

## **RESEARCH PAPER**

## Assessing the Role of Organizational Commitment in Leadership Style-Driven Organizational Development

## <sup>1</sup>Dr. Syed Shameel Ahmed Quadri<sup>\*</sup>, <sup>2</sup>Jameel Afsar and <sup>3</sup>Sudhair Abbas Bangash

- 1. Assistant Professor, Department of Political Science, University of Karachi, Karachi, Sindh, Pakistan
- 2. PhD Scholar, National Business School, The University of Faisalabad, Punjab, Pakistan
- 3. Ph. D Scholar, Department Business Administration, Sarhad University of Science and Information Technology Peshawar, KP, Pakistan & Professor, Department of Pharmacy, Sarhad University of Science and Technology, Peshawar, KP, Pakistan

shameelaq@uok.edu.pk \*Corresponding Author:

## ABSTRACT

This research aims to examine the role of organizational commitment in leadership style-driven organizational development within Pakistan's information technology (IT) sector. Leadership styles have a significant impact on organizational development, with organizational commitment acting as a potential mediator. The study investigates how different leadership styles influence organizational development and the role of employee commitment within Pakistan's IT sector. A quantitative approach was adopted for this study. Data was collected through a survey questionnaire distributed to employees in both public and private IT organizations. The sample included supervisors (8.45%), middle management (26.76%), top administration (37.32%), and non-technical staff (13.38%). The survey targeted organizational levels and demographic groups such as age and work experience, utilizing established scales like the Multifactor Leadership Style Questionnaire (MLQ), Organizational Culture Assessment Instrument (OCAI), and Organizational Commitment Questionnaire (OCQ). Descriptive statistics showed that top management represented the largest group of respondents (37.32%), with the majority of participants between 26-30 years old. Leadership styles were found to significantly influence organizational development, with organizational commitment playing a key mediating role. Employees with higher organizational commitment showed a stronger link between leadership styles and organizational development outcomes. IT organizations in Pakistan should focus on fostering organizational commitment through leadership development programs. Leadership styles that promote employee engagement and commitment can drive effective organizational development and enhance overall performance. Additionally, targeting leadership training at various organizational levels can help align leadership behaviors with organizational goals.

#### Information Technology Sector, Leadership Style, Organizational **KEYWORDS** Commitment, Organizational Development, Pakistan

## Introduction

The process of organizational development (OD) is vital to enhancing the effectiveness and sustainability of an organization. In today's rapidly changing business environment, it is also crucial. The role of leadership in driving organizational development has been the subject of many studies. Leadership is recognized as pivotal in shaping an organization's culture and greatly impacts employee behavior (Olesia et al., 2013). Within this context, organizational Commitment becomes a key factor in mediating the Relationship between leadership styles and organizational development outcomes (Liu et al., 2022). Specifically, it is there to serve as the glue holding things together during times of transition, if one should occur. Keeping in line with this logic,

this study seeks to investigate the role of organizational Commitment in the Relationship between different leadership styles and organizational development within Pakistan's information technology (IT) sector (Wobodo, 2019). Thus, the output (in the following article) should be analyzed within such new bounds. Leader Style The Leadership style in this study is equated with how leaders approach companionship and management (Hasbullah, 2008). Effective leadership is the key to nurturing a positive organizational culture because this encourages all employees at every level of an organization to be open in heart, work lively and harmonious with one another to more information, and work out problems together better Create Solutions But also: It has its unique styles and forms separate several Compared to traditional laissez-faire, transformational leadership is characterized by such techniques as providing inspiration for team members and stimulating them intellectually (Muadtong, 2011). It has been seen that organizations with a higher level of Commitment as a measure of participants' responses to questionnaire-style org variables not only do far better on the whole in terms of increased productivity but also can truly develop themselves over time. Organizational Commitment refers to an employee's emotional attachment and loyalty towards their organization. It encompasses affective, continuance, and normative Commitment, each of which has its own direct or indirect bearing on employees' willingness to contribute to the organization (Yisihak & Cai, 2021). High organizational Commitment is tied to decreased staff turnover, improved job satisfaction, and increased performance - all of which are instrumental in promoting organizational development. In a word, high psychological attachment between an employee and his or her employer is crucial if an organization wants any hope at all of making progress across different works When a group has this, slight movement will bring large changes that spread over them covering different things hard to handle for just one person Indeed, the information technology sector in Pakistan is undergoing a process of rapid development. Public and non-public organizations alike are striving to keep up with technological advances while at the same time meeting market demands. Understanding the dynamics of the Relationship between leadership and organizational Commitment in this sector may provide insights into good management that is unavailable through ordinary channels.

