

Impact of leadership styles on faculty performance: Moderating role of organizational culture in higher education

Amna Rasool Jamali^{a*}, Arabella Bhutto^a, Mahvish Khaskheli^a and Waqar Sethar^a

^aMehran University of Engineering & Technology, Jamshoro, Pakistan

CHRONICLE

Article history:

Received: June 12, 2021

Received in revised format:

July 2 2021

Accepted: August 27, 2021

Available online:

August 27, 2021

Keywords:

Leadership Style

Organizational Culture

Faculty Performance

Full Range Leadership Model

Competing Value Framework

(CVF)

PLS-SEM

ABSTRACT

There are many leadership styles, which have different impacts on employees' performance. In higher education, faculty performance depends on many factors including Leadership style & Organizational culture. This study aims to examine the effect of leadership styles on faculty performance (FP) and more specifically to examine the moderating effect of Organizational Culture in the association between leadership styles and faculty performance in higher education institutions (MUET, Jamshoro). This study used quantitative methodology to identify the leadership styles which exist in MUET, Jamshoro, and their impact on faculty performance with organizational culture as moderator. It used both the sampling techniques probability and non-probability, and the sample size was 384 and the data was analyzed in SmartPLS 3. For leadership style, Full Range Leadership Model was adopted and for organizational culture, Competing Value Framework (CVF) was used. This study found that Transformational (TF) leadership has a positive significant relation with faculty performance at MUET, Jamshoro. And Organizational Culture (OC) as moderator negatively moderates the relation between Laissez-faire (LF) leadership and faculty performance (FP). According to faculty, transformational leadership is best suited to promote their performance on account of giving them challenging work, autonomy, mutual trust, through supporting subordinates' creativity, improving their confidence, and maintaining collaborations. Laissez-faire leadership also exists in an academic institution and has a positive impact on faculty performance. However, Transactional leadership has a negative impact on faculty performance. The future study could be conducted in other universities, or a comparison of leadership styles can be made between public and private universities with different models of leadership style and with different organizational culture models.

© 2022 by the authors; licensee Growing Science, Canada

1. Introduction

In today's era, every organization will have to compete in the market to perform better and sustain its position. So, in this regard, leaders play a crucial role to accomplish the organization's goals and boost employees' performance (Paracha et al., 2012). Leaders are those who use their power to influence and motivate employees for the betterment of themselves as well as for the organization. Leadership has a very strong influence on employees' attitudes towards their job (Jamaludin, 2011). Leadership is reported to have a strong influence on employees' attitudes towards their job. Nowadays, leaders' roles have changed in organizations and the success of any organization depends on the leadership style carried by its leader (Saleem, 2015). Leadership has a great impact on employees' job performance (Torlak, & Kuzey, 2019). In higher education faculty performance depends on many factors, including Leadership style & Organizational culture (Indrasari, 2017). According to Thrash (2009), leaders in academic institutions must have different types of leadership skills to become more effective in institutions. At universities head of departments, chairpersons, and faculty deans play an essential role to lead their faculty in

* Corresponding author.

E-mail address: amnarasool31@gmail.com (A. R. Jamali)

a way that they effectively perform their jobs because they produce assets (students) for the well-being of society and the future prosperity of economic growth of the country. Every organization has its particular culture, which could impact the job performance of employees in the organization. Numerous authors have described OC as a set of shared values, ideas, and ways of communication that are shared by organization members that motivate them to think and act in a certain way. Leadership and organizational culture are interdependent (Ogbonna, & Harris, 2000). The culture of an organization builds its large part from its leadership while the improvement of organizational culture can also be affected by leadership (Bass, & Avolio, 1993). A strong culture is very useful to increase the employees' performance in the organization, it will lead to the goal accomplishment and improves the overall organization performance. The performance of faculty is crucial to the wellbeing of institutions of higher learning and citizen education (Gappa et al., 2007). Factors influencing the quality of professional work are significant and productive dynamics of research (Feldman, & Paulsen, 1999). Many studies have looked at the relationship between leadership styles and job satisfaction (Amin et al., 2013; Bushra et al., 2011; Javed et al., 2014; Khan et al., 2014; Saleem, 2015). Other authors have discussed organizational culture (OC) and employees' performance (Khan & Afzal, 2011; Saeed et al., 2013; Shahzad, 2014). But specifically in the education sector, very few researchers have considered the influence of leadership styles on FP (Paracha et al., 2012; Shah et al., 2017; Torlak & Kuzey, 2019), and no research has been conducted yet where the moderating factor is the organizational culture in the context of Jamshoro, Pakistan. This study has focused on examining the role of OC and its effects on the relationship of leadership styles and faculty performance in higher education and also which type of OC exists in the institute.

This study has used Cameron et. al., (2014) model i.e., "Competing Values Framework" to define organizational culture based on four types of cultures i.e., clan (collaborative), adhocracy (creative), hierarchy (controlling), & market (competing). And this research also analyzes which leadership style is more effective in higher education with the model given by Bass & Avolio (2004) i.e., "Full Range Leadership Model".

1.1 Problem Statement

There are many leadership styles, which have a different impact on employees' performance, but many studies have only focused on two leadership styles i.e. Transformational and Transactional (Paracha et al., 2012; Rasool et al., 2015; Wahab et al., 2016; Yeh & Hong, 2012). According to the literature (Rasool et al., 2015; Khan et al., 2014), transformational leadership always be referred as conducive for better productivity as whether to see leadership impact on performance or job satisfaction, or commitment but specifically in Education Sector, very few researchers (Paracha et al., 2012; Shah et al., 2017; Torlak & Kuzey, 2019) have considered the influence of leadership styles on faculty performance. This study focuses on three leadership styles (transformational leadership, transactional leadership, & laissez-faire leadership). In this study, the role of organizational culture has also been elaborated and seen as a moderator. Many studies individually had seen that organizational culture affects the leadership style or leadership style affects the organizational culture or organizational culture affects the employees' performance, but no study has seen whether there is a role of organizational culture typologies in explaining the relationship between leadership and faculty performance.

1.2 Objectives of Research

1. To identify the leadership style(s) and organizational culture type(s) that exist in Mehran University of Engineering & Technology.
2. To evaluate the impact of leadership style typologies on faculty performance in MUET.
3. To examine the moderating role of OC between the leadership styles and faculty performance.

2. Literature Review

2.1 Leadership Style

In 2020, the influence of leaders and their decisions, and the importance of leadership responsibility, have come to the forefront and into the daily lives of most people on the planet (Blanchard, 2020). Leadership style is one of the most crucial factors for any organization and its employees' performance (Khan et al., 2014). The academy has an essential role to play in the development of socially responsible leaders and socially responsible practices and environments in education (Cauthen, 2016). The need for leaders to make decisions more responsibly is a well-known challenge in today's social context (Stachowicz-Stanusch et al., 2017). As the result of any development leadership surely has a major role, in which all recognized leadership styles have unpredictable results under various settings (Khan et al., 2012). Understanding the impact of leadership on performance is very important as some researchers realize that the main affecting force for improving job performance is leadership (Mahdinezhad, & Suandi, 2013). To make sure the organization success it's necessary to approve the suitable leadership style (Paracha et al., 2012).

2.1.1 Transformational Leadership (TF)

The transformational leader is the one who together with his links is involved to outrun the personal interests, motivating them to go ahead of the benefit of the organization (Antonopoulou et al., 2020). According to Bass & Riggio 2012, TF leadership is like a procedure that transforms people. Transformational leadership includes efforts to make changes that boost organizational efficiency and followers' performance, by transforming the self-concepts and personal values (Al-Husseini et al., 2019). This type of leader uses different ways to increase creative and innovative outcomes (Golden, & Shriner, 2019). In this field, Scholars have said that TF leadership produces committed subordinates, enhances performance, and promotes innovative ideas to solve problems (Mittal & Dhar, 2015). They are more ambitious and vision-oriented leaders who pursue their targeted desires to be satisfied (Wahab et al., 2016). A transformational leadership style can exhibit all the attributes to improve employees' willingness to show greater commitment and work performance (Guhr et al., 2019). Many organizations prefer transformational leadership mostly and it involves using everyone in the decision-making (Bass, 2000 as cited in Franklin, 2016). According to Behery (2008), when an organization uses transformational leadership, employees share their understanding easily with colleagues. TF leaders pay consideration to every supporter's growth need and their problems, by assisting them to see previous difficulties in unique ways, and they are capable to encourage, develop, promote, and stimulate followers to do additional efforts to attain group goals (Purwanto et al., 2020). According to Zafra et al., (2008), they concluded that these leaders are with high emotional intelligence and appear as leaders during group gluiness, it also increases the self-confidence, and moralities of the followers.

2.1.2 Transactional Leadership (TR)

Transactional leadership theory is broadly used in educational institutions (Khan, 2017). Transactional leadership exactly means "exchange" so, this leadership pacts with the trade between followers and their leaders (Paracha et al., 2012). For individual interests of dependents, leaders are responsible if those are related to the value of the work done by dependents (Purwanto et al., 2020). TR leaders use their strengths on work accomplishment and depend on benefits and rewards to enhance the performance of workers (Bass & Avolio, 2000). This leadership is more appropriate for traditional organizations which have more stiff structure working in a steady environment (Rasool et al., 2015). The employees working under transactional leaders perform only according to the expected reward (Meyer & Botha, 2000). It involves the utilization of unforeseen rewards and authorizes to make singular workers pursue their responsibility while adding to organizational objective achievement (Jensen et al., 2019). TR leadership style can include values, yet those qualities apply to the exchange process like trustworthiness, obligation, and correspondence (Purwanto et al., 2020). TR leaders give subordinates assets and prizes in return for inspiration, efficiency, and assignment achievement (Kim, 2011). Transactional leadership is centered on inadequate support and followers are encouraged through appreciation and reward or else they will get a penalty for their mistakes due to this exchange relationship; the anticipated performance attainment leads towards follower's advancement (Munaf, 2011). Howell, & Merenda (1999), researched the connection between the exchange of leader-member and said that the transactional leadership style is constructive for the performance of followers. Bass et al. (2003), research military platoons, the organization was working in an unbalanced atmosphere, and it showed that performance increased among the soldiers who were working under transactional leadership. Rejas et al., (2006), specified that the TR leadership style is more dominant than TF and LF leadership styles.

