

The Impact of Teacher Qualifications and Experience on Student Satisfaction: A Mediating and Moderating Research Model

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Abstract

Every economy has three major sectors: manufacturing, trading and services. The contribution of service sector has become increasingly important for countries' economic wellbeing. The education sector has received greater local and foreign direct investment. This research examines the relationships among teacher qualifications, teacher experience, and student satisfaction. It also investigates whether teacher skills and methods, and knowledge-sharing mediate the association between teacher qualifications, experience, and student satisfaction. Moreover, the moderating effect of a knowledge-intensive culture examines between teaching skills and methods, knowledge-sharing and students satisfaction. The data were collected from 440 teachers/instructors of top ranking and well-known Private Pakistani universities. The results reveal that a teacher qualification is the strongest predictor of student satisfaction than teacher experience. Teacher skills and methods, and effective knowledge-sharing partially mediated the relationship between teachers experience, qualifications and students satisfaction. Finally, knowledge-intensive culture has moderated and strengthened the relationship between teachers' skills and methods, effective knowledge-sharing and student satisfaction. This study provides new avenues for the top managements of education institutions to upgrade education system by involving student that is key stakeholder and best evaluator of teacher performance.

Keywords: teacher qualifications, teacher experience, teacher skills and methods, effective knowledge-sharing, knowledge-intensive culture, student satisfaction.

1. Introduction

Every organization depends on human capital to become a leader in service provision. The services sector has received recently attention for this purpose because of its huge market share, stiff business environment, major economic contributions, modern technology, professionalism, deregulations, and high percentage of domestic and foreign investments. Universities offering degrees in this field are transforming from resource based models to knowledge-sharing ones through the promotion of knowledge-sharing conferences, online journals, research seminars, research webinars, online SPSS and AMOS trainings, online lectures, online assignments, digital libraries, online exam systems, and online discussion platforms. These modern technologies and teaching methods have used to facilitate education to students and increase the chances of their success. However, student quit from one institute to another has been shifted the educational paradigm from teacher to student satisfaction. Therefore, universities are continuously interested in evaluating education system effectiveness and teacher performance by involving students.

Student satisfaction has received increased attention because the top managements of universities have been interested in reevaluating the teaching standards, policies, quality and methods. Therefore, identifying predictors of teaching quality and student satisfaction is very useful. Wachtel (1998) has been found that teachers experience and qualifications predict and develop student competencies. A study on teachers experience and qualifications predicted professional achievement of their students (Michaelowa, 2002). Numerous studies have investigated the relationship between student achievement, teacher job satisfaction and teaching career (Johnson, Kraft, & Papay, 2012; Michaelowa, 2002; Veldman, Tartwijk, Brekelmans, & Wubbels, 2013). However, few studies have measured the level of student satisfaction via teacher qualifications, teacher experience, teaching skills and methods, knowledge-sharing and a knowledge-intensive culture.

(Douglas et al., 2015) have found that student satisfaction can be determined by learning, teaching methodology, and supportive services. Other researchers have investigated the effects of teacher experience and educational level on student satisfaction (Beelick, 1973; Lenton, 2015). Students are the representative and brand of its universities therefore it is essential to search factors to predict student satisfaction. There is limited literature that investigated the link between student satisfaction, teaching skills and methods, and effective knowledge-sharing. Numerous scholars have been found relationship between teacher job satisfaction, career achievement and development (Chapman, Al-Barwani, Mawali, & Green, 2012; Skaalvik & Skaalvik, 2011). However, scarcity of literature has addressed the teacher experience and qualification, competence, teaching methodologies, and knowledge-sharing effect on student satisfaction. Understanding this relationship may be useful for professionals in the education sector to develop new policies that eradicate the flaws and improve teaching skills and methods. In addition, this study may benefit the top management and strategic thinkers by encouraging the development of strategies to retain students and gain their loyalty.

The rationale of this investigation is to find the impact of teacher experience and qualifications on student satisfaction. Furthermore, this study sought to investigate whether teacher skills, methodologies, and knowledge-sharing mediate the association between teacher experience, teacher qualifications and student satisfaction. Subsequently,

it also investigates the moderating effect of knowledge-intensive culture on teaching skills and methods, knowledge-sharing and student satisfaction.

