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Affiliation:
Shabroz
PhD Scholar, IQRA University. Email: shabrozseehar@gmail.com
Martin Thomas
Head of Department, Education and Social Sciences, IQRA University
Shams Hamid
Professor, IQRA University

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Impact of Transformational Leadership Style on Organizational Commitment: A Quantitative Study at Higher Education Level in Karachi, Pakistan

Shabroz * Martin Thomas † Shams Hamid ‡

Abstract: *Although the education sector has been a fast-growing sector in Pakistan, it has been facing various challenges including the lack of effective leadership styles and teachers' organizational commitment. The purpose of this quantitative study is to investigate the impact of Principals' transformational leadership style on teachers' organizational commitment at higher education level in Karachi, Pakistan. Multifactor Leadership Questionnaire (MLQ Form 5X) developed by Bass and Avolio and Organizational Commitment Survey (OCS) developed by Meyer and Allen were used as research instruments to collect the data for the study. The survey method and stratified random sampling technique were used to collect the data from n=310 college teachers from public sector colleges and the data were analyzed using Structural Equation Modeling technique using Smart PLS. The Results of the study revealed that Principals' transformational leadership style has a positive and significant impact on teachers' organizational commitment. It is recommended for the Principals of colleges that they demonstrate transformational leadership behaviors to enhance the organizational commitment among teachers for the betterment of the organization.*

Keywords: Transformational leadership, organizational commitment, structural equation modeling.

Introduction

Many affiliated colleges in Pakistan provide tertiary education under the supervision of universities of Pakistan. The system of affiliated colleges was inherited from British India (WorldBank, 2011). These affiliated colleges are playing a very important role in providing higher education to students within a minimum fee structure. Students from remote areas of Pakistan are receiving higher education from these affiliated colleges which are easily accessible to them. Despite its easy access to tertiary education through these colleges, there is still a demand for quality education in this technological world. Teachers' organizational commitment is directly linked with the quality of their education in the institutions. Teachers' organizational commitment depends on the effective leadership provided in their institutions.

*PhD Scholar, Iqra University. Email: shabrozseehar@gmail.com
†Head of Department, Education and Social Sciences, Iqra University.
‡Professor, Iqra University.
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Leadership is an ability to motivate a person or group towards achievement of a targeted goal with positive behavior (Robbins, 2003). Today's world is full of new technologies, and organizations face competition and many challenges to meet their targeted objectives. Therefore, effective leadership is a demand of every organization (Northouse, 2010).

B. M. Bass (1985) was the first person who discovered transformational, transactional and laissez- faire leadership styles, and his Full Range Leadership Theory (FRLT) eventually resulted in the nine-factor model of leadership. B. M. Bass (1985) also developed a measurement instrument known as the Multifactor Leadership Questionnaire (MLQ) to measure transformational, transaction and laissez-faire leadership styles. Now the MLQ is known as MLQ (5X Short) which has been developed by B. M. Bass, Avolio, Jung, and Berson (2003) and it is an updated version of B. M. Bass (1985).

The desire of the employees of an organization to keep working in the organization or leave it is known as organizational commitment. Allen and Meyer (1990) first developed the commitment model. The three components of organizational commitment include affective commitment, normative commitment, and continuance commitment. DuFour and Mattos (2013) found that transformational leadership creates a better working environment and makes employees more committed to their organizations. Kamola (2016) examined the influence of transformational leadership of institutional heads on teachers' job commitment. The results of their findings revealed that transformational leadership has a critical but positive relationship with teachers' commitment to their work. Sadeghi and Pihie (2012) examined the leadership effectiveness among heads of academic departments in Malaysian research universities and found that academic heads' transformational leadership, have a strong correlation with leadership effectiveness in higher education settings. Patiar and Wang (2016) also investigated the impact of transformational leadership style on organizational commitment in up scales hotels in Australia and found that transformational leadership has a positive relationship with teachers' commitment to their work.

Many past studies have examined the impact of leadership styles and their impact on organizational commitment but these studies have been conducted in the domains of business and management. The impact of transformational leadership on organizational commitment in the educational sectors remains under researched (Whiteley, Sy, & Johnson, 2012; Puni, Mohammed, & Asamoah, 2018). Similarly, in Pakistani context, the researchers have studied the impact of transformational leadership mostly in the business and management fields (Zareen, Razzaq, & Mujtaba, 2015; Tipu, Ryan, & Fantazy, 2012; Asare, 2017). Therefore, aim of the study is to investigate the impact of Pakistani College Principals' transformational leadership style on their teachers' organizational commitment to address the scarcity of research in this area in the higher education context.