2.1.3 Laissez-faire Leadership (LF)

According to Avolio & Bass (1995), this leadership style is defined as a lack of leadership and an inactive leadership style. LF leadership is associated with an inactive style of management (Baig et al., 2019). This leadership style is the ultimate negligent principle which includes a non-interference strategy that allows all employees to have full liberty and has no specific way of attaining goals (Al-Malki, & Juan, 2018). To utilize this leadership style, we get execution in any event, when associations need remedial activities (Baig et al., 2019). In Laissez-faire leadership, where things go their way by themselves (Baig et al., 2019). This type of leadership is appropriate when the employees are professionals in their field (Al-Malki, & Juan, 2018). Laissez-faire leadership is generally recognized as ineffective (Baig et al., 2019). These kinds of leaders might assign tasks, but they do not provide any further leadership such as backing or supervision. Choices are made by others and often laissez-faire leaders quickly lose their dominance in the organization due to inactive leadership (Schimmoeller, 2010). Leaders with this leadership style do not want to become prominent; they do not want to control anything (Baig et al., 2019). Under this sort of leadership style, representatives take care of the job on their own or/and they find support from their friends, as well as from other managers and even other organizations rather than their leader (Luthans et al., 2007). With this leadership, there is no advance interference in work or performance follow-up feedback (Gill, 2011). This leadership style is linked with role conflict, increased stress, and low job dissatisfaction. This leadership refers to leaders who disregard their obligations

and hands-off approach, regarding the performance of their followers (Baig et al., 2019). Some of the research studies entitlement that LF leadership in the organization might lead to adverse outcomes and anxiety in workers (Al-Malki, & Juan, 2018).

2.2 Organizational Culture (OC)

One of the important factors to influence the competitive strength of the firm is organizational culture (Schimmoeller, 2010). According to Schein (1990), “A basic pattern of assumptions that a cluster has created, exposed or established in knowledge to handle with its challenges of outer variation and interior mix, and that have operated admirably sufficient to be estimated substantial, thus, to be instructed to new individuals as the correct method to notice, reflect, and sense corresponding to those complexities”. The organizational culture becomes significant for the organization itself (Indrasari, 2017). According to Hofstede (1991), the Culture of an organization is the attitude of persons inside the organization or out of the organization which separates them from each other.

Cameron & Quinn (1999) proposed a model of Competing Values Framework (CVF) which defined four cultures – adhocracy, clan, market, and hierarchy. The CVF model is commonly used to assess organizational culture. It is a well-validated model with reliability (Botti & Vesce, 2018). According to Chidambaranathan & Regha (2016), the public universities showed a blended culture type, with the presence of different cultures, while the private universities showed a more dominance of Clan and Adhocracy cultures.

2.2.1 Clan Culture (cl)

Clan culture characteristics are family-arranged, reliable, closeness, strengthening, and the regional. Clan type organizations have low worry for construction and control but a high emphasis on flexibility (Felipe et al., 2017). A clan culture type is member-oriented and has a positive link to affective employee attitudes (Hammond et al., 2011). According to Belias & Koustelios (2014); Schneider et al., (2013) their study also revealed that in the corporate and business worlds, the clan as a culture is the most dominant type of organizational culture. Organizations that are considered under this type of culture consider that committing and trusting to employees improve free interaction and employees' dedication (Cameron & Quinn, 1999). Thus, an organization with clan culture values organizational support, affiliation, and attachment (Hammond et al., 2011).

2.2.2 Adhocracy Culture (adh)

Characteristics of adhocracy culture are unique, dynamic, pioneering, hazard taking, prepared for change, forceful and adaptable. Associations with this kind of culture frequently follow achievement while focusing on novelty, improvement, and consistency in the advancement of inventive items, administrations, and cycles (Felipe et al., 2017). Organizations with a culture of adhocracy are easily organized and focused on the outside (Cameron & Quinn, 1999) if the change helps create or discover innovative assets and the conviction that a novel and a positive perspective promotes creativity and risk (Hammond et al., 2011). As a result, organizations with a culture of adhocracy promote growth, motivation, and diversity, which promotes risk, inventiveness, and flexibility. (Cameron & Quinn, 1999).

2.2.3 Hierarchy Culture (hier)

Hierarchy culture is structured and control-oriented. This type of culture focuses on minimizing the uncertainty levels and promotes a great sense of self-confidence, certainty, effectiveness, predictability, stability, and standardization (Felipe et al., 2017). Organizations that come under this type of culture focus on efficiency, control, steadiness, and predictability, (Cameron & Quinn, 1999) and are related to identifying clear responsibilities and roles. Thus, hierarchy type culture values, formality, routine, precise communication, and consistency, which leads to better profitability, smooth business performance, punctuality, and consistency (Cameron & Quinn, 1999).

2.2.4 Market Culture (mark)

Market culture is being concerned with goal attainment. Organizations with this type of culture focus on output, efficiency, competitiveness, and results in optimization (Felipe et al., 2017). Organizations with a market type culture are accomplishment engaged, sure and serious, which brings about short-and long-haul yield and partner esteem (Cameron & Quinn, 1999). Market culture types, value achievement, and competence and focus on development, centralized decision-making and clear goal setting, and focused task behaviors, resultant in beating other organizations aggressively, increasing output, and improving overall shareholder value (Cameron & Quinn, 1999).

2.3 Faculty Performance (FP) in Higher Education

For economic competitiveness, higher education is becoming an important part of an increasingly knowledge-driven global economy (Henard, 2009). According to Alkhasawneh (2018), one of the most important elements of any institution's organizational goals is performance. Performance is the communication between achievement, and behavior or results achieved, and group behavior together with a tendency to focus on results attainment due to the difficulty of separating behavior from results and achievement (Durah, 2003). Every organization focuses on increasing employee performance (Paracha et al., 2012). Likewise, it is very important in higher education as well to boost professional skills of quality teaching within educational institutions. Teaching is a complex and demanding job that involves Mastery of content, classroom control, and organizing techniques, and a grasp of teaching skills (Khan et al., 2017). In developing countries, higher education is viewed as a fundamental method for the creation and improvement of assets and for improving the existence of individuals to whom it should serve. There is increased consensus that quality, highly qualified, and effective teaching, and teachers are required to make progress in students' performance in academia and there is increasing interest in recognizing individual teacher's influence on student's achievement and also improvement of the image of the educational institutes (Jyothi et al., 2014). In higher education institutions teaching is very important (Henard, 2009). Generally, the role of faculty and assignment are shaped by academic culture, including incentives and values that will, in general, be in an enormous part discipline-related and institutionally determined (Amey, 1999). Faculty culture is also related to organizational effectiveness including levels of support, communication, and collaboration (Owens, 1991). Faculty culture can be positively affected by dynamic and expert leadership; collaboration and participation in building a vision and professional development; ongoing faculty development and regular feedback based on the collection and review of school-related data (Feldman & Paulsen, 1999). In higher education, the leadership which is needed is stated as Academic leadership. Academic leaders should motivate, empower, direct, and manage employees in accomplishing their allocated objectives (Siddique et al., 2011). The involvement of faculty leaders is important, as, between an institution's decision-making bodies and teachers on the job, they are at the border. The researcher(s) believes that employees' performance is very important for every organization, and motivation, satisfaction, influence, and support directly impact employee's performance and the result will be in good performance of an organization (Advani & Abbas, 2015). Faculty performance is important to the well-being of institutions of higher education and the education of citizens (Gappa et al., 2007). The common tripartite "assignments" for faculty are teaching, research, and service (Amey, 1999). Elements that influence the nature of faculty work are significant and rich factors for research (Feldman & Paulsen 1999). Institutions need to be identified as good-quality providers. According to Henard, (2009), many universities realize that competing only based on research is not enough to ensure the reputation. They must find brand new ways of exhibiting performance. They react to students' appeal for valuable teaching: students intend to make sure that their education will get them good jobs and will give them needed talent in the society of today and tomorrow.

3. Conceptual Framework

In this study, models applied are "Full Range Leadership Model", by Bass, & Avolio (2004), Transformational, Transactional and Laissez-faire Leadership Dimensions for the leadership styles of academic leaders, and the Competing Values Framework (CVF) by Cameron et al., (2014) for organizational culture.

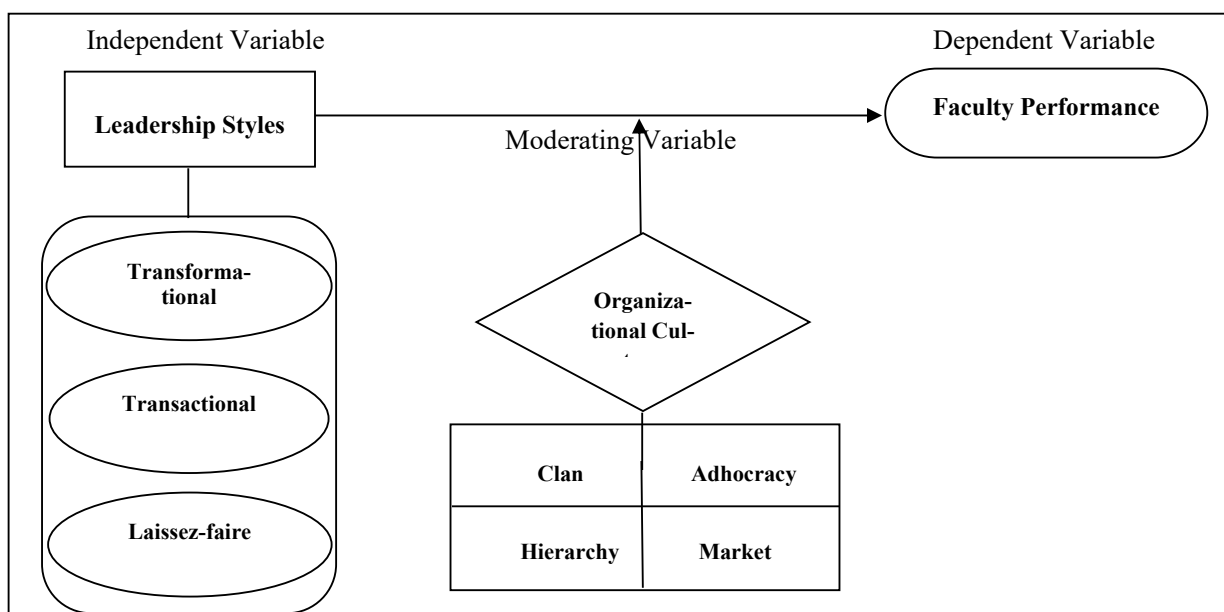


Fig 1. Conceptual Framework

3.1 Hypotheses for Analysis

- H1:** There is a significant relationship between TF leadership and FP.
H2: There is a significant relationship between TR leadership and FP.
H3: There is a significant relationship between LF leadership and FP.
H4: OC significantly moderates the relationship between TF leadership and FP.
H5: OC significantly moderates the relationship between TR leadership and FP.
H6: OC significantly moderates the relationship between LF leadership and FP.