2. Literature Review

In general, it can be said that satisfaction is a key element in high performance. Aldridge and Rowley (1998) have argued that the feeling of pleasure one derives from doing work, using a product, or gaining a effective service can be called satisfaction. For educational institutes, therefore, success comprises the cumulative gratification of different stakeholders, while student satisfaction is deemed the most vital (Ali & Ahmad, 2011; Elliott & Shin, 2002; Lenton, 2015). Student satisfaction refers to students' short term reflections based on their experiences at educational institutions (Hameed & Amjad, 2011). Their level of satisfaction can be positive when an educational institute meets their expectations, or vice versa (Roman, 2014; Witt, Andrews, & Kacmar, 2000). Carey, Cambiano, and Vore (2002) have suggested that student satisfaction is a multi-dimensional construct with various predictors such as learning environment, teachers' characteristics, image of the institute, curriculum, culture and knowledge patterns. Therefore, educational institutes are keenly interested in pleasing their students by meeting their expectations. In previous studies, different scholars were interested in measuring student satisfaction through multi-factor analysis and ascertained that teachers' characteristics and culture are the two most important factors that need to be addressed to ensure student satisfaction (Aldridge & Rowley, 1998; Bean & Bradley, 1986; Beelick, 1973; Witt et al., 2000). Moreover, few scholars have identified the importance of student satisfaction and discovered the impact of service quality thereon (Bigne, Moliner, & Sánchez, 2003; Malik, Danish, & Usman, 2010; Spreng & Mackoy, 1996).

The discussion of student satisfaction has revealed that it is an important phenomenon that plays a key role in the success of all educational institutes and thus requires further investigation. The current study investigates student satisfaction from a unique angle that is, teacher qualifications and experience, and a knowledge-intensive culture. Witt et al. (2000) have elaborated that, in terms of student satisfaction, it is important to address the aspects of student attitudes, behavior and loyalty, which can be achieved by deploying the services of competent and experienced teachers. A teacher's drive to satisfy students is an important tool to ensuring student satisfaction (Hameed & Amjad, 2011). If a teacher has an effective teaching methodology and good a grasp of the subject, then the students are more likely to be satisfied (Malik & Mubeen, 2009). Different scholars have identified various pedagogical skills that have a positive effect on students' satisfaction: teachers' competency, delivery method, and experience (Carey et al., 2002; Malik et al., 2010). In developing nations, educational institutes are struggling to do their best and, in these regions, the competency of intellectual capital is playing a vital role. Lenton (2015) has argued that experience gives teachers the confidence to construct a positive image in the eyes of students. Experienced teachers are more likely to be respected by students and, further, teachers power to convince depends on their qualifications (Spreng & Mackoy, 1996).

Now-a-days, educational institutes are progressing amid stiff business competition. In this environment, institutes favor knowledge-oriented teachers so that they can achieve better performance in terms of student satisfaction (Malik et al., 2010). The knowledge-sharing intensions of teachers benefit both faculty and students (Malik & Mubeen, 2009).

The experienced and qualified teachers are interested in sharing what they know (Abbasi, Malik, Chaudhry, & Imdadullah, 2011; Hendriks, 1999; Hsu, 2008). Moreover, they are introducing a knowledge-intensive culture into the institutes, which is beneficial for creating student satisfaction (Hauschild, Licht, & Stein, 2001; Ribiere & Sitar, 2003). In the last two decades, knowledge-sharing has become a very popular construct and that is being researched worldwide (Ipe, 2003; Wang & Wang, 2012; Zakaria, Amelinckx, & Wilemon, 2004).