Literature Review

Transformational Leadership

Transformational leadership promotes new ideas to solve problems, shares the vision of leaders efficiently, and transform the skills of the workers. It also encourages change, motivates the followers through attending to their higher order needs, and transforms the leader into a source of satisfaction for his or her followers (B. M. Bass, 1985; B. Bass & Avolio, 2004). Transformational leadership consists of five dimensions including the idealized influence, i.e. the behavior of transformational leadership in which the leaders are role models for their followers because they show extraordinary efforts and abilities and deal with their followers through applying positive ethical principles. Transformational leaders give importance and priority to their subordinates' needs more than their own needs. Idealized attribute and behavior are the two aspects of the idealized influence behavior (Gill, Sharma, Mathur, & Bhutani, 2012). Inspirational motivation is the quality of transformational leaders using which leaders inculcate team spirit in their followers to achieve the targeted goals for the betterment of an organization. These leaders provide clear vision to their followers. Intellectual stimulation is the transformational leaders' quality to develop the intellectuality among their followers and they listen their followers' point of views very carefully (B. M. Bass, 1985). Finally, individualized consideration means that the transformational leaders give individual attention to their followers and encourage them to put in their efforts for the betterment of their organizations (Northouse, 2010).

Organizational Commitment

Organizational commitment is considered as the psychological attachment of employees towards the work and the working environment which makes organizations stronger and productive (Meyer & Allen, 2004). Organizational commitment is accepted as the theory which relates employees' work attitude and behavior with their organizations (Lambert, Kim, Kelley, & Hogan, 2013). Many researchers consider organizational commitment as a measurement model to investigate the employees' psychological attachment to an organization with three types of commitment feeling towards the organization. Meyer and Allen (2004); Lambert et al. (2013); Meyer et al. (2012). Organizational commitment is measured through three dimensions: affective commitment, continuance commitment, and normative commitment. Affective commitment is the emotional connection of employees with their organization. Normative commitment is the desire to stay with the organization and continuance commitment refers to employees' feelings of 'being locked' with organization because of financial benefits (Meyer et al., 2012; Lambert et al., 2013).

Relationship between Transformational & Organizational Commitment

Leadership is considered as an important organizational factor and a key determinant of organizational commitment (Mowday, Porter, & Steers, 2013). Many researchers found a well-established link between transformational leadership and organizational commit-

ment (Kellis & Ran, 2013). A meta-analysis study by Keskes (2014) examined the relationship between transformational leadership styles and organizational commitment. The findings of his study revealed a positive relationship between the transformational leadership styles and the followers' organizational commitment. Keskes (2014) also suggested additional research to examine the effect of precise behaviors of leadership styles on organizational commitment. Many researchers argued that employees, who work under the supervision of transformational leadership, feel more committed to their jobs and organizations (Khalil, Iqbal, & Khan, 2016; Ali, Kim, & Ryu, 2016).

Transformational leaders create a strong and deep commitment among followers by using individual consideration to meet the followers' needs. As a result of this, the followers show a long organizational tenure and strong commitment (Dhawan & Mulla, 2011). In a meta-analysis of the literature. Jackson, Meyer, and Wang (2013) found that a strong positive relationship exists between transformational leadership and affective commitment because the transformational leaders have inspirational and motivational qualities. Under the umbrella of inspirational and motivational behavior, the transformational leaders build an affective commitment among followers through emotional appeal, creation of a compelling vision and challenge for employees to work together in the best interest of their organizations.

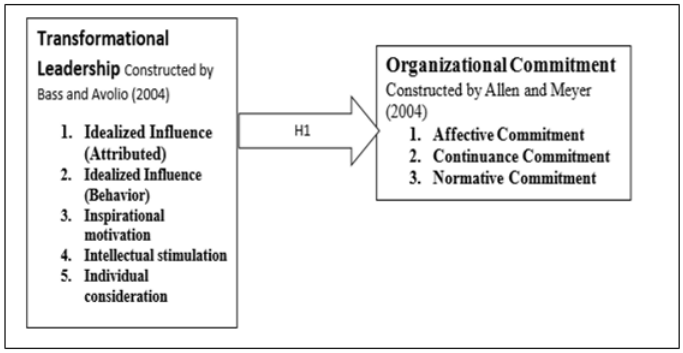
Asif, Ayyub, and Bashir (2014) conducted a study to examine the relationship between transformational leadership and organizational commitment. Their study included n=250 employees in the textile sector of Punjab, Pakistan. The researchers collected data using the MLQ-5X, OCQ, and the Psychological Empowerment Questionnaire (PEQ). The findings revealed that the transformational leadership has a positive and significant impact on employees' organizational commitment.

Yahaya and Ebrahim (2016) examined the relationship between B. M. Bass (1985) leadership dimensions (transformational, transactional, and laissez-faire) and several outcome variables (employee extra effort, employee satisfaction with leader, leadership effectiveness) and organizational commitment through a systematic literature review. Findings revealed that the transformational leadership motivates employees to work hard and be committed to achieving their organizational goals. Kim and Kim (2014) also investigated the effect of transformational leadership on affective organizational commitment among staff members in Spilt off Korean companies. They tested the hypotheses of their study through structural equation modeling and found a statistically significant relationship between transformational leadership style and organizational commitment. The findings of the study of Puni et al. (2018) also revealed that transformational leadership behavior creates an emotional attachment between employees and their organizations.