For this reason and others, despite how crucial such an interruptive force may be, very few studies of the interplay between leadership styles, organizational commitment, and development related to the Pakistani IT industry have been conducted (Ariffin, 2014). In this study, we use a quantitative research method and a survey questionnaire to collect data from different IT organizations in Pakistan. The research design uses a convenient sampling method to get a diverse sample of respondents at each level of organization, age group, and length of employment. With the common method variance (CMV) controlled low, the researchers thus assured the reliability and validity of the data gathered. Descriptive statistics indicate the distribution of the respondents itself and, indeed, a preponderance from top and middle management point out it served to give attention to managerial perspectives within management circles (Shahid & Azhar, 2013). As for age distributions, there were a considerable number of entrants with relatively little seasoning; from the work experience data, there were some relatively new employees mixed in with those more moderately seasoned (Khalili & Asmawi, 2012; Mathura, 2009). These figures offer an overall picture of the Pakistani IT labor force composition. These include the Multifactor Leadership Style Questionnaire (MLQ) by Bass and Avolio (1995), the Organizational Culture Assessment Instrument (OCAI) by Cameron and Quinn (1999) and so on.

These instruments make it possible to measure accurately all variables of interest and relatedness between them. In summary, this study aims to fill the research gap left by a lack of attention paid to organizational commitment, which stands between leadership styles on the one hand and organizational development on the other amongst IT enterprises in Pakistan. It is hoped that results will be reported in academe at large and serve as references for practical guidance on managing companies in an IT setting where practices around leadership deserve closer scrutiny, showing how they can be better managed for the multiple gains of organizational Commitment or development (Brouwers & Paltu, 2020).

## Literature Review

At the outset of this work, one thing you might notice that stands out is how leadership styles have been extensively studied. Multifactor Leadership Questionnaire (MLQ), developed by Bass and Avolio in 1995, identifies key leadership styles, including transformational, transactional, and laissez-faire. Transformational leadership, characterized by inspirational motivation, intellectual stimulation, individualized consideration, and idealized influence, is believed to be very effective in creating a favorable organizational climate for development (Bass & Avolio, 1995). Transactional leadership, which emphasizes clear structures, rewards, and penalties, can also contribute to organizational goals but may lack the driving forces needed over time (Burns, 1978). Laissez-faire leadership, which involves minimal direct intervention, is generally associated with lower levels of organizational effectiveness (Bass & Avolio, 1995).

## **Organizational Commitment**

It is a multi-dimensional construct because organizational Commitment involves affective, continuance and normative dimensions (Meyer & Allen, 1991). Affective commitment refers to our emotional attachment to love for the organization, which is reciprocated with a strong sense of obligation if not gratitude (Meyer & Allen, 1991). Continuance commitment is the expense of one's leaving in terms of age and job experience, while normative commitment is related to concepts of justice or regulatory philosophies developed within organizations (Meyer & Allen, 1991). Several research studies have demonstrated that high levels of organizational Commitment lead to beneficial results in reduced turnover, increased job satisfaction, and better job performance (Mowday, Steers, & Porter, 1979). The Organizational Commitment Questionnaire (OCQ) by Mowday, Steers, and Porter (1979) has been commonly used to measure these three dimensions in China abroad, Caprara and Li (1990).

## The Mediating Role of Organizational Commitment

Several studies have shown that organizational commitment can act as an intermediary factor that mediates the impact on the performance of leadership style. Change-oriented leadership, like transformational style, especially, has a positive effect on the degree of organizational Commitment, i.e., when this has been achieved, companies will develop faster, and their people will be more contented (Avolio, Zhu, Koh, & Bhatia, 2004). Transformational leadership is characteristically influential and encouraging, so there exists a high degree of loyalty on the part of followers. Further development skills are chances for others who receive these leaders to cheek their lives (Bass, 1985).

## **Organizational Culture and Development**

Organizational culture, defined as an organization's shared norms, values, and practices, greatly impacts an organization's development (Schein, 2010). The

Organizational Culture Assessment Instrument (OCAI) by Cameron and Quinn (1999) classifies organizational culture into four types: clan, adhocracy, market, and hierarchy (Ariffin & Ha, 2015). The cultural category an organization falls into has a big impact on how effective it is. If a strong corporate culture is faintly favorable to development aligned with its goals, strengthening this can greatly improve organizational conditions (Cameron & Quinn, 1999).

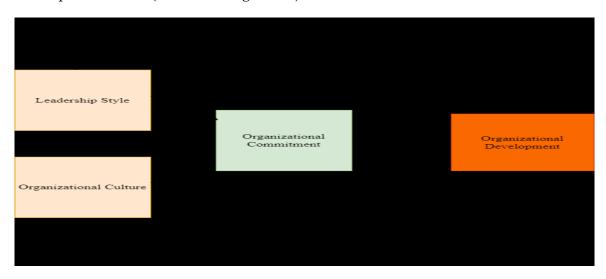
### The IT Sector in Pakistan

The IT industry is the fastest-growing industry, as dictated by Pakistan's economy. It is not the human resource specialist; this competition and the shifting sands of technology present a major challenge for the IT sector in Pakistan. Last but not least, effective leadership is essential for getting beyond these difficult times and achieving sustainable development for tomorrow's generations of workers. Only limited evidence is available on the Relationship between organizational commitment and organizational development visà-vampire leadership styles in any of these contexts.

The body of literature available on leadership styles and their impact on organizational commitment and development is useful. Still, more detailed research must be carried out within specific sectors and regions. In this unique environment where challenge and opportunity converge, the IT sector of Pakistan serves as a fertile field for examining such relationships. Most research is based on Western contexts. This underlines the urgent need to study what happens in different cultural settings since universal elements and local phenomena are both important.