Teachers' skills and knowledge-sharing can enhance student satisfaction if a knowledge-intensive culture prevails (Oliver & Reddy Kandadi, 2006). A knowledge-intensive culture is one in which every organizational member aims to share what he/she knows and knowledge-sharing is the norm in that culture (Alsam, Rehman, & Imran, 2016; Hauschild et al., 2001; Muqadas, Ilyas, & Aslam, 2016). Many scholars have identified the relationship between a knowledge-intensive culture and organizational outcomes, that is, creativity, innovation, competitive advantage and performance (Muqadas et al., 2016; Ribiere & Sitar, 2003; Zheng, Yang, & McLean, 2010). Earlier studies have demonstrated that a knowledge-intensive culture can moderate the relationship between employees' intellectual skills and performances (Alsam et al., 2016; Imran, Ilyas, Aslam, & Ubaid, 2016). Moreover, Lal (2002) examined the importance of a knowledge-intensive culture in the organizational spectrum and highlighted that it is the basic requirement for attaining the required performance. The performance of educational institutes is dependent on the level of student satisfaction and a knowledge culture is of the utmost importance in creating an effective learning environment. In addition, number of researchers have investigated the relationship between teacher job satisfaction, career achievement and development (Chapman et al., 2012; Skaalvik & Skaalvik, 2011). Until recently, rare literature has been addressed how teacher experience and qualifications, competence, teaching methodologies, and knowledge-sharing affect student satisfaction.

2.1 Theoretical Model and Hypotheses

This study presents the overarching model by which to determine teacher performance via the involvement of students. Teacher qualifications and experience (independent variables) are used to measure the effect on student satisfaction (dependent variable). To date, no study found in the extant literature evaluates the direct impact of teacher experience and qualifications on student satisfaction.

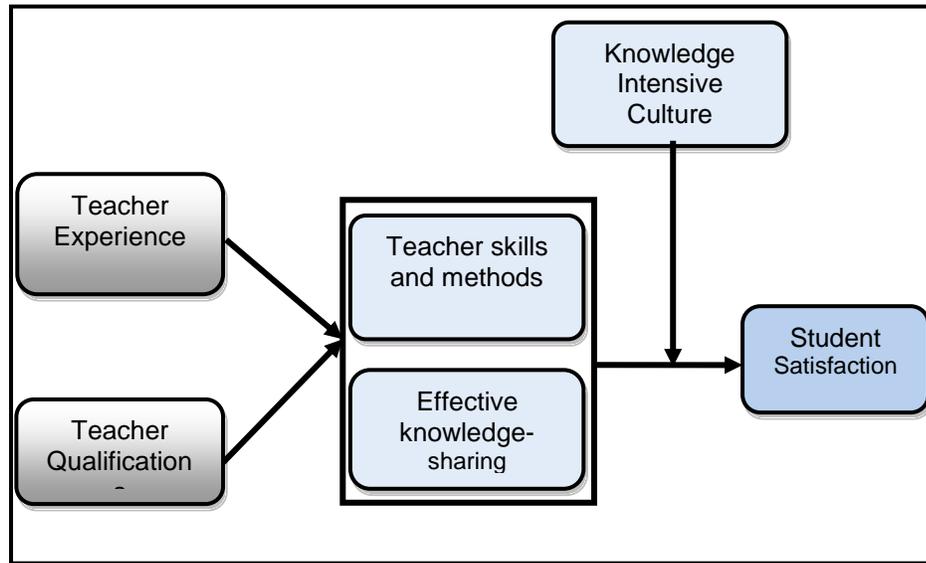


Figure 1: Theoretical Model

Furthermore, this research aims to investigate whether teacher skills and methods, and effective knowledge-sharing mediates the relationship between teacher experience, qualifications and student satisfaction. Subsequently, it also investigates the unique moderating impact of a knowledge-intensive culture on teacher skills, methods, effective knowledge-sharing and student satisfaction:

- **H_{1a}:** Teacher experience increases the level of student satisfaction.
- **H_{1b}:** Teacher skills and methods mediate the relationship between teacher experience and student satisfaction.
- **H_{1c}:** Effective knowledge sharing mediates relationship between teacher experience and student satisfaction.
- **H_{2a}:** Teacher qualifications can foster the level of student satisfaction.
- **H_{2b}:** Teacher skills and teaching methods mediate the relationship between teacher qualifications and student satisfaction.
- **H_{2c}:** Effective knowledge sharing mediates the relationship between teacher qualifications and student satisfaction.
- **H_{3a}:** Knowledge intensive culture moderates the relationship between teacher skills and methods and student satisfaction.
- **H_{3b}:** Knowledge intensive culture moderates the relationship between teachers' skills and methods and student satisfaction.