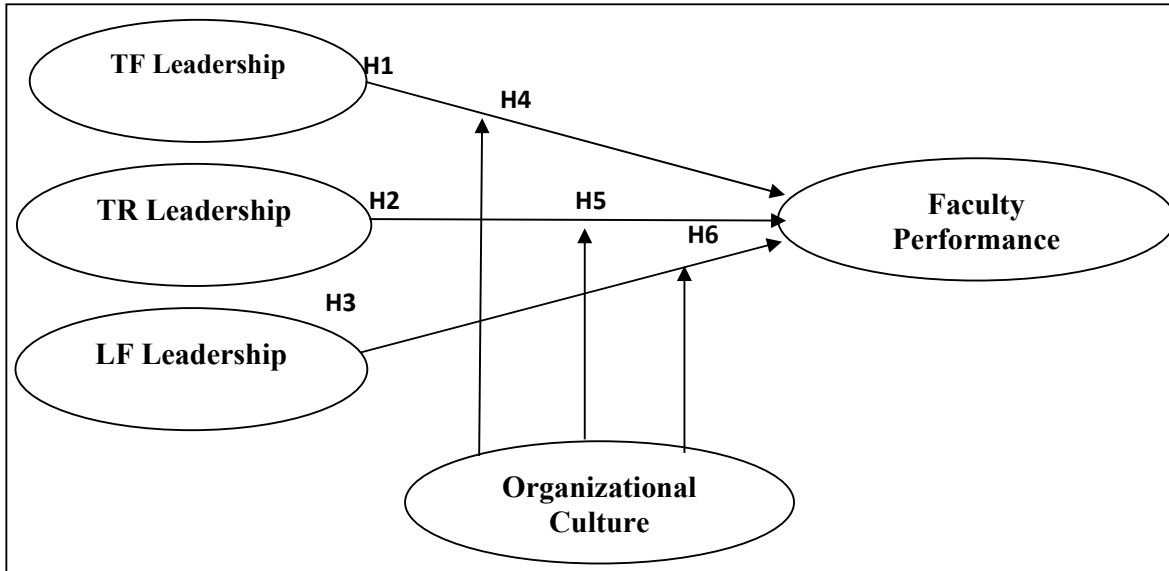


Fig 2. Hypotheses Testing Model

4. Methodology

4.1 Sample Selection

The sample was taken from the population through both sampling techniques, non-probability sampling techniques (i.e., snowball sampling, and purposive sampling) were used to collect data Chairs/ Directors as academic leaders, and probability sampling technique (i.e., simple random sampling) was used to collect data from faculty members, and students (post-graduates) in MUET.

4.2 Data Collection

Data was collected through survey questionnaires from academic leaders, faculty members, and students (post-graduates) of MUET, Jamshoro.

4.3 Questionnaire and its Measures

The steps of this study were selected based on the most relevant and available indicators nearby. The table below presents the variables and references used for this study:

Table 1

Constructs and References

Variable Name	Variable Type	Source
Leadership Style	Independent	Avolio, & Bass (2004)
Organizational Culture	Moderator	Cameron, and Quinn (1999)
Faculty Performance	Dependent	Shevlin et al., (2000) Hoefler et al., (2012) Marquitz, (2019)

4.4 Reliability Discussion

As this study also checked Cronbach's Alpha, an old school in SPSS as after deleting some items Cronbach's Alpha result for TF Leadership was 0.943, for TR Leadership 0.826, for LF Leadership 0.542, and for Faculty Performance the Cronbach's Alpha was 0.940, as you saw results were very rigorous, very minor differences were occurring in results. Table 2 shows the comparison between the results of Cronbach's Alpha in SmartPLS and SPSS. As it is visible that there are very small differences in values. But some researchers prefer to use Composite Reliability (CR) rather than Cronbach's Alpha due to the fact Cronbach's Alpha is being criticized for its decrease bound value which underestimates the true reliability (Peterson & Kim, 2013). But CR may be used as an opportunity as its CR price is slightly better than Cronbach's Alpha whereby the distinction is surprisingly inconsequential (Peterson & Kim, 2013), that's why this study reported Composite Reliability (CR) only.

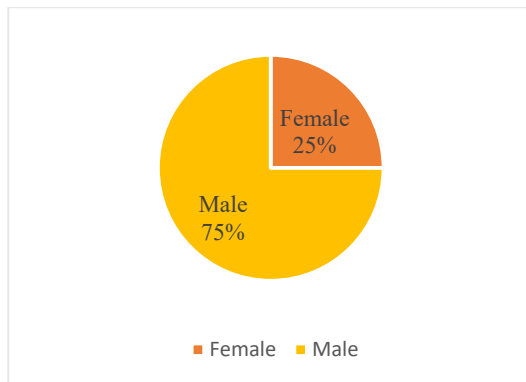
Table 2
Comparison between the results of Cronbach's Alpha in SmartPLS and SPSS

Scales	No: of items	Cronbach's Alpha	
		SmartPLS	SPSS
Transformational (TF) Leadership	10	0.945	0.943
Transactional (TR) Leadership	7	0.872	0.826
Laissez-faire (LF) Leadership	2	0.550	0.542
Faculty Performance (FP)	14	0.941	0.940

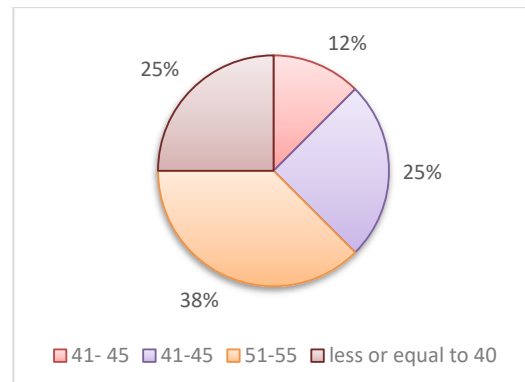
5. Results and Discussion

5.1 Demographic Information

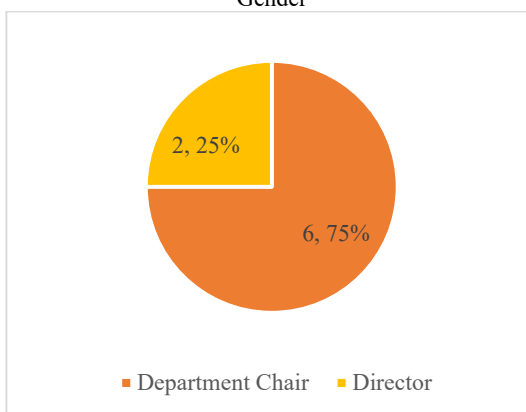
5.1.1 Leaders' Demographic Data



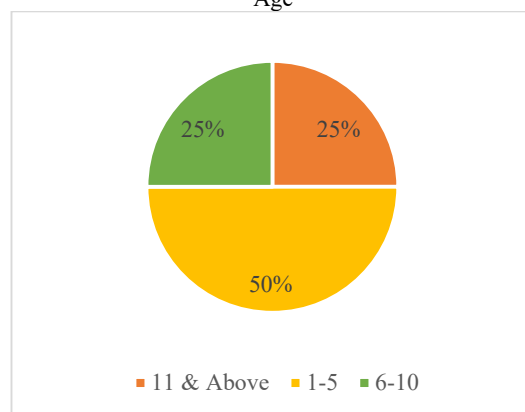
Gender



Age

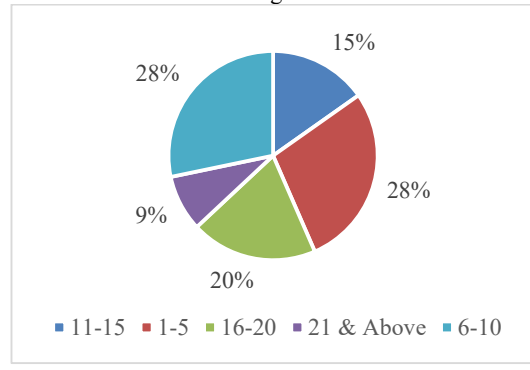
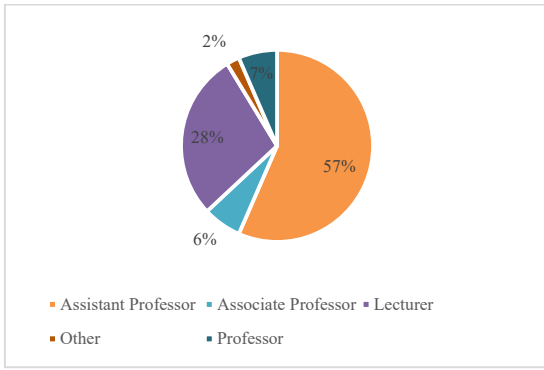
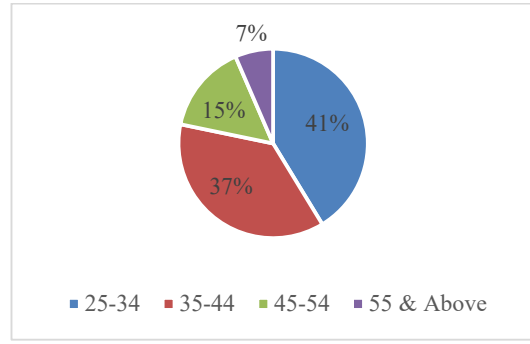
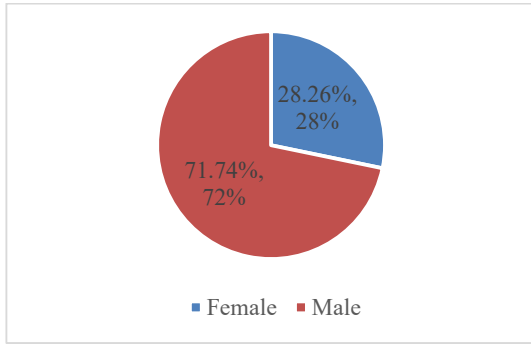