Based on the foregoing review of the literature, the researcher proposes the following hypothesis:

H1: Principals' transformational leadership has significant effect on their teachers' organizational commitment.

Figure 1
Conceptual Framework or Research Model



Source: Figure 1 shows the research model of this study with all higher order constructs i.e. transformational leadership as exogenous variable and organizational commitment as endogenous variable.

Methodology

Sample and Data Collection

This quantitative study reported in this paper is the part of the author's doctoral research (Dissertation). This study was conducted to find out the impact of the Principals' transformational leadership styles on teachers' organizational commitment at higher education level in Karachi, Pakistan. The survey method was used to collect the data of the study. Public sector degree colleges in Karachi were selected for sampling. The targeted population was teachers of public degree colleges from all districts of Karachi. Literature supports the selection of teachers as respondents for the study in context of transformational leadership style and organizational commitment. Therefore, 400 survey questionnaires were distributed among 20 colleges which were selected on the basis of stratified random sampling technique. The response rate was 86% (345 returned questionnaires), but 35 questionnaires were rejected because of incomplete response. A total of 310 questionnaires were used as the final sample that reflects the actual sample of the study.

Table 1 reports the demographic details of the participants of the current study. It shows that 45% female and 55% male teachers participated in this study and majority of the respondents belonged to the age group of 31 to 40 years. Majority of the respondents (teachers) of this study possessed Master's degree with 16-20 years' work experience. Demographic information also reveals that 54% lecturers, 30% Assistant Professors, 11% Associate Professors and 5% Professors were the respondents of this study.

Table 1
Demographic information of the study

Demographic variables with sample size n= 310 Degree college teachers		Frequency (f)	Percentage (%)
Gender	Male	170	55%
	Female	140	45%
	Total	310	100%
Age	20-30 years	71	23%
	31-40 years	127	41%
	40-50 years	68	22%
	50-60 years	44	14%
	Total	310	100%
Qualification	Masters	192	62%
	MS/M.Phil.	99	32%
	Ph.D.	19	6%
	Total	310	100%
Work experience	01-5	62	20%
	06-10	71	23%
	11-15	93	30%
	16- 20	31	10%
	21-25	34	11%
	26-30	19	6%
	Total	310	100%
Designation	Lecturer	168	54%
	Assistant Professor	92	30%
	Associate Professor	34	11%
	Professor	16	5%
	Total	310	100

Survey Instruments

Two standardized measurement scales were used to collect the data for the study. The structured Multifactor Leadership Questionnaire (MLQ Form 5X Short) developed by Bass and Avolio's (2004) was used to collect the data for the construct of transformational leadership style. Transformational leadership style consists of five dimensions. Each dimension of MLQ consists of four items on a 5-point Likert Scale ranging from 0 (not at all), to 4 (frequently, if not always). Organizational Commitment Questionnaire's (OCQ) developed by Meyer and Allen (2004)'s was used to collect the data for the research construct of organizational commitment. Organizational commitment consists of three dimensions. Each dimension of OCS consists of six items on a 7-point Likert Scale ranging from 1(strongly disagree) to 7(strongly agree). Demographic information, i.e. age, gender, designation, academic qualification and working experience, was also collected during the survey. Both research instruments are permission potent measuring instruments.

Data Analysis

The data were analyzed by using Statistical Package for the Social Sciences (SPSS) version.22.0 and SmartPLS version 3.2.7. SmartPLS 3.2.7 (Ringle, Wende, & Becker, 2015) was used to confirm the validity and reliability of the outer model and to test the hypothesis of the study. It is one of the advanced statistical software commonly used for Partial Least Squares Structural Equation Modeling (PLS-SEM).

The research model of this study is based on higher-order constructs containing two layers of constructs. Modeling Transformational leadership style and organizational commitment as higher order model constructs reduces the number of relationships between transformational leadership style and organizational commitment.

The higher order model of this study is of reflective-formative type. It was used to reflect the five dimensions of transformational leadership style. Becker, Klein, and Wetzels (2012) suggested the repeated indicator approach for the higher-order model. Therefore, in present study the researcher followed the repeated indicator approach for the higher-order model. Through PLS-SEM, the researcher assessed the measurement model and structural model in two steps.

A pilot test is a small-scale version of a study used to establish materials, parameters and procedures (Bordens & Abbott, 2011). Cronbach's Alpha internal consistency reliability test was undertaken for the pilot test. According to Nunnally (1978), the minimal reliability coefficient required to claim a measure construct as consistently reliable is 0.70. Table 2 shows that all constructs of this study have an acceptable reliability value and these results allowed the researcher to collect the data for main study.