3. Research Methodology

3.1 Research Paradigm and Approach

The research approach is based on a real problem that requires a solution (Creswell, 2013). For this study, positivism has been selected as it is based on objective reality, existing theories, acceptable and unbiased knowledge, quantifiable variables and statistical analysis (Bryman & Bell, 2015; Creswell, 2013). Furthermore, deductive inquiry approach is used and it is an associational study that aims to examine the relationships among proposed hypotheses (Fraenkel, Wallen, & Hyun, 1993). The positivist paradigm and the deductive approach are appropriate to test the theoretical research model and to examine causation effects (Fraenkel et al., 1993).

3.2 Sample

The population included universities interested in improving the quality standards of education by involving students. For the population frame, teachers and students of private universities have been selected. The justifications for using Private universities are huge market share, latest technology adoption, research seminar, webinars, conferences, stiff business competition, knowledge sharing culture and professional faculty members. The list of Private universities have been taken from Higher Education Commission (HEC) website. For sample selection, the targeted population was divided into clusters according to geographical locations. Punjab was divided into nine clusters based on its divisions: Faisalabad, Bahawalpur, Gujranwala, Rawalpindi, Lahore, Dera-Ghazi Khan, Sargodha, Multan and Sahiwal. One cluster (Lahore) was chosen based on high business volume.

Out of the 14 Private universities in Lahore, four well-known universities were randomly selected: the University of Management and Technology, the University of Central Punjab, the Superior University, and the National College of Business Administration and Economics. Data regarding teacher qualifications and experience have been collected from faculty members; moreover, while data regarding teacher skills, teaching methods, knowledge sharing, knowledge intensive culture, and students' satisfaction were gathered from students. Sample size was calculated via sample size formula with a known sampling frame. Finally, to overcome the problems of sampling errors, approximately 600 respondents have been chosen (Ary, Jacobs, Sorensen, & Walker, 2013).

3.3 Time Horizon

This study has collected data once from teachers and students of private universities using cross-sectional time horizon. Cross-sectional studies have numerous benefits such as minimum travelling and budget cost, and data collection from large population in limited time (Creswell, 2013; Hair et al., 2006).

3.4 Statistical Analysis Techniques

There are various statistical techniques that were used to find out the results. For example, reliability and validity tests were performed to measure the internal consistency and construct validity of scales. Whereas linear regression, mediation, and Aguinis (2004) multiple moderation regression (MMR) tests were used to examine the relationships in proposed hypotheses.

3.5 Instrumentation

Sekaran (2014) described self-administered questionnaires as the best data collection tool, as self-administered questionnaires can be helpful in collecting data at low cost,

require less effort, pose minimum travelling cost, and do not require the physical presence of the researcher (Babbie, 2015; Creswell, 2013).

A twenty-eight-item questionnaire was adapted to evaluate teachers skills and methods (Moreno-Murcia, Torregrosa, & Pedreño, 2015), and, in addition, student satisfaction scale has been adapted to meet the aims of this research (Wiers-Jenssen, Stensaker, & GrØgaard, 2002). Furthermore, a knowledge-sharing scale was adopted and adapted from a previous study by Xue, Bradley, and Liang (2011). Finally, a knowledge-intensive culture scale was chosen from a study by Gold and Malhotra (2001). This study used a five-point Likert scale that ranged from “1 = strongly disagree” to “5 = strongly agree”.

Exploratory factor analysis is used to examine the construct validity of adapted scales as well as to evaluate the structure of association between variables used and respondents. In this instance, factor analysis was conducted using PCA with a varimax approach. In Table 1, Bartlett’s test of sphericity has found significance for collected data for factor analysis. Furthermore, a sampling adequacy test shows a significant sample and good relationship among variables. KMO sampling adequacy has indicated the appropriateness of these factors. Moreover, Bartlett’s test and P-values are also significant; therefore, factor analysis was performed.