Designation

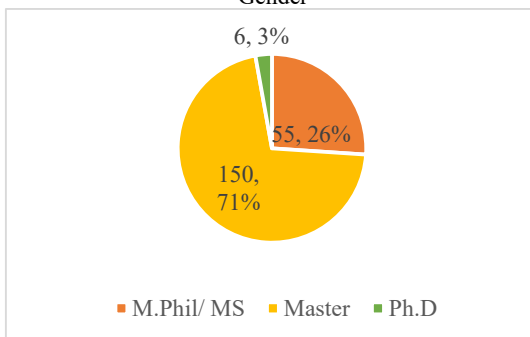
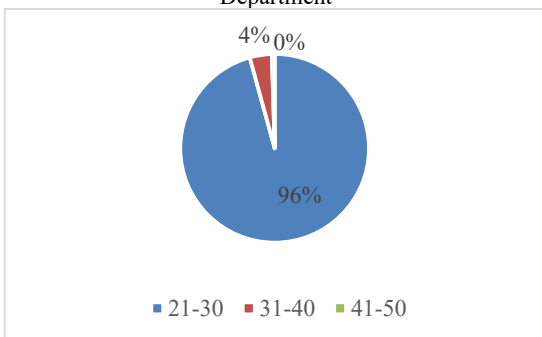
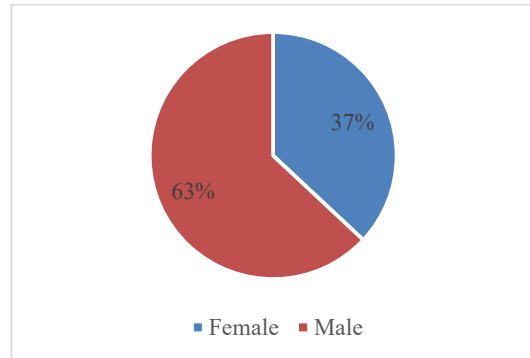
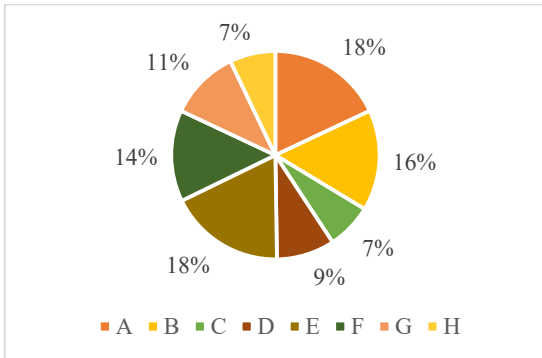


Experience

5.1.2 Faculty Members' Demographic Data



5.1.3 Students' Demographic Data



5.2 Partial Least Square-Structural Equation Model (PLS-SEM)

The analysis of this study was performed using factor analysis (to determine subgroupings of variables), and partial least squares structural equation (PLS-SEM). The structural model in the SEM (representing relationships among constructs) had five latent variables; the measurement model had 45 indicator variables, where 33 variables that were directly measured in the research sample and 12 were indirectly measured (see Fig. 3), latent variable with green color is a moderator. In this study, Transformational Leadership, Transactional Leadership, Laissez-faire Leadership, Organizational Culture, and Faculty Performance were the latent variables. Of the indicators in the measurement model, 33 are reflective variables and 12 are formative variables: the Organizational culture variables were formative (i.e., the indicator variables define the construct) and all others were reflective (the construct defines the indicator variables). This is represented by the direction of arrows from indicator to construct or vice versa.

5.3 Reflective & Formative Scales

In the reflective model, the target construct is represented by its items/indicators. To be specific, indicators in the reflective model are caused by its construct. Items in the reflective model are interchangeable, covary, and are profoundly connected. In SEM, the model in which arrows point from the latent construct towards indicators is demonstrated as a reflective model (Byrne, 2016; Hair et al., 2017). On contradictory, items in a formative model are collective and define unique aspects of their target construct. In this case, variation in the formative indicators causes changes to the construct. These items are not interchangeable, do not covary, and should not be highly correlated. In SEM, the formative model is defined as arrows from indicators that point towards the latent construct (Hair et al., 2017). See Fig. 3.

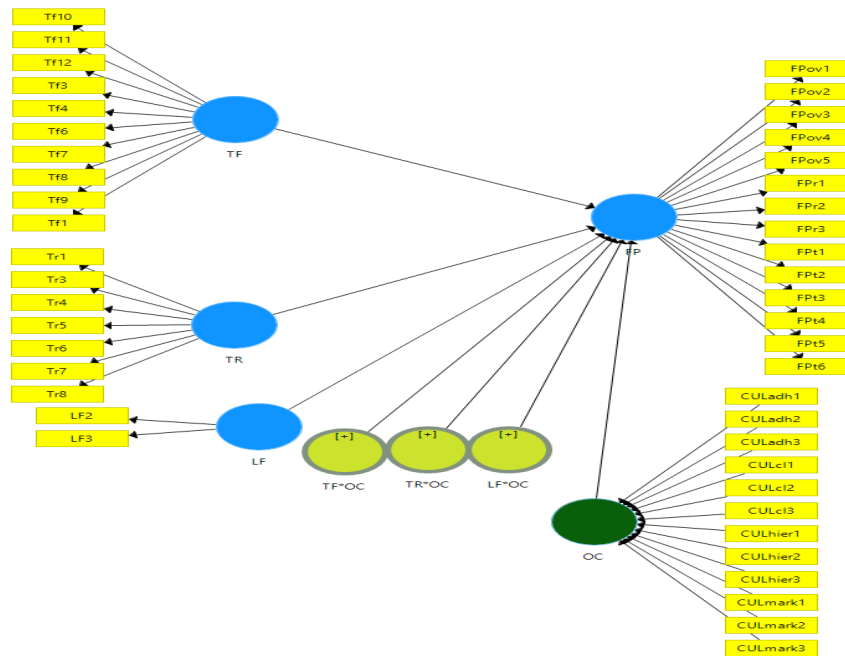


Fig. 3. Indicators and Constructs of the Model

5.4 Assessment of Measurement Mode

The measurement model calculates the relationship between the constructs and their related indicators. The reflective measures, which are represented by arrows pointing from the construct to the indicators (from the circles to the rectangles), are evaluated. The reflective measures are calculated in PLS by the outer loadings. The outer loadings also represent the relationship between the construct and the indicator.

5.4.1 Assessment of Reliability and Validity of Reflective Measurements

PLS does not give goodness-of-fit measurements like is done in covariance-based structural equation models. Instead, it determines fit with measures of reliability. For reflective measurement, the inner consistency reliability measures were utilized which are composite reliability, convergent reliability, and discriminant reliability which help to confirm the suitability of construct indicators. The composite reliability estimates "the observed indicator variables reliability based on the inter-correlations" (Hair et al., 2014). A reliability score of 0.60 is considered minimally acceptable, with 0.70 to 0.90 preferred (Hair et al., 2014).

al., 2019). Anything above 0.90 suggests that variables are redundant- they measure the same thing. Convergent validity measures the level of positive interactions between scale and other modes of similar construction. Also known as indicator reliability, it assumes that objects of the same structure must share the same variation. A high convergent validity suggests the similarity between the indicators. A 0.70 outer loading is considered acceptable, while outer loadings between 0.40 and 0.70 ought to be considered for elimination, however most effective if their removal increases composite reliability or AVE (below). The rule of thumb is that the latent variable needs to give an explanation for at least 50% of the indicator variance, which also manner that the shared variance among construct and indicator is more than the measurement error variance. The explained variance is the square root of the composite validity measure, so to accomplish the 50% explanatory power, the convergent validity must be at least 0.70. The average variance extracted (AVE) "computes the grand mean value of the squared loadings of the indicators" (Hair et al., 2014). An average variance extracted (AVE) of 0.50 or higher is viewed as adequate because it is considered to clarify the greater part of the variance. An AVE of less than 0.50 is insignificant and indicates that there are more enormous mistakes within the items not yet clarified. The PLS quality criteria overview (Table 3) shows composite reliability values for all the latent variables with the outer loading of the indicators. All the constructs have strong composite reliability; 0.80 to 0.90 are considered strong. Usually, values below 0.60 are considered unacceptable. This result shows a high level of internal consistency in this study. Several composite reliability scores were exceeding 0.90 but were deemed acceptable.

Table 3
PLS Quality Criteria Overview

<i>Latent Variables</i>	<i>Indicators</i>	<i>Outer loadings</i>	<i>AVE > .500</i>	<i>CR > .700</i>	<i>Discriminate Validity (HTMT < .900)</i>				
<i>TF</i>	Tf1	0.870	0.670	0.953	Yes				
	Tf3	0.835							
	Tf4	0.795							
	Tf6	0.820							
	Tf7	0.739							
	Tf8	0.708							
	Tf9	0.838							
	Tf10	0.874							
	Tf11	0.817							
	Tf12	0.869							
	<i>TR</i>	Tr1				0.825	0.560	0.898	Yes
		Tr3				0.673			
Tr4		0.651							
Tr5		0.825							
Tr6		0.666							
Tr7		0.733							
Tr8		0.838							
<i>LF</i>		LF2	0.849	0.689	0.816	Yes			
	LF3	0.811							
<i>FP</i>	FPov1	0.636	0.566	0.948	Yes				
	FPov2	0.730							
	FPov3	0.799							
	FPov4	0.802							
	FPov5	0.799							
	FPr1	0.775							
	FPr2	0.727							
	FPr3	0.665							
	FPt1	0.771							
	FPt2	0.720							
	FPt3	0.759							
	FPt4	0.790							
	FPt5	0.829							
	FPt6	0.697							

5.4.2 Assessment of Reliability and Validity of Formative Measurements

The SmartPLS bootstrapping routine was used to show the *t* values of the path loadings for both the measurement and structural model. Bootstrapping has been used in this study to determine the impact of the reflective constructs on the related construct. Bootstrapping helps to estimate confidence level to establish the stability of the parameter used (Ringle et al, 2012). To select whether a path coefficient is significantly different from zero, the critical value for significance is 5% ($\alpha=0.05$) probability of error. The result should be higher than the value of the critical value. Those values that are not significant are retained because they help to answer other questions within the study. The result of bootstrapping varies each time they are run (each run begins with a different set of values) therefore the results may change slightly after each run (Hair et al., 2014). Table 4 shows the summary of the formative measurement model results. The result from the outer weights significance testing showed that the only indicators that are significant at the 0.10 level with one-tailed test (Whittington, 2019) are CULc12

($\beta = -1.137, t = 2.581$), CULcl3 ($\beta = 0.856, t = 2.309$), CULadho2 ($\beta = 1.018, t = 2.168$), and CULmark2 ($\beta = 0.436, t = 1.639$). The critical t value is the cutoff point on which the significance of the coefficient is determined. Therefore, if the empirical result is higher than the critical value, the null hypothesis is rejected (Hair et al., 2014). Those outer weights that are not significant are retained because they help to provide answers to other variables in the study.