Table 2
Cronbach's Alpha Reliability of all constructs

Constructs	Dimensions	No. of items	Cronbach's Alpha Reliability
Transformational leadership		20 items	0.946
(Higher order construct)	Idealized influence attribution	5 items	0.796
	Idealized influence behavior	5 items	0.782
	Inspirational motivation	5 items	0.878
	Intellectual stimulation	5 items	0.778
	Individualized consideration	5 items	0.77
Organizational commitment		18 items	0.821
(Higher order construct)	Affective commitment	6 items	0.656
	Normative commitment	6 items	0.803
	Continuance commitment	6 items	0.745

Common Method Variance Biased Test

Many researchers believe that the common method bias is a major concern when the same type of respondents are considered for a survey study by using the same type of Likert scale to measures the items of the research instruments (Yüksel, 2017; Palmatier, 2016; Tehseen, Ramayah, & Sajilan, 2017). Thus, it is very important to analyze the impact of common method bias prior to the analysis of the data of the study. For this purpose, Harman (1976) single factor statistical approach and correlation matrix procedure were used to test the common method variance bias. Harman's single factor test was proposed by Podsakoff, MacKenzie, Lee, and Podsakoff (2003). The results extracted 8 dimensions from 38 items that were accountable for 66. 157 % of the total variance. The first factor explained only 23.368% of variance in data. Moreover, the single factor neither emerged and nor produced most of the variance. It is proved by this test that this study did not have problem with the common method variance. Ali et al. (2016) argued that inter-construct correlations having the value of 0.9 and more is the indication of method bias in the study. Table 8 shows the highest value to be 0.814, thus the results of both tests

indicate that there was no issue of common method bias in this study.

The Measurement Model

At the first step, the researcher began the assessment with the measurement model. In this regard, the researcher selected a PLS algorithm based on considerations regarding the research design. The researcher selected the Path weighting scheme as PLS algorithm because it is applicable on all path models including a path model with a higher-order model. This assessment ensured sufficient construct validity and reliability of the measurement or outer model of the study which was examined through content validity, convergent validity, and discriminant validity. The following sections describe the construct validity and reliability in detail.

The Content Validity

The content validity of a research model is valid if the indicators (items) loadings of the construct are greater than 0.7 than rest of the constructs in the model (Chin, 1998; Hair, Hult, Ringle, & Sarstedt, 2013). Moreover, the majority of the factor loadings are greater than 0.7 which shows the property of items for measuring related concept. The results of the Table 3 and 4 confirmed the content validity of the research model. These tables show that the items were significantly loaded on their respective constructs with much higher values than other constructs at the < 0.05 level of significance.

The Convergent Validity

Convergent validity is used to confirm that the group of items converge to measure the same concept or construct (Hair et al., 2013). Three measures are used to confirm the convergent validity of the research model. Firstly, factors with high loadings should be at least more than 0.7 of factor loadings and statistically significant. Secondly, convergent validity should be measured by average variance extracted (AVE) and above 0.5, is considered as an acceptable threshold value (Fornell & Larcker, 1981). Thirdly, convergent validity should be measured through composite reliability which should be greater than 0.7 (Hair et al., 2013). Table 4 shows all the values demonstrated acceptable threshold value and fulfilled the requirement of convergent validity of the all constructs of the research model.

The Discriminant Validity

Discriminant validity is the validation of the research model which shows that a set of items can distinguish a variable from another variable in the model. The researcher analyzed the discriminant validity of the research model through two different ways. Firstly, all the items strongly loaded on their own respective constructs rather than the other constructs and differentiated the loading on respective constructs.