Table 1: KMO and Bartlett’s Tests

Variables Description	Scale Items	KMO Measure of Sample Adequacy	Bartlett’s Test of Sphericity & Chi-Square	Bartlett’s Test of Sphericity Sig.
Teaching Skills And Methods	12	.862	1753.18	.000
Effective Knowledge-Sharing	03	.789	1320.88	.000
Knowledge-Intensive Culture	05	.753	1111.28	.000
Student Satisfaction	08	.701	1012.11	.000

Exploratory factor analysis and confirmatory factor analysis were used on an initial sixty responses for measuring the construct’s validity for those scales which were adapted to fulfill the aims of this study (Cudeck, 2000; Harrington, 2008). By using exploratory factor analysis, the twelve-item of teacher skills and methods has retained that loaded on its original factor. Furthermore, eight items of student satisfaction were retained on its original factor. Finally, all three items of knowledge-sharing scale have loaded on its original factor.

In Table 2, only those values are presented that have Eigen-values > 1. Furthermore, four components were selected based on higher Eigen-values. These components are called principle components. Teacher skills and teaching methodologies have twelve-items and are demonstrated 66.49% variance, and effective knowledge sharing was measured based on three-item which indicated 63.77% variation. Furthermore, knowledge-intensive

culture was measured by five-item which demonstrated 60.44% variation. Finally, the student satisfaction scale consisted of eight items and indicated 55.01% variation.

Table 2: Eigen-values and total variance explained

Constructs	Components	Eigen-values		
		Total . Var.	% of Variance Explained	Cumulative % of Variance Explained
Teaching skills and methods	1 st Comp.	3.32	66.49	66.49
Effective knowledge-sharing	2 nd Comp.	2.55	63.77	63.77
Knowledge-intensive culture	3 rd Comp.	2.35	60.44	60.44
Student satisfaction	4 th Comp.	2.11	55.01	55.01

Confirmatory factor analysis (CFA) was conducted to measure the model fit for proposed hypotheses testing. For measuring the model validity, there are different standards provided by Byrne (2013), namely the “Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), Root-Mean Square Error of Approximation (RMSEA), Goodness of Fit Index (GFI), and Adjusted Goodness of Fit Index (AGFI)”. Following the same, RMSEA standard benchmark was 0.08 or below, CFI, GFI, AFGI, TLI standard was 0.90 or above, whereas CMIN/df standard for acceptance was <3 (Byrne, 2013; Hair et al., 2006; Harrington, 2008). Initially, there was weak model fit statistics. However, modification indices were extracted to get good model fit statistics (See Table 3).

Table 3: CFA Results

Descriptions	CMIN/DF	CFI	TLI	RMSEA	GFI	AGFI
Weak Model Fit	4.271	.731	.711	.078	.723	.809
Good Model Fit	3.01	0.890	0.874	.053	.911	.901
Threshold-Model fit	<3	≥0.91	≥0.90	≤0.081	≥0.93	≥0.92

3.6 Procedures

About 600 hundred self-administered questionnaires were distributed among the teachers and students of private universities in Lahore, Pakistan. Three hundred questionnaires were distributed among teachers for gathering data on teacher qualifications and experience. The remaining three hundred questionnaires were distributed among students

to gather data regarding teacher skills and methods, knowledge-sharing, knowledge-intensive culture, and student satisfaction

Out of these 600, approximately 489 respondents returned the questionnaires. Out these responses, 29 questionnaires were discarded because of high missing values. Two hundred responses were collected from teachers, and the remaining 240 responses were collected from the students of private universities. Finally, 440 questionnaires are determined to be valid for data analysis and interpretations.

4. Results and Analysis

4.1 Demographic Analysis

Table 4: Demographic Characteristics of Teachers

Descriptive Facts	Frequency	Frequency (%)
Teacher Experience		
Below 5 Years	101	42.08
5-9 Years	59	24.58
10-14 Years	32	13.53
15-19 Years	28	11.67
20-24 Years	12	5
Above 24 Years	8	3.3
Teacher Educations Level		
Masters	138	57.5
MS/Mphil	82	34.17
PhD	20	8.33

In Table 4, 240 teachers responses have presented, 101 teachers have below 5 years' experience, 59 respondents fall within the experience range between 5 to 9 years. Moreover, 32 teachers have the experience between 10 to 14 years, 28 teachers fall in the range of 15 to 19 years. Finally, 12 teachers having the experience of 20 to 24 and 08 respondents have the experience of above 24 years.