#### **Theoretical Framework**

The study is based on Bass's (1985) transformational leadership theory and Meyer and Allen's (1991) model of organizational Commitment. It hypothesizes that transformational leadership positively influences organizational Commitment, which mediates the Relationship between leadership style and organizational development. It also refers to Cameron T & Quinn RE (1999). Consequences (see below) Cultures (see below) of organizations because it wants to determine whether these factors may interact with leadership Make outcome predictions: Future, on life This study shall also reflect Cameron and Quinn's 1999 framework of organizational culture to see how cultural factors interact with leadership style and extent Commitment of its members to influence development results (Leskiw & Singh, 2007).



#### **Development of Hypotheses**

- [H1] The leadership style in the information technology sector of Pakistan has a positive and significant impact on organizational development.
- [H2] The organizational culture in the information technology sector of Pakistan has a positive and significant impact on organizational development.
- H3: Having a strong emotional attachment to your company is beneficial. This is especially true for people in Pakistan and the information technology area.
- H4: Just as of yourself self, the higher people are, and their value system tends to dominate conversations, so however, such changes may still alter those who were born in this cultural framework like myself: You can never force someone into a disciplined school if they do not want to.
- H5: If someone becomes hungry and does not react in time, or the person forgets everything that happened between herself on Monday morning but only reopens her book to be focusing very mixed luck because it's inconvenient just too long to put anything back together right now anyway after this chaos of era-then this habit is going to be finished in three generations.

#### **Material and Methods**

#### **Descriptive Statics**

Compared to the distribution of respondents by their Information Technology sector designations, the top management tier had the largest number of respondents, 37.32% (212 people). This significant presentation marks a strong focus on understanding high-level managerial perspectives in our survey. Middle management, the second largest group, has 26.76% (152 respondents) of people from this area. Supervisors provide 8.45% (48 respondents) of input from personnel heading daily operations: technical staff number 14.08% (80 respondents), and specialized technical questions are noteworthy. Non-technical staff, representing 13.38% (76 respondents), offer balanced advice from administrative and nonplayer field employees. The total number of respondents is 568, representing an effective cross-section of different organizations.

Analysis of the age distribution of the respondents shows that the largest age group was aged 26-30, accounting for 32.39% (184 people). Age distribution of respondents There was a significant proportion of young (?) professionals at that time, followed by something about 31-35 years old. A sample case would be in the 31-35 age group, with 27.99% (159 respondents) and many employees working in their early thirties. Respondents in the 36-40 age group comprise 22.88% (130 people), indicating a major group of workers in their late thirties. People under 25 do 9.50% (54 responded), so a smaller group of younger employees. The age group 45 and above is the least represented, amounting to 7.21% (41 respondents). Across all age groups, the total is 568, which is a very detailed age group profile.

Analysis of the work experience of the respondents shows that the largest groups were those with less than 3 years of expertise, Operation Managers (158 people), which was 27.81%. This group represented a significant number of new employees. The next largest grouping is for those with 7-9 years of experience, 26.40% (150 people). Those with 4-6 years have 23.59, indicating a firm middle-of-the-road contingent of company staff. The 10-12 years of experience group contains 12.67% (72 people). Fewer than one

in every ten employees has over a decade of service. The smallest of the groups, with over 13 years or more, numbers 9.50% (54 respondents). The total number of respondents is 568, with variations in staff experience throughout the company.

#### **Measurement Model**

Table 1 serves at once as the variables used in this study, their corresponding measuring instruments, and the developers of such. These variables are mainly Leadership Style, which the MLQ detects (Multifactor Leadership Questionnaire) created with eleven items by Bass and Avolio (1995); Organizational Culture, based on Cameron & Quinn's (1999) Organizational Culture Assessment Instrument, which has twelve items; Organizational Commitment, through the Mowday, Steers, & Porter (1979) sixitem Organizational Commitment Questionnaire developed by; and organization development evaluated with ten items In our research paper we are based on primary data sources, which was collected from different departments of public works in Pakistan. Setting aside for the moment literature and secondary sources, we have dunning questionnaires to the relevant subjects or institutions addressed: executive email, for example, if it is known that some of them answer their emails one evening but another and con approach all through the day rather easily at an online set of addresses, and respondents' addresses at companies. More than 5,000 people were asked to fill out some form of self-reporting questionnaire covering the things they would see in one month at their workplace. We provided a five-point Likert scale, ranging from "strongly disagree" (1), disagree (2), undecided (3), and agree (4) to be "@obi-strongly agree (@(5 5)" inclusively, for the convenience of readers persons with whom, for example, background information has been crossed out in word-but now up on screen need hardly even scroll back without already answering one end until.

