	EP	LQ	OC	TA	TB
EP					
LQ	0.730				
OC	0.728	0.704			
TA	0.678	0.486	0.689		
TB	0.221	0.131	0.245	0.207	

LQ= Leadership Quality, EP= Educational Practices, TA = Teacher Attitude, TB = Teacher Behavior, OC= Outcome

TABLE V. DISCRIMINANT VALIDITY – FORNELL LARKER CRITERION

Constructs	EP	LQ	OC	TA	TB
EP	0.694				
LQ	0.574	0.688			
OC	0.563	0.524	0.614		
TA	0.557	0.387	0.532	0.734	
TB	0.196	0.105	0.199	0.178	0.817

LQ= Leadership Quality, EP= Educational Practices, TA = Teacher Attitude, TB = Teacher Behavior, OC= Outcome

A. Partial Least Square Structural Equation Modeling Results and Discussion

Bootstrapping is used to compute the path SD values. The standard deviation, t-values, and p-values were also entailed. Table VII demonstrates that EP significantly impacts OC (SD = 0.035, t = 6.657, p = 0.000). Thus, H1 has been accepted. Student outcomes are highly responsive to educational practices and strategies.

TABLE VI. CROSS LOADINGS

Items	LQ	EP	OC	TA	TB
LQ1	0.695	0.401	0.38	0.272	0.084
LQ2	0.77	0.510	0.433	0.345	0.117
LQ3	0.623	0.323	0.283	0.145	0.061
LQ4	0.648	0.344	0.344	0.249	0.046
LQ5	0.693	0.359	0.334	0.277	0.039
EP1	0.351	0.683	0.373	0.368	0.125
EP2	0.453	0.783	0.394	0.454	0.144
EP3	0.386	0.716	0.355	0.391	0.133
EP4	0.416	0.646	0.41	0.284	0.168
EP5	0.419	0.647	0.366	0.33	0.045
EP6	0.475	0.778	0.513	0.464	0.17
EP7	0.268	0.578	0.296	0.386	0.154
OC1	0.364	0.374	0.664	0.422	0.147
OC2	0.125	0.144	0.240	0.09	-0.016
OC3	0.326	0.365	0.673	0.368	0.158
OC4	0.28	0.33	0.618	0.33	0.068
OC5	0.258	0.344	0.539	0.261	0.199
OC6	0.36	0.383	0.711	0.365	0.161
OC7	0.448	0.414	0.717	0.345	0.081
TA1	0.213	0.345	0.383	0.689	0.162
TA2	0.223	0.293	0.282	0.609	0.114
TA3	0.344	0.456	0.454	0.797	0.117
TA4	0.253	0.424	0.383	0.789	0.143
TA5	0.359	0.489	0.425	0.771	0.125
TB1	0.054	0.121	0.17	0.148	0.713
TB2	0.069	0.161	0.162	0.158	0.840
TB3	0.100	0.163	0.177	0.14	0.830
TB4	0.061	0.105	0.114	0.122	0.821
TB5	0.090	0.121	0.164	0.108	0.834
TB6	0.073	0.155	0.147	0.118	0.823
TB7	0.129	0.243	0.183	0.196	0.850

LQ= Leadership Quality, EP= Educational Practices, TA = Teacher Attitude, TB = Teacher Behavior, OC= Outcome

A positive learning classroom environment can substantially affect student motivation, engagement, and academic results. Teachers should constantly reflect on their techniques and make changes to better meet the needs of their students [27]. EP importantly influences TA, indicating that the second hypothesis is accepted (SD = 0.035, t = 14.16, p = 0.000). Thus, H2 has been accepted. Practical, supportive, and inclusive educational approaches tend to improve teacher attitudes, whereas those that cause stress, unhappiness, or a lack of support are likely to have the reverse impact. Educational institutions' management and governments should consider these aspects when planning and implementing innovative educational techniques [7]. Therefore, this research implies that EP substantially impacts TB. The third hypothesis is essential (SD = 0.039, t = 5.170, p = 0.007), Therefore, H3 has been accepted. Educational practices encourage instructors. The latter adapt their activities to conform to the norms, processes, and strategies that have arisen. The effectiveness of these strategies and the quantity of support and resources available to teachers can significantly impact their classroom behavior and interaction with students [28]. The fourth hypothesis test results are statistically crucial (SD = 0.035, t = 7.840, and p = 0.000). Consequently, H4 has been accepted suggesting that LQ influences OC to a great extent as prior research has showcased. The effectiveness of teachers' leadership skills has an important and far-reaching impact on