Finally, 138 teachers have completed master's degrees and 82 teachers are earned/M.Phil degrees. Furthermore, 20 teachers hold the PhD degrees.

4.2 Reliability Analysis

Table 5: Reliability Measurement

Variables Description	Total Items	Cronbach Alpha
Teaching skills and methods	12	.877
Effective knowledge sharing	03	.859
Knowledge Intensive Culture	05	.838
Student satisfaction	08	.807

Reliability analysis has conducted to examine the Cronbach’s alpha values to measure internal consistency of each construct. In Table 5, the results have revealed that all Cronbach’s alpha values vary from .807 to .877 that are significant and align with the acceptable standards (George & Mallery, 2003; Hair et al., 2006).

4.3 Descriptive Analysis

Table 6: Descriptive Statistics Results

Variables Description	Valid-N	Mean	Std. D	Min. V.	Max. V.
Teacher Experience	240	3.31	0.549	1	5
Teacher Qualifications	240	3.09	0.844	1	5
Teachers skills and methods	200	3.11	0.737	1	5
Effective knowledge sharing	200	2.97	0.367	1	5
Knowledge intensive culture	200	3.21	1.034	1	5
Student satisfaction	200	3.49	1.123	1	5

Descriptive analysis has performed to find the valid-N for each item, average values, standard deviation, minimum range and maximum range values. In Table 6, all the extracted means values vary from neutral to strongly agree.

4.4 Linear Regression Analysis

Table 7: Linear Regression (Teachers Experience and Qualification with Student Satisfaction)

Variables Description	Student Satisfaction				
	R ²	F-value	Un. std. β .	T-value	P-value
Teacher experience	.311	83.55	.381	3.11	.004
Teacher qualifications	.438	127.24	.505	5.68	.000

A linear regression test was applied to determine whether or not there was a relationship between teacher experience and student satisfaction. In Table 7, the R²-value (0.311) means student satisfaction changed significantly with teacher experience. Furthermore, un-standardized β coefficients and P-values indicated a statistically significant relationship between teacher experience and student satisfaction ($\beta = 0.311$, $p < 0.005$). In the same way, the R²-value (0.418) showed that student satisfaction was influenced significantly by teacher qualifications. Moreover, un-standardized coefficients and P-values demonstrated strong and statistically valid relationship between teacher qualifications and student satisfaction ($\beta = 0.438$, $p < 0.005$).

4.5 Mediation Analysis

The Preacher and Hayes (2004) test has been used to examine the mediation effects of teacher skills and methods and effective knowledge-sharing among teacher experience, qualifications and student satisfaction.

Table 8: Mediation Test (Teacher Experience, Teacher Skills and Methods, and Student Satisfaction)

Statistical descriptions	A-Path ¹	B-Path ¹	C-Path ¹	C'-Path ¹
	X-M	M(X)Y	X-Y	X(M)-Y
Un-standardized β .	.581	.401	.507	.311
P-value	.000	.000	.000	.000
T-value	10.14	6.19	5.11	4.01
R ²	.501			
Adjusted R ²	.492			
Significance value	.000			
F-value	85.14			
Note X: Teacher experience, M: student satisfaction, Y: teacher skills and methods, Note*P < .05, **P < .01, ***P < .001, 5000 times bootstrapping for mediation test on 95% confidence level.				

A-Path¹ revealed a significant and positive relationship between teacher experience and student satisfaction ($\beta=0.581$, $T=10.14$ at 99% confidence level). All four steps of the mediation effects were significant (See Table 8). C and C'-Path¹ indicated the direct and indirect associations show that, teacher skills and methods partially mediated the relationship between teacher experience and student satisfaction. The overall results of mediation were statistically significant ($R^2=0.501$ and $F\text{-value}=85.14$).

Table 9: Mediation Test (Teacher Experience, Effective Knowledge-Sharing, and Student Satisfaction)

Statistical descriptions	A-Path ¹	B-Path ¹	C-Path ¹	C'-Path ¹
	X-M	M(X)Y	X-Y	X(M)-Y
Un-standardized β .	.533	.378	.486	.313
P-value	.001	.003	.010	.009
T-value	10.19	5.88	9.51	4.95
R ²	.453			
Adjusted R ²	.449			
Significance value	.002			
F-value	65.19			

Note X: Teacher experience, M: student satisfaction, Y: effective knowledge-sharing, Note *P < .05, **P < .01, ***P < .001, 5000 times bootstrapping for mediation test on 95% confidence level.