Table 3
Results of Factor Analysis

Constructs	Items	ACS	CCS	IA	IB	IC	IM	IS	NCS
	ACS1	**0.792**	0.077	0.334	0.300	0.249	0.275	0.204	0.488
ACS	ACS2	**0.770**	0.032	0.274	0.222	0.166	0.148	0.144	0.387
	ACS6	**0.764**	0.065	0.316	0.260	0.250	0.241	0.213	0.495
CCS	CCS4	0.064	**0.895**	0.037	0.003	-0.035	-0.018	0.026	0.073
	CCS6	0.067	**0.802**	0.068	-0.025	-0.029	-0.021	-0.023	0.036
IA	IA1	0.374	0.032	**0.840**	0.574	0.573	0.581	0.516	0.337
	IA2	0.216	0.111	**0.653**	0.446	0.443	0.449	0.403	0.207
	IA3	0.346	0.018	**0.864**	0.691	0.645	0.711	0.567	0.366
IB	IB1	0.232	0.020	0.474	**0.711**	0.458	0.464	0.548	0.303
	IB2	0.299	0.004	0.611	**0.859**	0.582	0.676	0.563	0.289
	IB3	0.272	-0.039	0.636	**0.853**	0.592	0.674	0.596	0.340
	IB4	0.289	-0.013	0.623	**0.814**	0.600	0.678	0.489	0.216
IC	IC1	0.201	0.002	0.530	0.527	**0.759**	0.563	0.6	0.318
	IC3	0.277	0.017	0.497	0.460	**0.731**	0.406	0.401	0.176
	IC4	0.225	-0.094	0.639	0.644	**0.889**	0.675	0.566	0.215
IM	IM1	0.259	0.027	0.604	0.614	0.524	**0.763**	0.482	0.230
	IM2	0.276	0.019	0.600	0.637	0.580	**0.806**	0.600	0.284
	IM3	0.201	-0.047	0.569	0.573	0.545	**0.799**	0.611	0.304
	IM4	0.187	-0.069	0.591	0.645	0.590	**0.825**	0.584	0.316
	IS1	0.193	0.062	0.450	0.471	0.424	0.510	**0.771**	0.424
IS	IS2	0.189	-0.064	0.485	0.494	0.553	0.581	**0.809**	0.383
	IS3	0.160	-0.005	0.489	0.546	0.544	0.557	**0.796**	0.334
	IS4	0.236	0.027	0.584	0.649	0.600	0.640	**0.838**	0.389
	NCS2	0.390	-0.012	0.376	0.381	0.347	0.354	0.430	**0.649**
NCS	NCS3	0.496	0.056	0.348	0.265	0.177	0.258	0.396	**0.796**
	NCS4	0.420	0.142	0.253	0.236	0.173	0.240	0.368	**0.788**
	NCS5	0.543	0.04	0.313	0.289	0.267	0.305	0.383	**0.911**
	NCS6	0.549	0.043	0.319	0.295	0.273	0.315	0.38	**0.908**

Table 3 indicates that all the cross-loadings were measured to be higher than 0.1 (Gefen & Straub, 2005). Secondly, discriminant validity approach of Fornell and Larcker (1981) was used to measure the discriminant validity. Table 5 indicates that the square roots of AVE represents a diagonal line of elements in the correlation matrix in which elements show an absolute value of their correlation of the constructs in rows and columns.

The Structural Model (Inner Model) and Hypotheses Testing

After examining and establishing the construct validity and reliability, the researcher used PLS-SEM (Partial Least Squares- Structural Equation Modeling) in SmartPLS 3.2.7 (Ringle et al., 2015) to test the proposed hypotheses of the study. PLS-SEM is appropriate for handling complex models having multivariate reflective and formative constructs, which is why it was preferred for analyzing reflective -formative research model of this study (Hair, Ringle, & Sarstedt, 2011; Henseler et al., 2014). The PLS-SEM (Partial Least Squares- Structural Equation Modeling) approach provides the better estimates over other covariance-based approaches (Hair et al., 2013). This study followed the statistical procedure recommended by Hair, Hult, Ringle, and Sarstedt (2014) to assess the structural model. In this regard, SmartPLS was used to run bootstrapping procedure with 5000 resamples to generate the t-values. Bootstrapping method was used to multiply the research data by doubling the existing data sets. As shown in Table 6, Transformational leadership has a positive and significant effect on organizational commitment at the <

0.05 level of significance (β=0.456, t=, 10.492, p<0.05) Therefore, the proposed hypothesis H1 is supported by the results.

Table 4
Significantly loaded items and convergent validity

Constructs	Items	Factor loadings	Standard Deviation	T –Value	P Values	CR	AVE
ACS	**ACS1**	0.812	0.036	22.589	0.000	**0.817**	**0.599**
	ACS2	0.739	0.052	14.137	0.000		
	ACS6	0.768	0.047	16.356	0.000		
CCS	**CCS4**	0.895	0.286	3.333	0.001	**0.838**	**0.722**
	CCS6	0.802	0.340	2.364	0.018		
IA	**IA1**	0.805	0.026	30.420	0.000		
	IA2	0.653	0.052	12.655	0.000		
	IA3	0.849	0.014	61.873	0.000	**0.820**	**0.570**
IB	**IB1**	0.711	0.041	17.342	0.000		
	IB2	0.859	0.017	49.629	0.000	**0.885**	**0.657**
	IB3	0.853	0.013	63.399	0.000		
	IB4	0.814	0.023	35.13	0.000		
IC	**IC1**	0.759	0.029	26.564	0.000	**0.834**	**0.652**
	IC3	0.731	0.040	18.196	0.000		
	IC4	0.889	0.010	92.804	0.000		
IM	**IM1**	0.763	0.038	20.315	0.000		
	IM2	0.806	0.018	43.614	0.000	**0.860**	**0.620**
	IM3	0.796	0.023	34.003	0.000		
	IM4	0.825	0.018	46.154	0.000		
IS	**IS1**	0.772	0.023	33.058	0.000		
	IS2	0.810	0.022	37.008	0.000	**0.869**	**0.650**
	IS3	0.797	0.021	37.766	0.000		
	IS4	0.839	0.017	49.309	0.000		
NCS	**NCS2**	0.713	0.030	24.011	0.000		
	NCS3	0.786	0.027	29.221	0.000		
	NCS4	0.777	0.033	23.381	0.000	**0.907**	**0.662**
	NCS5	0.891	0.016	57.044	0.000		
	NCS6	0.887	0.016	54.507	0.000		