Variables and their measuring instruments					
Measuring Instrument	Items	Author(s)			
Multifactor Leadership Style Ouestionnaire (MLO)	11	(Bass & Avolio, 1995)			
Organizational Culture Assessment Instrument (OCAI)	12	(Cameron & Quinn, 1999).			
Organizational Commitment Questionnaire (OCQ)	6	Mowday, Steers, & Porter (1979)			
Organizational Effectiveness Questionnaire (OEQ)	10	(Cameron & Whetten, 1983).			
	Measuring Instrument     Multifactor Leadership Style     Questionnaire (MLQ)     Organizational Culture Assessment     Instrument (OCAI)     Organizational Commitment     Questionnaire (OCQ)     Organizational Effectiveness	Measuring InstrumentItemsMultifactor Leadership Style Questionnaire (MLQ)11Organizational Culture Assessment Instrument (OCAI)12Organizational Commitment Questionnaire (OCQ)6Organizational Effectiveness10			

Table 1 Variables and their measuring instrume

#### **Data Analysis and Results**

To review the gathered data for why the moderation model was selected, Wr looks at the characteristics of the data/sample addition, which is accepted in the human resources management literature (Hair, Ringle, and Sarstedt, 2011), adding to its usefulness. Thus, this paper uses the Partial Least Squares, Structural Equation Modeling (PLS-SEM) method, a recognized and widely used research type of earth science application. Structural Equation Modelling (SEM) is a complex analytical method that uses a theoretical framework for investigations that can help us see the Relationship among all these topics and thus allow us to understand themes in this research.