students' progress. Successful school leaders provide a pleasant learning environment, motivate, and inspire their personnel, and implement measures that improve students' academic achievement [29]. As an outcome, the fifth hypothesis is statistically important as per the results (SD = 0.038, t = 2.675, p = 0.007), and so H5 has been accepted. The leadership quality in educational institutions significantly affects teachers' attitude. Positive attitudes and enhanced teacher productivity are the effects of successful leadership that promote greater job satisfaction, trust, communication, professional development, and overall morale in the classroom [30]. The sixth hypothesis is statistically crucial. LQ does not affect TA, and therefore as per the result (SD = 0.036, t = 7.782, p = 0.000) H6 has been accepted, indicating that TA substantially impacts student outcomes. A teacher's attitude can have far-reaching and varied consequences on their students. A teacher's pleasant, supportive, and encouraging attitude can improve student motivation, classroom atmosphere, conduct, academic performance, and general well-being [31-35]. The findings show that the eighth hypothesis has accepted that TB significantly affects OC; hence, TB significantly impacts OC (SD = 0.033, t = 2.228, and p = 0.026), resulting in the acceptance of H7. Teacher behavior has a significant impact on the outcomes of their students. Figure 3 values are explained in the above discussion and outlined in Table VII.

TABLE VII. DIRECT IMPACT

Direct Impact	Original sample	Sample mean	Std deviation	T statistic	P value	Remarks
EP -> OC	0.236	0.237	0.035	6.657	0.000	Significant
EP -> TA	0.499	0.498	0.035	14.16	0.000	Significant
EP -> TB	0.202	0.205	0.039	5.170	0.000	Significant
LQ -> OC	0.271	0.270	0.035	7.840	0.000	Significant
LQ -> TA	0.101	0.102	0.038	2.675	0.007	Significant
LQ -> TB	-0.011	-0.010	0.050	0.225	0.822	Insignificant
TA -> OC	0.282	0.284	0.036	7.782	0.000	Significant
TB -> OC	0.074	0.074	0.033	2.228	0.026	Significant

LQ= Leadership Quality, EP= Educational Practices, TA = Teacher Attitude, TB = Teacher Behavior, OC= Outcome

E. Mediation Impacts

This study uses PLS Bootstrapping to test the mediation role. PLS Bootstrapping approaches were adopted to obtain precise indirect impact estimates for evaluating the mediating variables. Likewise, the standard deviation, t-values, and p-values were computed. The data in Table VIII (SD = 0.029, t = 2.531, and p = 0.011) exhibit H8 acceptance, supporting the hypothesis that TA mediates the relationship between LQ and OC. Consequently, the mediating hypotheses of this investigation are significant. The results also support the prediction that TB mediates the relationship between LQ and OC (SD = 0.015, t = 2.039, and p = 0.042), disclosing that H9 has been accepted, rendering the mediating hypotheses of this investigation substantial. According to the, findings (SD = 0.029, t = 2.531, and p = 0.011), H10 has been accepted, signaling that TA mediates the relationship between LQ and OC and correspondingly rendering the mediating hypotheses of this investigation significant.