Note: ***p<0.05

Table 5
Correlations for Discriminant Validity

Constructs	ACS	CCS	IA	IB	IC	IM	IS	NCS
ACS	0.710							
CCS	0.075	0.850						
IA	0.399	0.059	0.797					
IB	0.330	-0.010	0.727	0.851				
IC	0.270	-0.037	0.703	0.650	0.795			
IM	0.240	-0.022	0.741	0.765	0.704	0.795		
IS	0.244	0.006	0.628	0.666	0.664	0.705	0.802	
NCS	0.593	0.067	0.389	0.353	0.299	0.357	0.474	0.814

Table 6
Hypothesis testing results

Hypothesis		Estimate	S.E	T- Values	P Values	Decision
H1	Transformational leadership ->OCS	0.456	0.043	10.492	0.000	Supported

Note: ***p < 0.05

Predictive Relevance of the Model

The predictive relevance of the construct in the structural model was examined through R square and Cross-Validated Redundancy (Q square). R squared value is an important criterion for assessing the structural model in PLS-SEM and known as the coefficient of determination (Hair et al., 2013). R squared value of 0.10 is considered the minimum acceptable level (Falk & Miller, 1992). Table 7 shows that 0.20% of organizational commitment is explained by Transformational leadership. This confirms that Transformational leadership construct is predictable to understand the outcome in this research. Furthermore, the value of Cross- Validation Redundancy (Q square) was tested to ensure the quality of the research model. In this regard, the researcher applied the Blindfolding method in SmartPLS with omissions distances at 7. Stone (1974) developed the Q square technique to measure the predictive relevance. Q square value > 0 shows the predictive relevance of the research model. Table 7 shows that the Q square value was 0.080 for organizational commitment. According to Cohen (1988), effect size (f^2) .02, 0.13 and 0.35 are estimated to reflect weak, moderate and strong effects respectively. Table 8 shows that effect size is moderate which is found statistically significant at level of < 0.05.

Table 7
Predictive relevance of the construct

Estimate	R -Square	Q- Square
Organizational commitment	0.208	0.080

Table 8
Assessment of Effect Size (f^2)

	f^2	Standard Deviation (STDEV)	T-value	P Values	Decision
Transformational Leadership ->Organizational commitment	0.261	0.065	4.066	0.000	Moderate

Note: ***p<0.05

Discussion

The conceptual model of this study is reflective-formative in nature and is based on two major higher orders constructs. Their first higher-order construct, Transformational Leadership, is an exogenous construct, having five dimensions i.e. idealized influence attribution (IA), idealized influence behavior (IB), inspirational motivation (IM), intellectual stimulation (IS), and individualized consideration(IC) (B. M. Bass et al., 2003). The second higher-order construct organizational commitment, has three-dimensions i.e. affective commitment (ACS), normative commitment (NCS) and continuance commitment (CCS) which were examined in this research as an endogenous construct.

The hypothesis for the study H1 was supported as the transformational leadership has been found to have a significant impact on organizational commitment. These findings

are consistent with the Jackson et al. (2013) who also found that transformational leadership increases the employees' organizational commitment by motivating them with an emotional appeal to work together in the best interest of the organization.

The results of the study also confirm the findings of past studies (Puni et al., 2018; Kellis & Ran, 2013; Shurbagi & Zahari, 2012b) who found that transformational leadership style has a statistically significant relationship with their employees' organizational commitment. In addition, our results also support the findings of Asare (2017) who also explored the relationship between transformational leadership and organizational commitment in the higher education context and found a positive significant relationship between transformational leadership and organizational commitment.

Many past studies have been conducted in the various cultural contexts in the western world at school, college and university levels to explore the impact of transformational leadership on teachers' organizational commitment (Avolio, Bass, & Jung, 1999; B. M. Bass, 1985; B. Bass & Avolio, 2004; Munir & Khalil, 2016), however, the impact of transformational leadership on organizational commitment had not been explored in the Pakistani context, so the current study has made an important contribution by filling this gap in the literature.