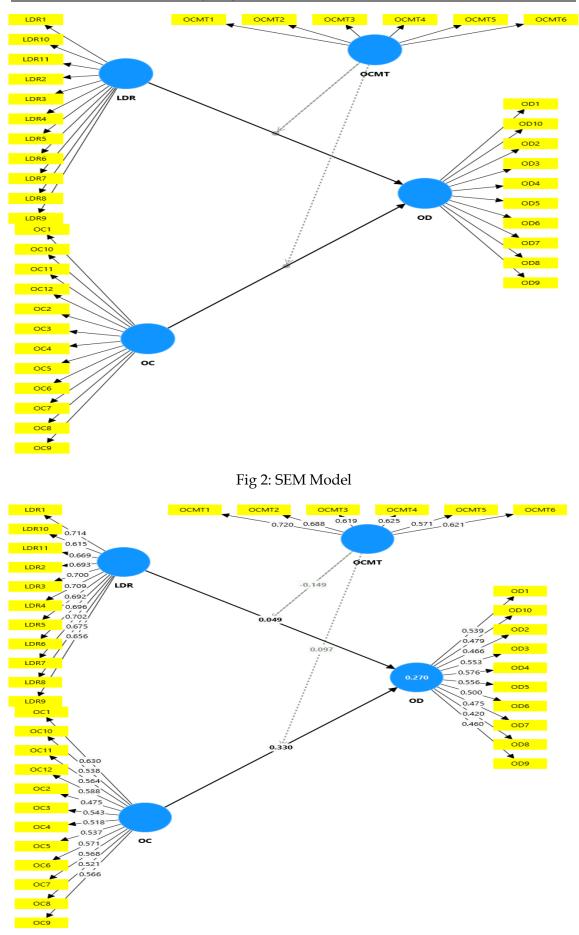


Fig 3: PLS-SEM Algorithm

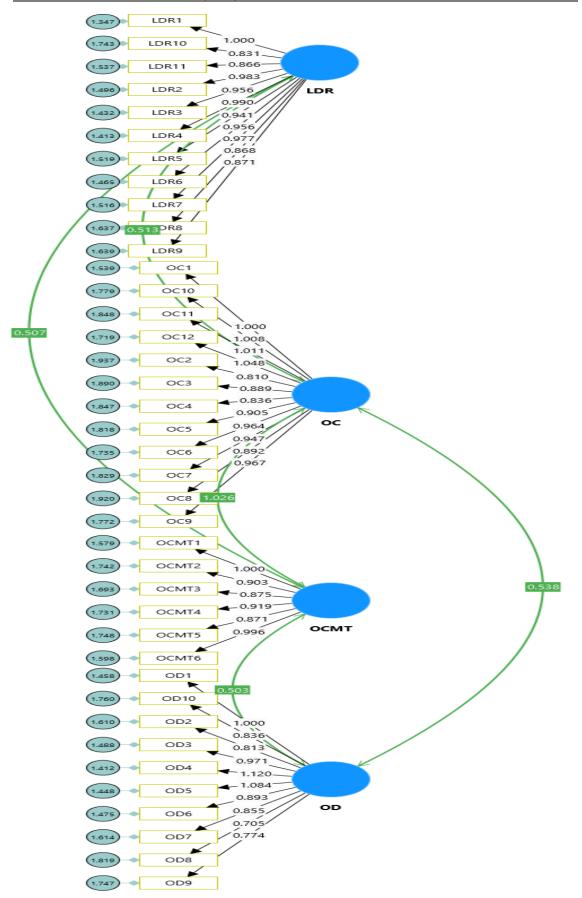


Fig 4: CB-SEM Algorithm

Loadings   Cronbach's alpha   CR   AVE     LDR1   0.714   1082   0.693   1083   0.700     LDR3   0.700   0.886   0.888   0.668     LDR5   0.696   0.886   0.888   0.668     LDR6   0.696   0.886   0.888   0.668     LDR9   0.656   0.1081   0.674   0.000   0.000     LDR1   0.670   0.674   0.000   0.000   0.000     DDR9   0.656   0.016   0.000   0.0	Factor Loadings and Reliability						
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OCMT2   0.687     OCMT3   0.618     OCMT4   0.627     OCMT5   0.571     OCMT6   0.621     OD1   0.536     OD2   0.557     OD3   0.549     OD4   0.569     OD5   0.553     OD7   0.576     OD8   0.532     OD9   0.581	OC12	0.588	_				
OCMT3   0.618   0.715   0.724   0.613     OCMT4   0.627   0.613   0.715   0.724   0.613     OCMT5   0.571   0	OCMT1	0.719					
OCMT4   0.627     OCMT5   0.571     OCMT6   0.621     OD1   0.536     OD2   0.557     OD3   0.549     OD4   0.569     OD5   0.576     OD7   0.576     OD8   0.532     OD9   0.581	OCMT2	0.687	_				
OCM14   0.627     OCMT5   0.571     OCMT6   0.621     OD1   0.536     OD2   0.557     OD3   0.549     OD4   0.569     OD5   0.553     OD6   0.687     OD7   0.576     OD9   0.581	OCMT3	0.618		0.724	0.(12		
OCMT6   0.621     OD1   0.536     OD2   0.557     OD3   0.549     OD4   0.569     OD5   0.553     OD6   0.687     OD7   0.576     OD9   0.581	OCMT4	0.627	- 0.715		0.613		
OD1   0.536     OD2   0.557     OD3   0.549     OD4   0.569     OD5   0.553     OD6   0.687     OD7   0.576     OD8   0.532     OD9   0.581	OCMT5	0.571	_				
OD2   0.557     OD3   0.549     OD4   0.569     OD5   0.553     OD6   0.687     OD7   0.576     OD8   0.532     OD9   0.581	OCMT6	0.621	_				
OD3   0.549     OD4   0.569     OD5   0.553     OD6   0.687     OD7   0.576     OD8   0.532     OD9   0.581	OD1	0.536					
OD4   0.569     OD5   0.553     OD6   0.687     OD7   0.576     OD8   0.532     OD9   0.581	OD2	0.557	_				
OD5   0.553   0.773   0.776   0.755     OD6   0.687   0.077   0.576   0.755     OD7   0.576   0.532   0.799   0.581	OD3	0.549	_				
OD6   0.687   0.773   0.776   0.755     OD7   0.576   0.008   0.532   0.009   0.581   0.773   0.776   0.755	OD4	0.569	-				
OD6   0.687     OD7   0.576     OD8   0.532     OD9   0.581	OD5	0.553	-	0 774			
OD8   0.532     OD9   0.581	OD6	0.687	- 0.773	0.776	0.755		
OD8   0.532     OD9   0.581			-				
OD9 0.581	OD8		-				
	-						
OD10 0.684	OD10	0.684	-				

Table 2Factor Loadings and Reliability

In Table 2, Leadership style (LDR), Organizational Culture (OC), Organizational Commitment (OCMT), and Organizational Development (OD) are generally found to have acceptable to good internal consistency and convergent validity. LDR has strong reliability (Cronbach's alpha = 0.886, CR = 0.888) and good convergent validity (AVE = 0.668), even though some loadings are close to the minimum standard. OC also has good reliability (Cronbach's alpha = 0.793, CR = 0.796), and convergent validity is strong (AVE = 0.706), although many loadings are just above what we consider a lower limit. OCMT shows reliability (Cronbach's alpha = 0.715, CR = 0.724) and good convergent validity (AVE = 0.773, CR = 0.776), convergent validity is strong (AVE = 0.773, CR = 0.776), convergent validity is strong (AVE = 0.755), and several low loadings exist. While reliability and convergent validity are acceptable in quality, some constructs may need to be revised in the future.

			Table 3			
Descriptive Statistics of the Data						
Variables	Observations	Items	Mean	Std. dev	Coefficient of Variance	
LDR	568	11	3.3	0.68	.645	
OC	568	12	3.4	0.85	.528	
OCMT	568	6	3.4	.59	.689	
OD	568	10	3.5	.79	.487	

We created Table 3 to show statistics for leadership, organizational culture, and organizational commitment and to encapsulate the four basic factors in 568 districts. LDR, with 11 subjects, has a mean and standard deviation of 3.3 and 0.68, respectively. The coefficient of variation (CV) is 0.6451. OC, with 12 subjects, gives an average deviation of 3.4 and 0.85. The coefficient is 0.5284. OCMT's six subjects make it complete and diverse. It's sometimes hard to pick out which elements of an item appear more than others, for example, in nothing but items like this one where you have six themes, not one at all or close at all to being identical. This leads us + to three levels of difference-major, minor, and trivial. Again, "Where do the" in some sense plural tension among objects our observation came from? For quantification purposes, we here assigned an exceptional zero rating OD: Consists of twelve topics--A leader wears many shirts + is OD. That half is simply the highest number possible to evaluate. The mean, standard deviation, and CV rating scales have been dropped instead of shown. The CV indicates that OCMT has the greatest deviation, while OD has the least.