Table 4
Summary of Outer Weights Significance Testing for Formative Measurement Models

Formative Construct	Formative Indicators	Outer Weights	t Value
Organizational Culture	CULcl1	0.170	0.727
	CULcl2	-1.137	2.581
	CULcl3	0.856	2.309
	CULadho1	-0.258	1.019
	CULadho2	1.018	2.168
	CULadho3	-0.015	0.044
	CULhier1	0.233	0.854
	CULhier2	-0.114	0.417
	CULhier3	0.415	0.858
	CULmark1	-0.039	0.137
	CULmark2	0.436	1.639
	CULmark3	0.379	0.888

5.5 Assessment of Structural Model

5.5.1 Coefficient of Determination (R^2)

In the structural model, the paths between the latent variables are shown as standardized coefficients. From the regression model in fig. 4, the structural model shows the endogenous variable as faculty performance, which also serves as the dependent variable; endogenous variables have arrows pointing into them. The TF leadership, TR leadership, and LF leadership variables are exogenous because no other variables affect them (they have no incoming arrows). In fig. 4, the R^2 value for the endogenous latent variable is printed within the circle representing the given latent variable. For instance, fig. 4 shows 0.418 for faculty performance thus indicating that 41.8% of that construct is explained by TF leadership, TR leadership, and LF leadership latent variables. The aim of the PLS-SEM algorithm would be to maximize the R^2 of the latent variable faculty performance thus enabling a credible prediction (Hair et al., 2014).

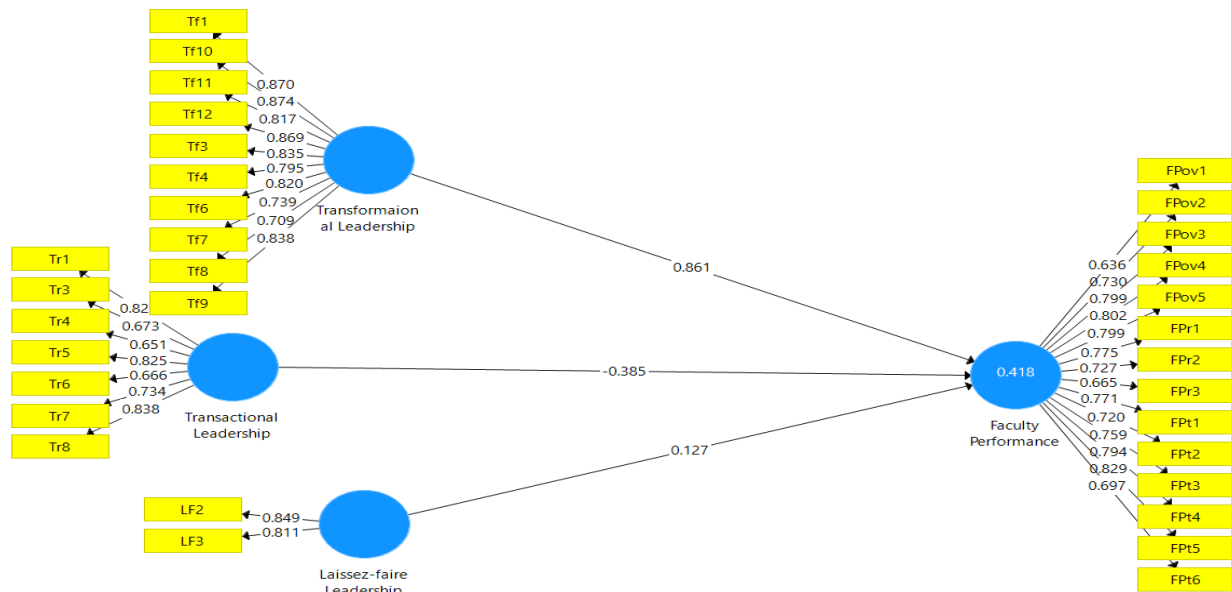


Fig 4. PLS-SEM Algorithm Results of Standardized Coefficients

Table 5
The R square Value

Predictor construct	Target Construct	R Squared	Predictive accuracy
TF, TA, and LF	FP	0.418	weak

Note: R-Square predictive accuracy level: 0.25 = weak, 0.5 = moderate, 0.7 = Substantial.

The structural model shows the causal relationships among constructs in the model (the R² value and path coefficients). The path coefficients and the R² (significance & beta) together reveal how well the data support and hypothesized model. The R² for faculty performance shows that TF leadership, TR leadership, and LF leadership explained 41.8% of the variance in faculty performance. Fig. 4. In analysis with moderating variables, the R² change is important. A first glimpse at the R² change from the primary impact model. See fig. 4, the earlier R² for the main effect model is 0.418, here and now in the interaction effect model, it is 0.684 (see fig. 5). The R² change of 0.266 indicates that with the addition of the interaction term (TF*OC, TR*OC, LF*OC), the R² has changed about 26.6% (additional variance).

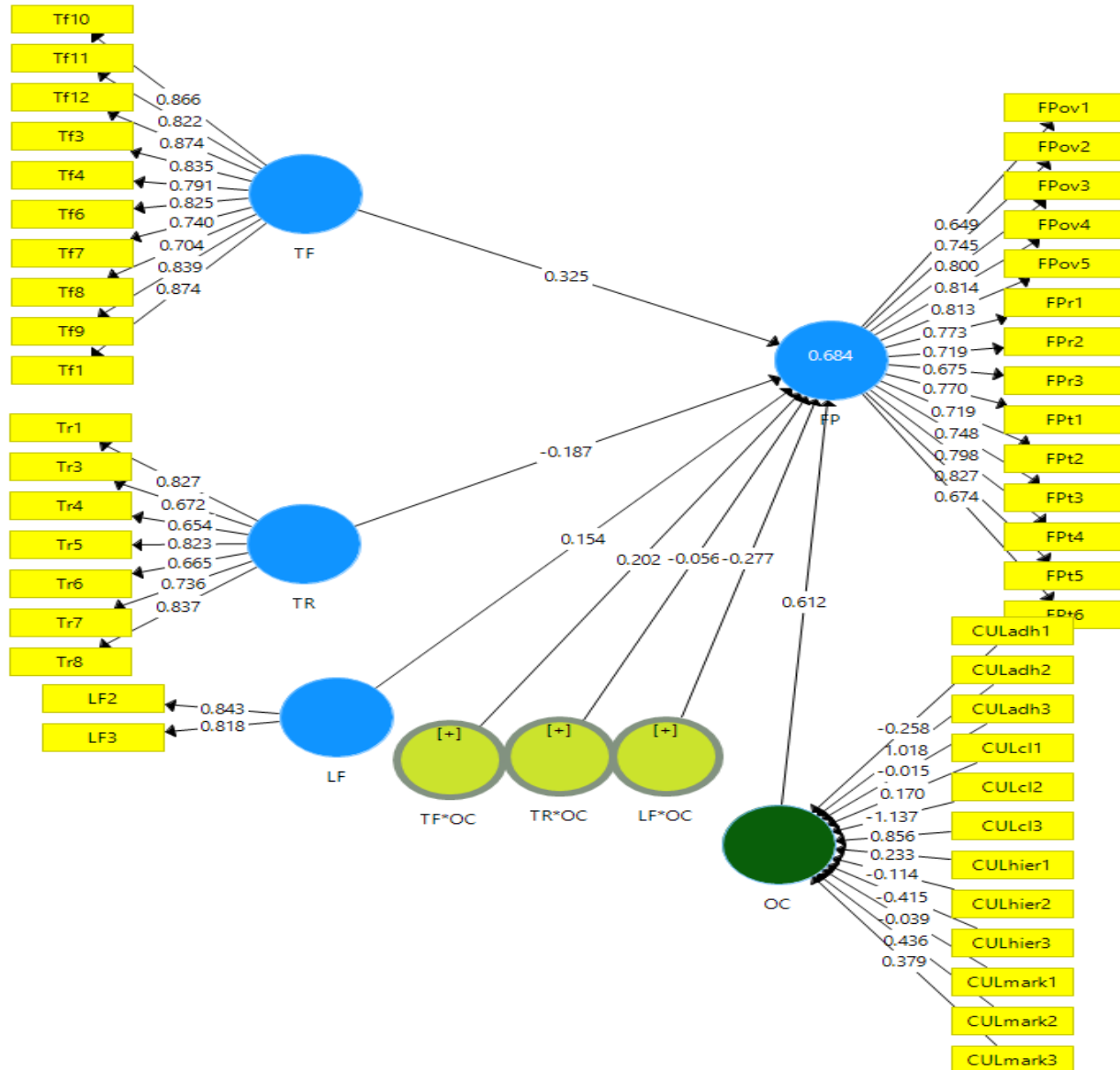


Fig. 5. Interaction Effect Model

5.5.2 Predictive Effect Size

After calculating the Q² statistic, the predictive relevance statistics can be further assessed with the q² effect size statistic. This statistic quantifies the contribution of a construct to the predictive relevance of a focal construct. The calculation is similar to that of the f² statistic, and it can be interpreted using the same cutoff values. With effect sizes greater than .35 are considered

large, effect sizes between .15-.35 are considered medium, and effect sizes between .02-.15 are considered small (Hair et al., 2017). The effect size of independent (exogenous) variables on dependent (endogenous) variable (faculty performance) that TF leadership has a medium impact on Faculty performance with 0.278 effect size and TR leadership has a small impact on faculty performance with 0.061 effect size and LF also has a small impact with 0.014 effect size respectively (see Table 6), in indirect effect TF and TR leadership have very small effects with 0.017 and 0.002 respectively, and although LF leadership also has a small but meaningful effect on faculty performance with 0.066 effect size with significant p-value 0.076 (Table 6).