A-Path¹ reported a significant and positive relationship between teacher experience and students satisfaction ($\beta=0.533$, $T=10.19$ at 99% confidence level). All four steps of the mediation effects were significant (See Table 9). C and C'-Path¹ indicated the direct and indirect relationships highlight that, knowledge-sharing partially mediated the relationship between teacher experience and student satisfaction. The overall outcomes were statistically significant ($R^2=0.453$ and $F\text{-value}=65.19$).

Table 10: Mediation Test (Teacher Qualifications, Teacher Skills and Methods, and Student Satisfaction)

Statistical descriptions	A-Path ¹ X-M	B-Path ¹ M(X)Y	C-Path ¹ X-Y	C'-Path ¹ X(M)-Y
Un-standardized β .	.388	.403	.387	.298
P-value	.000	.000	.000	.001
T-value	5.94	6.03	5.81	4.51
R ²	.401			
Adjusted R ²	.393			
Significance value	.001			
F-value	55.49			
Note X: Teacher qualifications, M: student satisfaction, Y: teacher skills and methods, Note *P < .05, **P < .01, ***P < .001, 5000 times bootstrapping for mediation test on 95% confidence level.				

A-Path¹ showed a significant and positive relationship between teacher qualifications and student satisfaction ($\beta=0.388$, $T=5.94$ at 99% confidence level). C and C'-Path¹ showed direct and indirect associations that, teacher skills and methods partially mediated the relationship between teacher qualifications and student satisfaction (See Table 10). The overall statistics were statistically significant ($R^2=0.401$ and $F\text{-value}=55.49$).

Table 11: Mediation Test (Teacher Qualifications, Effective Knowledge-Sharing, and Students Satisfaction)

Statistical Descriptions	A-Path¹ X-M	B-Path¹ M(X)Y	C-Path¹ X-Y	C'-Path¹ X(M)-Y
Un-Standardized B.	.713	.478	.616	.391
P-Value	.000	.000	.000	.000
T-Value	13.14	6.59	11.51	4.87
R ²	.651			
Adjusted R ²	.648			
Significance Value	.000			
F-Value	111.19			
Note X: Teacher Qualification, M: Student Satisfaction, Y: Effective Knowledge-Sharing, Note *P < .05, **P < .01, ***P < .001, 5000 Times Bootstrapping For Mediation Test On 95% Confidence Level.				

A-Path¹ revealed positive link between teacher qualifications and student satisfaction ($\beta=0.713$, $T=13.14$ at 99% confidence level). It is evident that effective knowledge-sharing partially mediates the relationship between teacher qualifications and students satisfaction (See Table 11). The overall values were statistically significant ($R^2=0.651$ and $F\text{-value}=111.19$).

4.6 Moderation Analysis

Table 12: Moderation Test (Teaching Skills and Methods, Knowledge Intensive Culture, Students Satisfaction)

Model 1	TS&M, KIC& SS		
R ²	.468		
Adjusted R ²	.459		
F-Value	71.21		
	TS&M	SS	
Beta Coefficient	.433	.339	
Standard Error	0.04	0.08	
T-Value	5.22	4.88	
Significant Value	.000	.000	
Model 2	TS&M, KIC, TS&M *KIC&SS		
R ²	0.513		
Adjusted R ²	0.509		
F-Value	77.16		
	TS&M	KIC	TS&M *KIC
Beta Coefficient	.567	.593	.639
Standard Error	0.09	0.19	0.021
Significant Value	.000	.000	.000
TS&M= teacher skills & methods KIC=Knowledge Intensive Culture SS= Students satisfaction			
Note *P < .05, **P < .01, ***P < .001, 95% confidence level			

Multiple moderated regression was conducted using the procedures of Aguinis (2004). A table 12 show, the interactive role of knowledge-intensive culture on the relationship between teacher skills and methods and students satisfaction. In Model 1, teacher skills and methods correlated significantly with student satisfaction ($\beta = 0.433$, $\beta = 0.339$, $p < 0.005$). In Model 02, the construction of an interaction term (TS&M *KIC) revealed statistically significant impact on student satisfaction. Knowledge-intensive culture

moderated and strengthened the association between teachers skills and methods and student satisfaction ($\Delta R^2 = 0.045$, $p < 0.05$).