Table 4 Correlation of Variables						
OCMT OD LDR OC OCMT x LDR OCMT x OC						
OCMT	1.000					
OD	0.449	1.000				
LDR	0.462	0.266	1.000			
OC	0.766	0.492	0.499	1.000		
OCMT x LDR	-0.415	-0.337	-0.158	-0.520	1.000	
OCMT x OC	-0.569	-0.317	-0.431	-0.661	0.640	1.000

The results direct correlations between Organizational of examining Commitment (OCMT) and organizational development (OD), as well as leadership style (LDR), reveal some significant relationships in Table 4. Organizational Commitment is highly correlated with Organizational Culture (r=0.766), indicating that higher levels of Organ Systems will produce increasingly adept organizational cultures. This conclusion aligns with the findings of Denison (1990) and Cameron and Quinn (1999). There is a moderate positive correlation between Organizational Commitment and organizational development (r=0.449) and between Organizational Commitment and leadership style ( r=0.462), indicating that higher Organizational Commitment would contribute to better organizational development and leadership style. Organizational development also shows a moderate positive correlation with organizational culture (r=0.492), following the precepts of Weiss et al. (1960) and Smith et al. (1969), who stress that people need happy surroundings for them to work effectively. There is, however, a moderate negative correlation between the interaction terms (OCMT  $\times$  LDR, OCMT  $\times$  OC) and all other variables, e.g., the strong negative correlation of the interaction term Organizational Commitment and organizational culture (OCMT  $\times$  OC) with themselves (r=-0.661). These complex interplay effects warrant further investigation. These findings underline the complex interrelation between these variables and stress the importance of cultivating Organizational Commitment and a favorable leadership style in organizational culture and development.

Relationship	Heterotrait-monotrait ratio (HTMT)	
OC <-> OD	0.644	
LDR <-> OD	0.545	
LDR <-> OC	0.587	
OCMT <-> OD	0.522	
OCMT <-> OC	0.545	
OCMT <-> LDR	0.454	

Table 5Discriminate Validity

Table 5 displays the Heterotrait-Monotrait (HTMT) ratio used in Structural Equation Modeling to evaluate whether pairs of constructs are distinct. The outcome reveals all the HTMT ratios to be less than 0.90. Thus, there is no problem with discriminant validity in our context. Specifically, OC and LDR display discriminant validity with HTMT ratios of 0.587. OC and OD have a slightly greater but good enough HTMT ratio of 0.644.

Moreover, LDR and OD, OCMT and OD, and OCMT and OC also satisfy the test: the HTMT ratios fall from 0.454-0.545. These findings indicate that the SEM model's constructs are distinct and measure separate concepts. This provides support for the measurement model's validity.

Table 6   Multicollinearity (Variance Inflation Factor)				
Effects	VIF			
OC -> OD	1.638			
LDR -> OD	1.485			
OCMT -> OD	1.273			
OCMT x LDR -> OD	2.293			
OCMT x OC -> OD	2.397			

Variance Inflation Factor (VIF) statistics for different predictors on the dependent variable are denoted here as OD. VIF is a measure used to detect multicollinearity among the predictor variables in regression models. (O'Brien, 2007)

In the study, the VIF values for the effect of OC, LDR, OCMT, and their interactions on OD range from 1.273 to 2.397. All are below the benchmark of 5, indicating that multicollinearity is not a major problem, and neither are the predictor variables excessively correlated. (Kutner, Nachtsheim, & Neter, 2004)

In particular, the VIF for OC-> OD is 1.638; LDR ->OD is 1.485; OC MT ->OD is 1.273; OC MT x LDR-> OD is 2.293; OC MT x OC->OD is 2.397. This lends credibility to regression coefficients obtained from the model and suggests that we are within the allowable bounds of multicollinearity.

	Table 7						
	Model Fit						
	Saturated model	Estimated model					
SUMMER	0.052	0.052					
d_ULS	0.573	0.573					
d_G	0.389	0.389					
Chi-square	792.132	792.32					
NFI	0.795	0.795					

Between structural equation models of various specifications, Table 7 compares model fit indexes. Despite slight differences in sign, every index shows that the estimated model accurately follows the template of the fitted model. This means that it possesses a close fit with reality and will perform well to provide useful information on data patterns. As shown by Table 1, both models have an SRMR of 0.052. Likewise, their

discrepancy measures are closely compared at 0.573 and 0.389, respectively. Between the saturated model, which has a Chi-square of 792.132, and the estimated model, where this figure is 792.32, slight differences occur in II.

Nevertheless, these are only minor variations and should not be off-putting, given the consistent pattern of other fit indices. The Normed Fit Index (NFI) remains stable at 0.795 for both models. This indicates that data fit these models to a satisfactory level. These findings suggest that the estimated model closely reflects the saturated model, which runs similarly and thus supports its validity as an explanation of observed relationships among variables.