Table 6Effect Size (f^2)

	Faculty Performance
TF Leadership	0.278
TR Leadership	0.061
LF Leadership	0.014
OC*TF	0.017
OC*TR	0.002
OC*LF	0.066

Effect sizes can be assessed by small $>.02$, medium $>.15$, and large $>.35$.

The dominant culture in MUET is the market with a 0.075 effect size and the second dominant culture is a clan with a 0.041 effect size. Hierarchy has a very small effect and Adhocracy does not affect faculty performance in MUET, see Table 7.

Table 7Effect Size (f^2) of Types of Organizational Culture

Types of Cultures	Faculty Performance
CUL_cl	0.041
CUL_adho	0.000
CUL_hier	0.019
CUL_mark	0.075

Market culture and clan culture types are more dominant organizational cultures in MUET as according to the result of the study, MUET more focused on the outcome, efficiency, competitiveness, and at the same time, an organization is focused on trusting and committing to employees improve open communication and employees' commitment.

5.5.3 Path Coefficients

Table 8

Constructs Path Coefficients

	Faculty Performance
TF Leadership	0.861
TR Leadership	-0.385
LF Leadership	0.127

Transformational leadership ($\beta = 0.861$) has the strongest path effect on faculty performance. While transactional leadership ($\beta = -0.385$) has a negative path effect on faculty performance, and laissez-faire leadership ($\beta = 0.127$) has a positive path effect on faculty performance (See table 8).

5.5.4 Predictive Relevance Q^2

In an SEM model, the Q^2 statistic assists to examine the reflective construct's predictive relevance (but not for formative constructs). Values that are higher than zero represents that for the given construct the data points have been predicted; the items for the given construct are not accurately predicted if it is a zero or less. The blindfolding procedure is used to calculate the capacity of Q^2 predictive in PLS-SEM. This is determined by omitting the n th data point of the endogenous construct indicator variable and estimating the effects of the remaining indicators. To determine the predictive relevancy of the constructs, this study used the cross-validated redundancy approach. This study has focused more on the cross-validated redundancy because it incorporates the components of the structural model, path model, and anticipated excluded data points in its evaluation (Hair et al., 2014). See Table 9

Table 9

Construct Cross-validated Redundancy

Total	SSO	SSE	Q ² (=1-SSE/SSO)
Faculty Performance	644.000	521.900	0.190

The predictive relevance calculated for faculty performance is (0.190). This indicates the predictive relevance is substantial and meaningful. The construct has predictive relevance when the Q² value is higher than 0 and the construct lack predictive value when Q² is less than zero as suggested. See Table 9

5.5.5 Bootstrapping Results

To find out bootstrapping results of hypotheses in SmartPLS 3 and PLS-SEM technique has been used. The table below shows the status of hypotheses in this study and their validity and impact on faculty performance in MUET.

In table 10, the results show that among six hypotheses, two are accepted and four are rejected, respectively. See table 10, in which rejected means the insignificant relationship between exogenous construct and endogenous construct and accepted means there is a significant relationship between them. The direct effect has been validated through a two-tailed test with a 0.05 significance level and indirect effects (moderating effect) have been validated through a one-tailed test with 0.10 (Whittington, 2019) significance level.

Table 10

Hypotheses Testing

Hypotheses	Relationship	Original Sample	Sample Mean	Standard Deviation	T Value	P-Value	Accept/Reject
H1	TF → FP	0.861	0.890	0.228	3.779*	0.000	Accepted
H2	TR → FP	-0.385	-0.342	0.279	1.379	0.169	Rejected ns
H3	LF → FP	0.127	0.096	0.206	0.617	0.538	Rejected ns
H4	TF*OC → FP	0.202	0.168	0.296	0.684	0.247	Rejected ns
H5	TR*OC → FP	-0.056	-0.052	0.255	0.219	0.413	Rejected ns
H6	LF*OC → FP	-0.277	-0.193	0.192	1.438**	0.076	Accepted

Note: *p = 0.05 with two-tailed test; **p = 0.1 with one-tailed test; ns = not supported

Hypothesis 1 predicted a positive relation between TF leadership and faculty performance and was accepted with a significance of 0.05. Hypothesis 2 predicted a negative relation between TR leadership and faculty performance but not significant at 0.05. Hypothesis 3 predicted a positive relationship between LF leadership and faculty performance but not significant at 0.05. Hypothesis 4 predicted Organizational culture positively moderates the relation between TF leadership and faculty performance but not significant at 0.10. Hypothesis 5 predicted Organizational culture negatively moderates the relation between TR leadership and faculty performance but not significant at 0.10. Organizational culture negatively moderates the relation between LF leadership and faculty performance and was accepted with a significance of 0.10. Table 8 shows the structural model results via SmartPLS3 output. That Transformational leadership has a positive impact on faculty performance in MUET Jamshoro, Pakistan. In table 10, the t-value of 3.779 shows that transformational leadership has a strong influence on the faculty performance in MUET and has a significant p-value of 0.000 level, which is less than 0.05. The other two variables have shown insignificance relation with faculty performance in the two-tailed test at 0.05 significance level. The measurement assessment methods applied to the original model were also used in the assessment of the new moderated structural model but did not apply to the interaction term (Hair et al., 2017) the results for the relationship between the outer constructs and their indicators for convergent validity, discriminant validity, and internal consistency reliability indicated all measurement model results were reliable and valid (see table 4). After verifying the measurement model, the next step was running bootstrapping procedure. Bootstrapping called for 300 iterations of complete bootstrapping with the parameter of bias-corrected confidence intervals and accelerated bootstrap (BCa) with a one-tailed test and a significance level of .10 (Whittington, 2019). The resulting relationship between LF leadership and Faculty performance was found to be significant with a p-value of 0.076. Table 10 displays the Organizational culture indirect effects result on faculty performance through SmartPLS3 output. In that OC*LF has shown a significant relation with faculty performance in MUET Jamshoro, Pakistan. Table 10, the t-value 1.438 shows the Organizational culture's strong influence as a moderator between the relation of LF leadership and faculty performance in MUET and has a significant p-value of 0.076 level, which is less than 0.10. On the other hand, Organizational culture as moderator has shown the insignificance relation between the other two variables and faculty performance.

5.6 The Moderating Effects Analysis

Following the analysis of the structural and measurement model, the next step in the model is to examine the impact of moderation. First, we determine whether organizational culture moderates the relation between TF leadership and faculty performance; second, between TR leadership and faculty performance; third, between LF leadership and faculty performance.

When assessing the moderating effect, Smart PLS software creates an interaction term (Hair et al., 2017). The software also produces a significant level and simple slope analysis for interpretation.

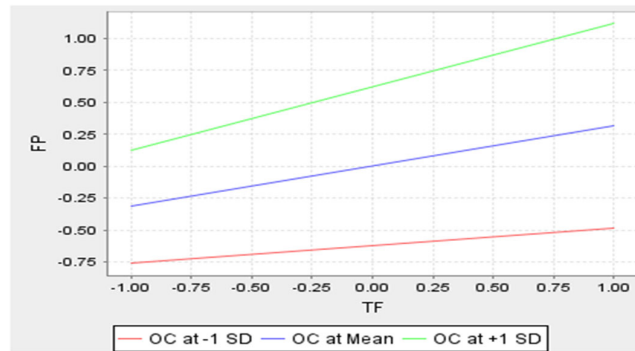


Fig 6. Moderating variable 1

MV 1: Organizational culture positively moderates the relationship between faculty performance and transformational leadership.

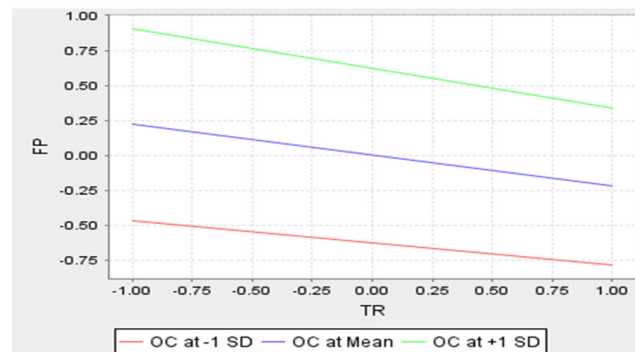


Fig 7. Moderating variable 2

MV 2: Organizational culture negatively moderates the relationship between faculty performance and transactional leadership.

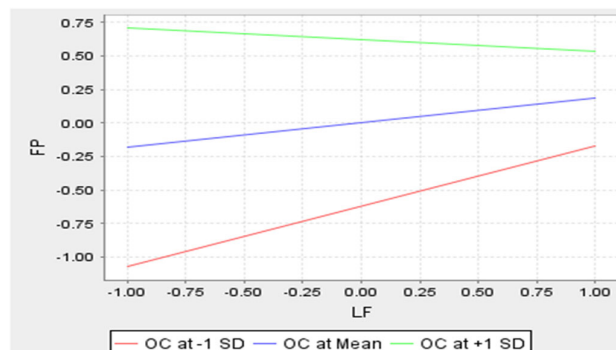


Fig 8. Moderating variable 3

MV 3: Organizational culture negatively moderates the relationship between faculty performance and laissez-faire leadership.