Practical Implications

The findings of the current study have important implication. Firstly, as the findings of this study show that transformational leadership has a significant impact on employees' organizational commitment, the principals or heads of higher education institutions should adopt transformational leadership behaviors. Secondly, the educational leaders also need to be provided training to help them adopt transformational leadership behaviors. Thirdly, the findings of this study imply that the aspect of transformational leader style should be made the part of the evaluation criteria of the performance of the educational leaders in the higher education institutions. Fourthly, the findings of this study may also be useful for the recruitment committees for hiring the educational leaders. In future, the recruitment committees may select the candidates having the behaviors of transformational leadership because this leadership style enhances the employees' commitment with the organization.

Conclusion, Limitations, and Directions for Future Research

In conclusion, the study examined the impact of transformational leadership on teachers' organizational commitment. The findings of the study reveal that transformational leadership has a positive impact on employees' organizational commitment. Like all empirical research, this study has several limitations; which also suggest directions for future researches. Firstly, this research study only investigated the impact of transformational leadership on organizational commitment, so future research should examine the impact of other leadership styles, such as transactional leadership and laissez faire leadership, on organizational commitment. Secondly, this research only examined the impact

of transformational leadership on organizational commitment at the higher order level, therefore, future researchers should examine the impact of transformational leadership on every dimension of organizational commitment (i.e. affective commitment, normative commitment, and continuance commitment) separately. Thirdly, this study focused on only public-sector colleges, so future research should focus both public and private sector colleges and may also conduct a comparative study. Fourthly, this study did not examine any mediation and moderation impact of different constructs on the relationship between transformational leadership and organizational commitment, future researchers should examine latent constructs for mediation or moderation impact. Finally, this research examined the impact of transformation leadership as a higher order construct, therefore, future researchers should examine transformational leadership as a lower-order construct to examine the impact of every dimension of transformational leadership individually.

References

Ali, F., Kim, W. G., & Ryu, K. (2016). The effect of physical environment on passenger delight and satisfaction: Moderating effect of national identity. *Tourism Management*, *57*, 213–224. doi: https://doi.org/10.1016/j.tourman.2016.06.004

Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, *63*(1), 1–18.

Asare, K. B. (2017). Are basic school head teachers transformational leaders? Views of teachers. *African Journal of Teacher Education*, *5*(1). doi: 10.21083/ajote.v5i1.3475

Asif, M., Ayyub, S., & Bashir, M. K. (2014). Relationship between transformational leadership style and organizational commitment: Mediating effect of psychological empowerment. *International Conference on Quantitative Sciences and its Applications*, *1635*(1), 703–707.

Avolio, Bass, & Jung. (1999). *Full leadership development: Building the vital forces in organizations*. Thousand Oaks: Sage.

Bass, B., & Avolio, B. (2004). *Multifactor leadership questionnaire: Manual and sampler set*. Menlo Park: Mind Garden, Inc.

Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.

Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *Journal of Applied Psychology*, *88*(2), 207–218.

Becker, J.-M., Klein, K., & Wetzels, M. (2012). Formative hierarchical latent variable models in PLS-SEM: Guidelines for using reflective-formative type models. *Long Range Planning*, *45*(5-6), 359–394.

Bordens, K. S., & Abbott. (2011). *Research design and methods: A process approach*. New York: McGraw-Hill.

Chin, W. W. (1998). Issues and opinion on structural equation modeling. *MIS Quarterly*, *1*(22), 7–16.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Erlbaum.

Dhawan, V., & Mulla, Z. R. (2011). The role of pay and leadership in developing organizational commitment. *South Asian Journal of Management*, *18*(2), 60–75.

DuFour, R., & Mattos, M. (2013). Improve schools? *Educational Leadership*, *70*(7), 34–39.

Falk, R. F., & Miller, N. B. (1992). *A primer for soft modeling*. University of Akron Press.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *1*(18), 39–50.

Gefen, D., & Straub, D. (2005). A practical guide to factorial validity using PLS-Graph: Tutorial and annotated example. *Communications of the Association for Information Systems*, *16*(1), 91–109.

Gill, A., Sharma, S., Mathur, N., & Bhutani, S. (2012). The effects of job satisfaction and work experience on employee-desire for empowerment: A comparative study in Canada and India. *International Journal of Management*, *29*(1), 190–200.

Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2013). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks, CA: Sage.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, *19*(2), 139–152.

Harman, H. H. (1976). *Modern factor analysis*. Chicago: University of Chicago.

Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., Straub, D. W., ... Calantone, R. J. (2014). Common beliefs and reality about PLS: Comments on Rönkkö and Evermann. *Organizational Research Methods*, *17*(2), 182–209.

Jackson, T. A., Meyer, J. P., & Wang, H. (2013). Leadership, commitment, and culture: A meta-analysis. *Journal of Leadership & Organizational Studies*, *20*(1), 84–106.

Kamola, P. M. (2016). *Influence of head teacher's transformational leadership style on teachers' job commitment in public primary schools in Matinyani sub county, Kitui County, Kenya.* (Unpublished doctoral dissertation).