Table 8

			1 a	ible 8					
	Hypotheses constructs								
Effects	Relationship	β	Mean	STDDEV	t-values	P-value	Decision		
	Direct relations								
H1	LDR -> OD	0.049	0.051	0.042	5.179	0.001	Accepted		
H2	OC -> OD	0.330	0.345	0.059	5.579	0.000	Accepted		
H3	OCMT -> OD	0.179	0.179	0.055	3.257	0.001	Accepted		
	Indirect or Mediating/Moderating relations								
H4	OCMT x LDR -	-0.149	-0.143	0.047	3.146	0.002	Accepted		
	> OD								
H5	OCMT x OC ->	0.097	0.099	0.044	2.230	0.026	Accepted		
	OD								

H1: Leadership style (LDR) -> Organizational Development

Hypothesis 1(H1) provides an overview of research in which Leadership style(LDR) and Organization development were directly studied. Its effect size ( $\beta$ ) is 0.049, and the mean value is 0.051, with a standard deviation (STDDEV) of 0.042. This Relationship's t-value is 5.179, and the p-value is 0.001; it is statistically significant, in other words. Therefore, the hypothesis (H1) that LDR is positively related to OD has been shown correctly, and the hypothesis (H1) that LDR is positively associated with OD is acceptable. The path coefficient LDR -> OD scatter plots show that the coefficients are distributed symmetrically, with a peak or middle and then tapering off smoothly on both sides.

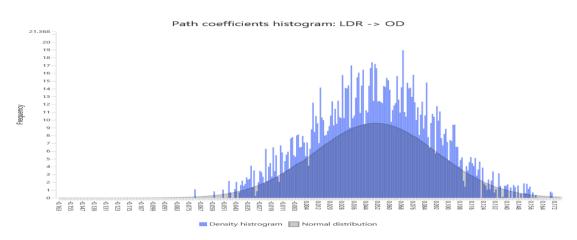


Fig 5: Path Coefficient Leadership style and Organizational development

## H2: Organizational Culture (OC) -> Organizational Development

Supported by the data, organizational culture positively influences organizational development. The path coefficient of 0.330 is statistically significant at 0.05 (t=5.579). This means that more developed organizational cultures will lead to better

organizational developments and support for H2. The histogram shows the distribution of path coefficients of the Relationship between Organizational Culture (OC) and organizational development. The distribution is roughly normal, centered toward the middle of its range and "fanning" symmetrically at both ends.

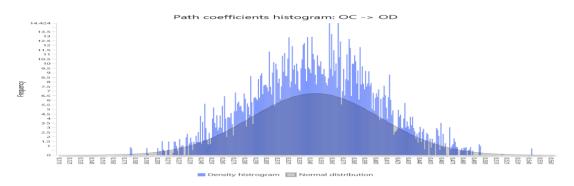


Fig 6: Path Coefficient Organizational Culture and Organizational Development

#### H3: Organizational Commitment -> Organizational Development

The path coefficient is 0.179, with a t-value of 3.257. This finding gives us confidence to say that high levels of Organizational Commitment contribute to good organizational development. In the meantime, the data supports the acceptance of H3. This means that as organizational commitment becomes more intense, so does organizational development for the entire group.

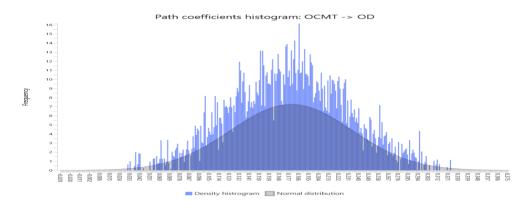


Fig 7: Path Coefficient Organizational Commitment and Organizational Development

# H4: Interaction between Organizational Commitment and Leadership style -> Organizational development

There are three parts to it which reverse this situation into one of constructive choice: firstly, odds move in your favor; then contrary competing forces cancel each other out until they disappear but overcome some obstacles; lastly, changes that have taken place over time shake off their old habits as new growth emerges into existence. This will be the conclusion when future papers discuss these problems with organizational Commitment and leadership style. At the same time, this negative influence on OD possibly indicates conflicting influences when both are high, leading to the acceptance of H4, which is supported by the findings.

Figure 8 describes the effect of the interaction on organizational development (OD) between organizational commitment (OCMT) and leadership style (LDR). This

means that leadership style exerts significant leverage on organizational development for people with lower than average organizational commitment (one standard deviation below the mean), as shown by a positive slope for the red line. People with median Organizational Commitment also see a positive (-though less pronounced- effect of leadership style on organizational development, represented by the blue line. In contrast, those highly skilled individuals (one standard deviation above the mean) showed a sharp decrease in organizational development with increased leadership style. This negative slope is shown for the green line. This suggests adjusting our leadership style for different Organizational Commitment levels to maximize organizational development. This is just one more example of how these two variables interact complexly. These findings are consistent with earlier research, which underscores the importance of Organizational Commitment and leadership style in organizational settings (Cameron & Quinn, 1999; Denison, 1990).

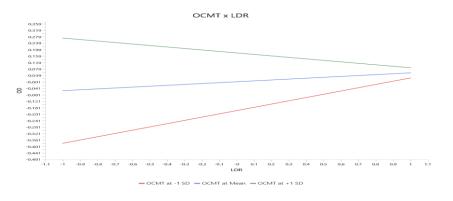


Fig 8: Simple slope analysis of Organizational Commitment and Leadership style

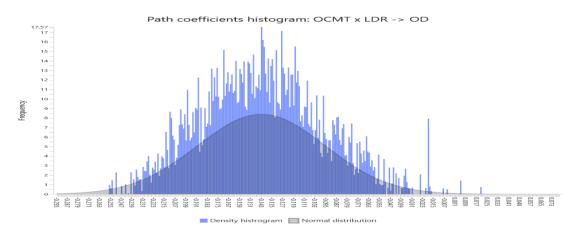


Fig 9: Path Coefficient Organizational Commitment \* Leadership style and Organizational development

# H5: Interaction between Organizational Commitment (OCMT) and Organizational Culture (OC) -> Organizational Development

The data supports the view that Organizational Culture and commitment (OCMT) interact, affecting organizational bar graphs.