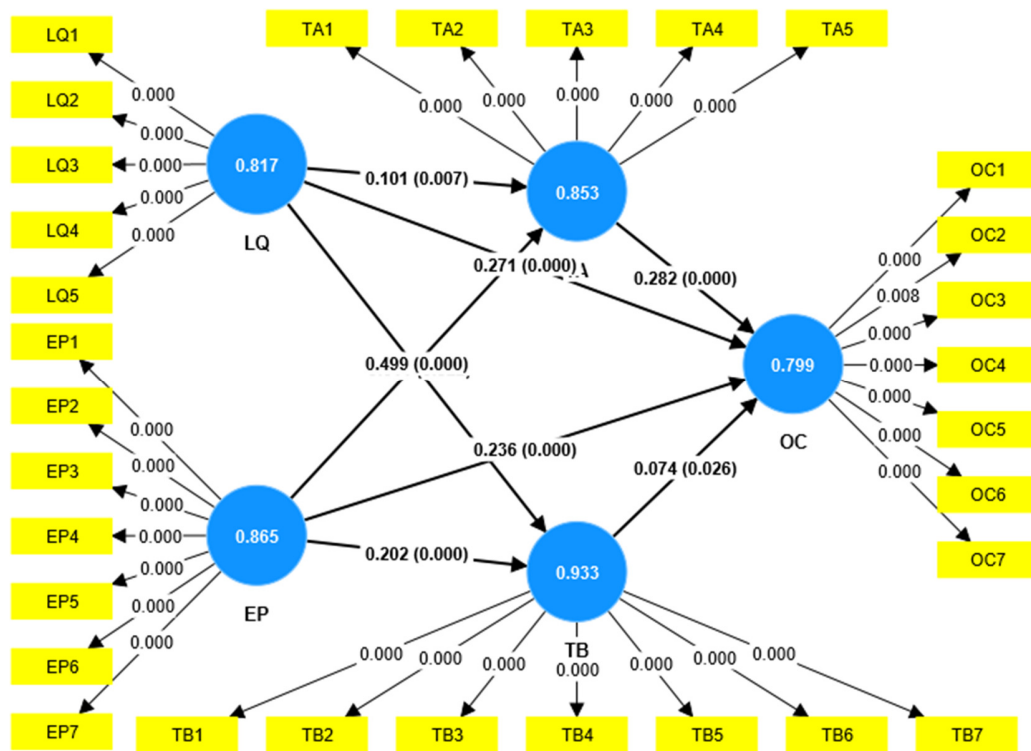


Fig. 3. The PLS structural model. LQ= Leadership Quality, EP= Educational Practices, TA = Teacher Attitude, TB = Teacher Behavior, OC= Outcome

TABLE VIII. MEDIATION IMPACT

Indirect impact	Original sample	Sample mean	Std deviation	T statistic	P value	Remarks
LQ -> TA -> OC	0.029	0.029	0.011	2.531	0.011	Significant
EP -> TB -> OC	0.015	0.015	0.007	2.039	0.042	Significant
EP -> TA -> OC	0.141	0.141	0.022	6.306	0.000	Significant
LQ -> TB -> OC	-0.001	-0.001	0.004	0.201	0.840	Insignificant

The hypothesis that TA mediates the connection between EP and OC has statistical support (SD = 0.141, t = 6.306, p = 0.000) and suggests that H11 has been accepted. As a result, the mediating hypotheses of this investigation are crucial. Finally, the TA does not mediate the relationship between EP and OC (SD = -0.001, t = 0.840, and p = 0.840). Consequently, H12 has been accepted and the mediating hypotheses of this investigation are insignificant.

IV. CONCLUSION AND IMPLICATIONS

A. Conclusion

Leadership and teaching methods play a crucial role in shaping educators' perspectives and actions in Pakistani classrooms. The research reveals that effective leadership can improve classroom performance by setting an example of excellence and accountability.

B. Practical Implications

This research has two main real-world implications. First, the results can help educational leaders and policymakers in Pakistan better control teacher attitudes and actions to improve student learning. The second benefit is that it offers educators a greater understanding of how their attitudes and actions affect the educational process and how they might improve the

classroom climate. Educational leaders and legislators may increase teacher effectiveness by identifying and addressing its underlying causes, namely teacher attitude and conduct. This research also stresses the need to provide instructors with regular chances to acquire new techniques and content areas, eventually ameliorating their students' educational experiences.

C. Policy Implications

The study on the role of leadership and educational practices in managing teacher attitudes and behavior in Pakistan's educational sector suggests that policymakers should revamp teacher training and professional development programs to cultivate positive attitudes and behaviors. Building a positive school culture, engaging communities, and promoting data collection and monitoring systems are essential. Policymakers should also facilitate the incorporation of research findings and best practices into educational policies and encourage collaboration among educational institutions to improve education quality in Pakistan.

D. Limitations and Future Research Directions

The study on teacher attitudes and behaviors in Pakistan has some limitations, involving that it cannot be used in other places because it only examined teachers in one region, possible response bias, differences in culture and context, and a

lack of time. So, future research should focus on longitudinal studies, cross-regional variations, qualitative methods, and the impact of technology on teacher attitudes and behaviors. It is also essential to explore the relationship between teacher well-being and their stance, evaluate policy implementation, and foster cross-sector collaboration to address factors influencing teacher attitudes and behaviors outside the classroom.

DATA AVAILABILITY

The dataset used and analyzed during the current study is available from the corresponding author upon reasonable request.

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