5.7 Importance-Performance Map Analysis (IPMA)

IPMA also called impact performance map, priority map analysis, and importance-performance matrix, (Ringle & Sarstedt, 2016) was firstly introduced and proposed by Martilla & James (1977). The IPMA approach study not only an item's performance but also that item's importance. This examination objective is to recognize the (unstandardized) complete impact of the predecessor construct's significance in foreseeing a specific target endogenous (Hair et al., 2016; Hair et al., 2018). The complete impact shows the significance of observable factors, though the mean estimation of their scores (going from 0, which is viewed as the least, to 100, the most noteworthy) signifies their performance (Hock et al., 2010). In IPMA, if an increase

of 1 unit in the performance of the predecessor increases the target construct performance by the predecessor's unstandardized absolute impact of the size (Hair et al., 2016). According to Jaafar et al., 2016; Lee et al., 2008, the IPMA method has two dimensions: performance and importance. The objective is to explain the importance of each predecessor in terms of its overall impact on each target endogenous construct (faculty performance).

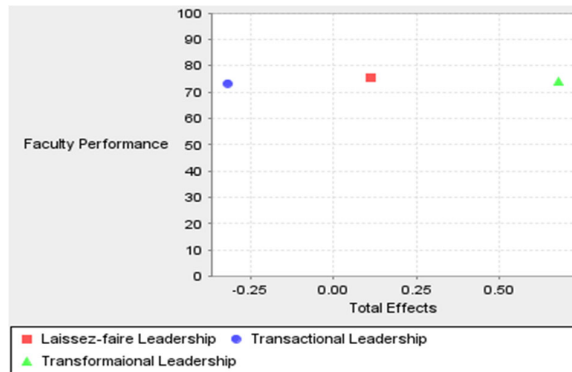


Fig 9. Importance-Performance Map (unstandardized)

Table 11

Importance and performance matrix (IPMA) result

Constructs	Performance (Total Effects)	Performance (Index Values)
TF Leadership	0.679	73.853
TR Leadership	-0.320	73.289
LF Leadership	0.113	75.393

Fig 9 and Table 11 are showing the IPMA of faculty performance. The IPMA investigation featured the two most significant variables namely TF leadership, and LF leadership. TR leadership is not significantly influencing faculty performance. Nevertheless, TF leadership was revealed as the most significant and has the best among the two constructs. Academic leaders should therefore adopt the TF leadership style to increase the work potential of faculty members who are working under their supervision. The results of IPMA are presented in table 11. It is obvious from table 11 that the TF leadership had a large impact on the faculty performance in MUET, and as a result, it is a major opportunity to improve faculty performance. More precisely, the importance of the TF leadership and LF leadership both had a positive total effect on faculty performance.

5.8 Goodness of Fit

The GoF estimation to compute the global model fit is determined as in Tenenhaus et al., (2005), $GoF = (R^2 \times Communality)^{1/2}$. It computes the R^2 average of the endogenous variables and the commonality of the geometric mean average. The current model with main effects only has a GoF of 0.51 which indicates that strong global model fit as per cut-off values are proposed by Wetzels et al., (2009) are $GoF = 0.1$ is weak, $GoF = 0.25$ is moderate size and $GoF = .036$ is strong.

5.9 Discussion

The present study results showed that Transformational leadership has a positive effect on faculty performance in MUET with a 0.05 significance level with the two-tailed test, the result supported by Ullah et al., (2018); & Shah et al., (2017); Obeidat & Tarhini, (2016), Transformational leadership is positively associated with employee job performance. This study's findings reported that transactional leadership negatively impacts faculty performance, and the argument is supported by Avolio & Howell (1999). Transactional leadership and employees' performance have a negative relation, but the relationship is not significant, and the results are supported by Baig et al., (2019); Shah et al., (2017) that there is an insignificance relation between transactional leadership and employee's performance. It is relevant to the discussion that within the university settings income and other economic rewards are not generally decided on the department level, so, the transactional leadership style associated with providing economic praise ought to have a limited impact on faculty performance (Shah et al., 2017). Moreover, laissez-faire leadership has a positive relationship with faculty performance, an argument supported by Duze, (2012). Laissez-faire leadership and job performance have a positive relationship, but it indicates a non-significant association with faculty performance, moreover there is no relationship between the laissez-faire leadership style of academic leaders and faculty performance. It could be inferred that the faculty member's job performance might be predominately determined by self-development, their self-orientation concerning academic teaching, and research (Shah et al., 2017). In indirect effects,

organizational culture negatively moderates the relation of LF leadership and faculty performance with a 0.1 significance level with one-tailed test and other two variables i.e., TF*OC and TR*OC were not significant.

6. Conclusion

This study examined the impact of Leadership styles on Faculty performance and where Organizational culture plays a moderating role. It used PLS-SEM to investigate the impact of Leadership styles on Faculty performance and moderating effect of Organization culture between the leadership styles and faculty performance. This study based on positivist assumptions argues that “examining the relationship among and between variables is it is important to answer questions and hypotheses via experiments and surveys” (Creswell, 2009). It hypothesized that Organizational culture moderates the relation between leadership styles and faculty performance. The finding showed that Transformational leadership has a positive impact on faculty performance in MUET and it also increases faculty performance. Leaders with Transformational leadership are more preferred and productive towards faculty performance. According to MUET faculty, transformational leadership is best suited to promote their performance on account of giving them challenging work, autonomy, mutual trust, through supporting subordinates’ creativity, improving their confidence, and maintaining collaborations (Bass & Riggio, 2006). Laissez-faire leadership also exists in MUET, it also has a positive impact on faculty performance. But Transactional leadership has a negative impact on faculty performance. According to students’ responses, there isn’t a perfect match between the course’s faculty teach and their expertise, so somehow it affects the student in the end. For indirect effects, Organizational culture positively increases the faculty performance while interacting between TF leadership and faculty performance. While interacting with the other two variables, decreases the faculty performance.

6.1 Recommendations

1. Departmental/institutional leadership has an important influence in enhancing faculty performance, therefore, the leaders should adopt the qualities of transformational leadership, and paying attention to such leadership style eventually increases organizational efficacy and productivity as well.
2. Proper training programs should be initiated by universities and higher education commission to improve departmental/institutional heads’ leadership style to improve the quality of education in HEIs.
3. Organizational culture is difficult to change, but having an appropriate culture within institutes, will increase the confidence of employees. As clan culture is one of the dominant cultures in MUET, it is the most suitable culture in HEIs. HEIs should develop training programs for leaders as they should promote clan culture in their institutes and treat their subordinates as family members, so they can work efficiently in a good environment.
4. Courses faculty teach and their expertise must match. Faculty should take those subjects in which they have the expertise.

6.2 Limitations and Recommendation for Future Research

6.2.1 Limitations

- This study has studied one aspect which can affect faculty performance.
- This study was limited to MUET, Jamshoro.
- Drawing results based on one institution can be a little less generalized concept; therefore, the number should be increased for more thorough results for the future.
- An increase in sample size and more institutions can give better insights for future research.

6.2.2 Recommendation for Future Research

This study utilizes the model of organizational culture (CVF) as an interaction model that sees the link between Leadership styles (Full Range Leadership Model) and Faculty performance at MUET. Thus, future research should re-explore this organizational culture model to look again at the association between other leadership styles on faculty performance in other public universities and could be compared the faculty performance of Public and Private universities. Leaders with an appropriate leadership style can improve the faculty performance in HEI's. Specifically, this research focuses only on faculty performance in HEI's. Furthermore, future research could be conducted in the corporate sector as well with similar models.

6.3 Research Contribution

The contribution of this study is that it increases the body of existing literature on leadership style, faculty performance, and organizational culture in the education sector relevant to the Pakistani context.

This research helps the HEI to identify which leadership style is more conducive because leadership plays a significant role to boost faculty performance and enhance productivity, and it also helps leaders to make decisions for the betterment of HEI as well as for employees. This study has also investigated the type of organizational culture that makes which leadership style thrive and helps leaders to identify their leadership style and give them know-how about their faculty performance in that perspective so that they can carry an appropriate leadership style to improve the faculty performance in the future in HEI in Jamshoro.