Table 13: Moderation Test (Effective Knowledge-Sharing, Knowledge-Intensive Culture, Students Satisfaction)

Model 1	EKS, KIC & SS		
R ²	.581		
Adjusted R ²	.575		
F-Value	83.81		
	EKS	SS	
Beta Coefficient	.498	.473	
Standard Error	0.09	0.07	
T-Value	6.86	5.87	
Significant Value	.000	.000	
Model 2	EKS, KIC, EKS *KIC & SS		
R ²	.673		
Adjusted R ²	.669		
F-Value	111.33		
	EKS	KIC	EKS *KIC
Beta Coefficient	.711	.694	.757
Standard Error	0.19	0.21	.029
Significant Value	.000	.000	.000
EKS= Effective knowledge-sharing KIC=Knowledge-Intensive Culture SS= Students satisfaction			
Note *P < .05, **P < .01, ***P < .001, 95% confidence level			

A Table 13 indicates the interactive role of a knowledge-intensive culture on the relationship of effective knowledge sharing and students satisfaction. In Model 1, effective knowledge-sharing has been examined and found significant with student satisfaction ($\beta = 0.498$, $\beta = 0.473$, $p < 0.005$). In Model 02, the construction of an interaction term (EKS *KIC) demonstrated statistically significant impact on students satisfaction. Knowledge-intensive culture moderated and strengthened the association between effective knowledge-sharing and student satisfaction ($\Delta R^2 = 0.092$, $p < 0.05$).

5. Conclusion

Education sector is a key driver and indicator of economic growth in world, predominantly in the context of higher education. Student satisfaction is an important to maintain the quality standards and evaluate the teacher performance. The paradigm has been shifted from teacher job satisfaction into student satisfaction. Students are the key stakeholders and consumers of higher education universities. Therefore, students' feedback is an important predictor to determine the performance of teachers and education system. To determine the teacher performance, teacher qualifications, experience, skills, methods, and knowledge-sharing were used in this study. It is evident from results that a teacher qualification is a major predictor of student satisfaction than teacher experience. Teacher skills and methods, and effective knowledge-sharing partially mediated the relationship between teachers experience, teacher qualifications and students satisfaction. Moreover, knowledge-intensive culture strengthens the relationship between teacher skills and methods, knowledge-sharing and student satisfaction.

6. Implications

This investigation has numerous theoretical and practical implications. From the perspective of theoretical implications, this study introduces an overarching model to measure the levels of teachers' performance and student satisfaction through teacher qualifications, experience, methods, and effective knowledge-sharing. There is quality literature available from the perspective of teacher job satisfaction (Johnson et al., 2012; Swan et al., 2013; Maele & Van Houtte, 2012). However, there is limited literature found in the context of student satisfaction. Furthermore, this research has tested the unique relationships of mediating and moderating variables and also evaluates the western theories in the perspective of Asian culture. Additionally, the significance of mediation effect enlarges the use of teacher skills and method and knowledge-sharing in the context of level of student satisfaction.

This study provides new avenues for the top managements of education institutions to evaluate the teachers' performance by involving their students that are the key stakeholder and best evaluator of teaching skills, experience and methods. In addition, this study may benefit the top managements and strategic thinkers to develop strategies to retain students and gain their satisfaction. This research also suggests that the top management has to recruit qualified and experienced teachers to gain student satisfaction and career success.

7. Limitations and Future Directions

This study has conducted only in private universities of Lahore, Pakistan. In future, data may be collected from Private and Public sector universities of Pakistan. A cross-sectional study and self-reported data raise the issues of causality and common method variance. Therefore, longitudinal study can facilitate to overcome the issues of causality and common method variance. Moreover, a comparative study can be conducted on private and public sector universities to determine the student satisfaction levels by using these variables.

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