Kellis, D. S., & Ran, B. (2013). Modern leadership principles for public administration: Time to move forward. *Journal of Public Affairs*, *13*(1), 130–141.

Keskes, I. (2014). Relationship between leadership styles and dimensions of employee organizational commitment: A critical review and discussion of future directions. *Intangible Capital*, *10*(1), 26–51.

Khalil, U., Iqbal, J., & Khan, A. (2016). Exploring leadership styles of school administrators in Pakistan. *FWU Journal of Social Sciences*, *10*(1), 39–47.

Kim, S., & Kim, J. (2014). Integration strategy, transformational leadership and organizational commitment in Korea's coorporate split-offs. *Procedia-Social and Behavioral Sciences*, *109*(8), 1353–1364.

Lambert, E. G., Kim, B., Kelley, T., & Hogan, N. L. (2013). The association of affective and continuance commitment with correctional staff life satisfaction. *The Social Science Journal*, *50*(2), 195–203.

Meyer, J. P., & Allen, N. J. (2004). *TCM employee commitment survey academic users guide 2004*. The University of Western Ontario, Department of Psychology. London, Ontario, Canada.

Meyer, J. P., Stanley, D. J., Jackson, T. A., McInnis, K. J., Maltin, E. R., & Sheppard, L. (2012). Affective, normative, and continuance commitment levels across cultures: A meta-analysis. *Journal of Vocational Behavior*, *80*(2), 225–245.

Mowday, R. T., Porter, L. W., & Steers, R. M. (2013). *Employee Organization linkages: The Psychology of Commitment, Absenteeism, and Turnover*. Academic press.

Munir, F., & Khalil, U. (2016). Secondary school teachers' perceptions of their principals' leadership behaviors and their academic performance at secondary school level. *Bulletin of Education & Research*, *38*(1), 41–55.

Northouse, P. G. (2010). *Leadership: Theory and practice*. London: Sage.

Nunnally, J. (1978). *Psychometric theory*. Hillsdale, NJ, McGraw Hill.

Palmatier, R. W. (2016). Improving publishing success at JAMS: Contribution and positioning. *Journal of the Academy of Marketing Science*, *44*(6), 655–659.

Patiar, A., & Wang, Y. (2016). The effects of transformational leadership and organizational commitment on hotel departmental performance. *International Journal of Contemporary Hospitality Management*, *28*(3), 586–608.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903.

Puni, A., Mohammed, I., & Asamoah, E. (2018). Transformational leadership and job satisfaction: The moderating effect of contingent reward. *Leadership & Organization Development Journal*, *39*(4), 522–537.

Ringle, C. M., Wende, S., & Becker, J.-M. (2015). SmartPLS 3. *Boenningstedt: SmartPLS GmbH, http://www. smartpls.com*.

Robbins, P. (2003). *Organisational behaviour: Global and South African perspective*. Englewood Cliffs: Prentice Hall.

Sadeghi, A., & Pihie, A. Z. (2012). Transformational leadership and its predictive effects on leadership effectiveness. *International Journal of Business and Social Science*, *3*(7), 186–193.

Shurbagi, A. A. M., & Zahari, I. (2012b). The relationship between organizational culture and job satisfaction in national oil corporation of Libya. *International Journal of Humanities and Applied Sciences*, *1*(3), 88–93.

Stone, M. (1974). Cross-validatory choice and assessment of statistical predictions. *Journal of the Royal Statistical Society. Series B (Methodological)*, *36*(2), 111–147.

Tehseen, S., Ramayah, T., & Sajilan, S. (2017). Testing and controlling for common method variance: A review of available methods. *Journal of Management Sciences*, *4*(2), 142–168.

Tipu, S. A. A., Ryan, J. C., & Fantazy, K. A. (2012). Transformational leadership in Pakistan: An examination of the relationship of transformational leadership to organizational culture and innovation propensity. *Journal of Management & Organization*, *18*(4), 461–480.

Whiteley, P., Sy, T., & Johnson, S. K. (2012). Leaders' conceptions of followers: Implications for naturally occurring pygmalion effects. *The Leadership Quarterly*, *23*(5), 822–834.

WorldBank. (2011). *Affiliated colleges in South Asia: Is quality expansion possible? South Asia Human Development Sector, Report No. 47, World Bank* (Tech. Rep.).

Yahaya, R., & Ebrahim, F. (2016). Leadership styles and organizational commitment: Literature review. *Journal of Management Development*, *35*(2), 190–216.

Yüksel, A. (2017). A critique of "response bias" in the tourism, travel and hospitality research. *Tourism Management*, *59*, 376–384. doi: https://doi.org/10.1016/j.tourman.2016.08.003

Zareen, M., Razzaq, K., & Mujtaba, B. G. (2015). Impact of transactional, transformational and Laissez-Faire leadership styles on motivation: A quantitative study of banking employees in Pakistan. *Public Organization Review*, *15*(4), 531–549.