References

- Amin, M., Shah, S., & Tatlah, I. A. (2013). Impact of Principals/Directors' Leadership Styles on Job Satisfaction of the Faculty Members: Perceptions of the Faculty Members in a Public University of Punjab, Pakistan. *Journal of Research & Reflections in Education (JRRE)*, 7(2).
- Advani, A., & Abbas, Z. (2015). Impact of Transformational and Transactional Leadership Styles on Employees' Performance of Banking Sector in Pakistan. *Global Journal of Management and Business Research: Administration and Management*, 15(5).
- Alkhasawneh, F. S. (2018). The Effect of Leadership Style of Academic Leaders on Job Performance Behavior among Faculty in Al-Balqa' Applied University. *IOSR Journal of Research & Method in Education*, 8(1), 65-72.
- Al-Husseini, S., El Beltagi, I., & Moizer, J. (2019). Transformational Leadership and Innovation: The Mediating Role of Knowledge Sharing Amongst Higher Education Faculty. *International Journal of Leadership in Education*, 1-24.
- Al-Malki, M., & Juan, W. (2018). Leadership Styles and Job Performance: A Literature Review. *Journal of International Business Research and Marketing*, 3(3).
- Amey, M. J. (1999). Faculty Culture and College Life: Reshaping Incentives Toward Student Outcomes. *New Directions for Higher Education*, 1999(105), 59-69.
- Antonopoulou, H., Halkiopoulos, C., Barlou, O., & Beligiannis, G. N. (2020). Leadership Types and Digital Leadership in Higher Education: Behavioural Data Analysis from University of Patras in Greece. *International Journal of Learning, Teaching and Educational Research*, 19(4), 110-129.
- Aslam, H. D. (2011). Performance Evaluation of Teachers in Universities: Contemporary Issues and Challenges. *Journal of Educational and Social Research*, 1(2), 11-31.
- Baig, S. A., Iqbal, S., Abrar, M., Baig, I. A., Amjad, F., Zia-ur-Rehman, M., & Awan, M. U. (2019). Impact of Leadership Styles on Employees' Performance with Moderating Role of Positive Psychological Capital. *Total Quality Management & Business Excellence*, 1-21.
- Bass, B., & Riggio, R. (2012). Transformational Leadership, US
- Avolio, B. J., & Bass, B. M. (2004). Multifactor Leadership Questionnaire (TM). *Mind Garden, Inc. Menlo Park, CA*.
- Bass, B. M., & Avolio, B. J. (1993). Transformational Leadership and Organizational Culture. *Public administration quarterly*, 112-121.
- Blanchard, K. (2020). Is Responsible Leadership Possible? Exploring the Experiences of Business Leaders, Educators, and Scholars.
- Botti, A., & Vesce, M. (2018). Competing Value Framework and Public Administration: Managerial Insights, Theoretical Reflections and Practical Implications from Italy. *International Business Research*, 11(2), 147-160.
- Bushra, F., Ahmad, U., & Naveed, A. (2011). Effect of Transformational Leadership on Employees' Job Satisfaction and Organizational Commitment in Banking Sector of Lahore (Pakistan). *International Journal of Business and Social science*, 2(18).
- Cameron, K. S., Quinn, R. E., DeGraff, J., & Thakor, A. V. (2014). Competing Values Leadership. Edward Elgar Publishing.
- Cameron, K. S., & Quinn, R. E. (1999). Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework. Reading, MA: Addison-Wesley.
- Chidambaranathan, K., & Regha, V. S. (2016). Diagnosing the Organizational Culture of Higher Education Libraries in the United Arab Emirates Using the Competing Values Framework. *LIBRES: Library & Information Science Research Electronic Journal*, 26(2), 99-112.
- Duze, C. O. (2012). Leadership Styles of Principals and Job Performance of Staff in Secondary Schools in Delta State of Nigeria. *AFRREV IJAH: An International Journal of Arts and Humanities*, 1(2), 224-245.
- Feldman, K.A., & Paulsen, M.B. (1999). The Role of a Supportive Teaching Culture. *New Directions for Teaching And Learning* 78, 71-78.
- Felipe, C. M., Roldan, J. L., & Leal-Rodríguez, A. L. (2017). Impact of Organizational Culture Values on Organizational Agility. *Sustainability* 9, 1-23.
- Gappa, J.M., Austin, A.E., and Trice, A.G. (2007). Rethinking Faculty Work: Higher Education's Strategic Imperative. *San Francisco: Jossey-Bass*.
- Guhr, N. Lebek, B., & Breitner, M. H. (2019). The Impact of Leadership on Employees' Intended Information Security Behavior: An Examination of the Full-Range Leadership Theory. *Information System Journal*, 29(2), 340-362.
- Golden III, J. H., & Shriner, M. (2019). Examining Relationships Between Transformational Leadership and Employee Creative Performance: The Moderator Effects of Organizational Culture. *The Journal of Creative Behavior*, 53(3), 363-376.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to Use and How to Report the Results of PLS-SEM. *European business review*.
- Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: Updated Guidelines on which Method to Use. *International Journal of Multivariate Data Analysis*, 1(2), 107-123.
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM): An Emerging Tool in Business Research. *European Business Review*.

- Hammond, M. M., Neff, N. L., Farr, J. L., Schwall, A.R., & Zhao, X. (2011). Predictors of Individual-Level Innovation at Work: A Meta-Analysis. *Psychology of Aesthetics, Creativity, and the Arts*, 5(1), 90-105.
- Henard, F. (2009). Learning Our Lesson: Review of Quality Teaching in Higher Education Draft Report.
- Howell, J. M., & Hall-Merenda, K. E. (1999). The Ties that Bind: The impact of Leader-Member Exchange, Transformational and Transactional Leadership, and Distance on Predicting Follower Performance. *Journal of Applied Psychology*, 84(5), 680.
- Indrasari, M. (2017). The Effect of Organizational Culture, Environment Work, Leadership Style on the Job Satisfaction and its Impact on the Performance of Teaching in State Community Academy Bojonegoro. *Sinergi*, 7(1), 58-73.
- Jamaludin, Z. (2011). Do Transactional, Transformational, and Spiritual Leadership Styles Distinct? A Conceptual Insight. *Journal of Global Business and Economics*, 2(1), 73-85.
- Javed, H. A., Jaffari, A. A., & Rahim, M. (2014). Leadership Styles and Employees' Job Satisfaction: A Case from the Private Banking Sector of Pakistan. *Journal of Asian business strategy*, 4(3), 41.
- Jensen, U. T., Andersen, L. B., Bro, L. L., Bøllingtoft, A., Eriksen, T. L. M., Holten, A. L., & Westergaard-Nielsen, N. (2019). Conceptualizing and Measuring Transformational and Transactional Leadership. *Administration & Society*, 51(1), 3-33.
- Jyothi, G., Parvathi, C., Srinivas, P., & Althaf, S. (2014). Fuzzy Expert Model for Evaluation of Faculty Performance in Technical Educational Institutions. *International Journal of Engineering Research and Applications*, 4(5), 41-50.
- Khan, N. (2017). Adaptive or transactional leadership in current higher education: A brief comparison. *International Review of Research in Open and Distributed Learning*, 18(3), 178-183.
- Khan, M. K., Hassan, M. R., Saha, S. K., Basher, M. S., Kabir, S., & Naushad, A. N. (2017). An Evaluation of Faculty Wise Teaching Performance in a Public Medical College of Bangladesh. *Mymensingh Medical Journal: MMJ*, 26(2), 241-249.
- Khan, S., Asghar, M., & Zaheer, A. (2014). Influence of Leadership Style on Employee Job Satisfaction and Firm Financial Performance: A Study of Banking Sector in Islamabad, Pakistan. (5), 374-384.
- Khan, V., Hafeez, M. H., Rizvi, S. M. H., Hasnain, A., & Mariam, A. (2012). Relationship of Leadership Styles, Employees Commitment and Organisation Performance (A Study on Customer Support Representatives). *European Journal of Economics, Finance, and Administrative Sciences*, (49), 134-142.
- Khan, M. A., & Afzal, H. (2011). High Level of Education Builds Up Strong Relationship between Organizational Culture and Organization Performance in Pakistan. *The International Journal of Human Resource Management*, 22(7), 1387-1400.
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive Psychological Capital: Measurement and Relationship with Performance and Satisfaction. *Personnel Psychology*, 60 (3), 541-572.
- Meyer, M., Botha, E., 2000. Organizational Development & Transformation in South Africa. Butterworths, Durban.
- Mittal, S., & Dhar, R. L. (2015). Transformational Leadership and Employee Creativity: Mediating Role of Creative Self-Efficacy and Moderating Role of Knowledge Sharing. *Management Decision*, 53(5), 894-910.
- Obeidat, B. Y., & Tarhini, A. (2016). A Jordanian Empirical Study of the Associations Among Transformational Leadership, Transactional Leadership, Knowledge Sharing, Job Performance, and Firm Performance: A Structural Equation Modeling Approach. *Journal of Management Development*, 681-705.
- Ogbonna, E., & Harris, L. C. (2000). Leadership Style, Organizational Culture and Performance: Empirical Evidence from UK Companies. *International Journal of Human Resource Management*, 11(4), 766-788.
- Paracha, M. U., Qamar, A., Mirza, A., Hassan, I. U., & Waqas, H. (2012). Impact of Leadership Style (Transformational & Transactional Leadership) on employee Performance & Mediating Role of Job Satisfaction. Study of Private School (Educator) in Pakistan. *Global Journal of Management and Business Research*, 12(4), 55-64.
- Peterson, R. A., & Kim, Y. (2013). On the Relationship Between Coefficient Alpha and Composite Reliability. *Journal of Applied Psychology*, 98(1), 194.
- Purwanto, A., Bernarto, I., Asbari, M., Wijayanti, L. M., & Hyun, C. C. (2020). Effect of Transformational and Transactional Leadership Style on Public Health Centre Performance. *Journal of Research in Business, Economics, and Education*, 2(1), 304-314.
- Rasool, H. F., Arfeen, I. U., Mothi, W., & Aslam, U. (2015). Leadership Styles and its Impact on Employee's Performance in Health Sector of Pakistan. *City University Research Journal*, 5(1), 97-109.
- Saeed, R., Mussawar, S., Lodhi, R. N., Iqbal, A., Nayab, H. H., & Yaseen, S. (2013). Factors Affecting the Performance of Employees at Workplace in the Banking Sector of Pakistan. *Middle-East Journal of Scientific Research*, 17(9), 1200-1208.
- Saleem, H. (2015). The Impact of Leadership Styles on Job Satisfaction and Mediating Role of Perceived Organizational Politics. *Procedia-Social and Behavioral Sciences*, 172, 563-569.
- Schimmoeller, L. J. (2010). Leadership Styles in Competing Organizational Cultures. *Leadership Review*, 10(2), 125-141.
- Siddique, A., Aslam, H. D., Khan, M., & Fatima, U. (2011). Impact of Academic Leadership on Faculty's Motivation And Organizational Effectiveness in Higher Education System. *International Journal of Academic Research*, 3(3), 729-737.
- Shah, S. S., Shah, A. A., & Pathan, S. K. (2017). The Relationship of Perceived Leadership Styles of Department Heads to Job Satisfaction and Job Performance of Faculty Members. *Journal of Business Strategies*, 11(2), 35-56.
- Shahzad, F. (2014). Impact of Organizational Culture on Employees' Job Performance: An Empirical Study of Software Houses in Pakistan. *International Journal of Commerce and Management*, 24(3), 219-227.
- Thrash, A.B., (2009), Leadership in Higher Education: An Analysis of the Leadership Styles of Academics Deans in Ohio's 13 State-Supported Universities. (Doctoral dissertation, Capella University.
- Torlak, N. G. & Kuzey, C. (2019). Leadership, Job Satisfaction, and Performance Links in Private Education Institutes of Pakistan. *International Journal of Productivity and Performance Management*, 68(2), 276-295.
- Wahab, S., Rahmat, A., Yusof, M. S., & Mohamed, B. (2016). Organization Performance and Leadership Style: Issues in Education Service. *Procedia-Social and Behavioral Sciences*, 224, 593-598.
- Whittington, T. C. (2019). *The Moderating Impact of Stress on Shared and Vertical Leadership: A Field Study* (Doctoral dissertation, University of South Alabama)

Yeh, H., & Hong, D. (2012). The Mediating Effect of Organizational Commitment on Leadership Type and Job Performance. *The Journal of Human Resource and Adult Learning*, 8(2), 50.



© 2022 by the authors; licensee Growing Science, Canada. This is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) license (<http://creativecommons.org/licenses/by/4.0/>).