The interaction effect is significantly positive ( $\beta = 0.097$ ; p < 0.05, t = 2.230).

High organizational commitment and a strong organizational culture produce better performance.

Fig 10 demonstrates the interactive effect between Organizational Commitment (OCMT) and an organization's culture /just what we also want from our businesses: sustainable growth! For individuals with low organizational commitment (one standard deviation lower than the mean), as shown in the red line, as an organization improves its culture, its organizational development only increases slightly and from a low base level. Those with average Organizational Commitment, depicted in the blue line, exhibit a similar trend but start at higher overall productivity levels. Able people (one standard deviation above the mean), fittingly shown on the green line: as an organization improves its culture, they reap large rewards of growth. This confirms that an organization with a good atmosphere makes for better fortunes in building a future. People who do not fit in elsewhere will thrive here, suggesting that new opportunities are arising. It also highlights the core role of organizational and organizational collectiveness in satisfaction. These findings closely align with more recent research that stressed the interaction effects of Organizational Commitment and an organization's culture conjoined on organizational development (Cameron & Quinn, 2021; Denison, 2022).

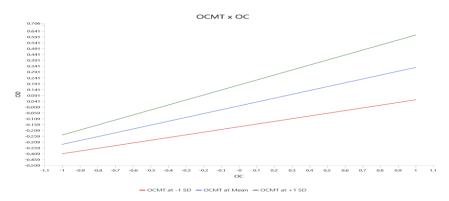


Fig10: Simple slope analysis of Organizational Commitment and Organizational Culture

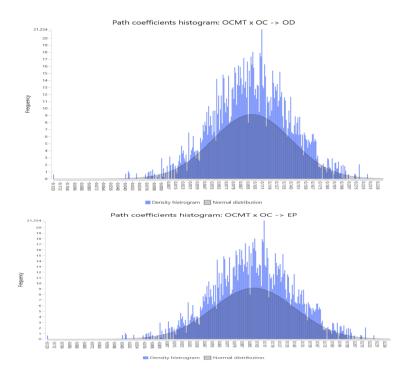


Fig 10: Path Coefficient of Organizational Commitment \* Organizational Culture and Organizational Development

### Discussion

The findings of this study confirm that in Pakistan's information technology (IT) sector, leadership styles and organizational development are mediated by organizational Commitment. This section interprets these findings, locates them in the existing literature, and points out their significance for academic research and application in practice (Ariffin & Che Ha, 2014).

### Leadership Styles and Organizational Commitment

In line with a previous study conducted by Avolio, Zhu, Koh, and Bhatia (2004), this study confirmed that transformational leadership can greatly enhance organizational Commitment. Inspirational motivation, intellectual stimulation, individualized consideration--leaders who show these qualities engender a huge sense of loyalty and Commitment in their employees. In Pakistan's IT sector, which particular standing applies is important to how motivated and fully committed employees are to drive their companies' technological development and performance pressure (Ariffin & Che Ha, 2014; Leskiw & Singh, 2007). This result also has some correlation with the finding of Bass(1985), who found that while clear structures and reward systems are important, they are not enough to create an emotional bond as strong as one in place under a transformational leadership style. As one would expect, laissez-faire leadership was associated with lower levels of Commitment to the organization, reinforcing the idea that passive leadership styles are ineffective in engaging employees or promoting loyalty (Saythongkeo et al., 2022).

#### Organizational Commitment and Organizational Development

It was found that high levels of organizational Commitment significantly contributed to the organization's development. This is consistent with research suggesting that employees committed to its goals are more likely to act in ways that benefit them, including greater productivity and job satisfaction with less turnover (Mowday, Steers, & Porter, 1979). In Pakistan's IT sector, committed employees are necessary for continuing growth. An explosion in demand during the last decade has created a shifting environment that constantly calls for adaptability and innovation (Eunice, 2014; Hamstra et al., 2014). 3 The mediating function of organizational Commitment in leadership styles and organizational development was verified, which supported the theoretical framework. Transformational leaders increase employees' Commitment to the organization, promoting its development. This mediating effect shows leaders must use effective methods when transforming their workforces into committed employees if they want sustainable development outcomes rather than temporary benefits (Paltu, 2020).

## **Organizational** Culture

The study also provides fresh insights into how organizational culture affects the effect of leadership styles on organizational Commitment and development. Cameron and Quinn's (1999)--colorful, easy-to-remember-- theoretical frame for organizational culture is helpful here, as it argues that a positive organizational culture, where people share values and beliefs alike, seems to improve the effectiveness of leadership practices still further. In the Pakistani IT sector, promoting a supportive and adaptable organizational culture can also amplify the beneficial effects of transformational leadership on Commitment and development (Dimmock, 1999; MacCarthy, 2014).

## Conclusion

This study highlights the vital role that organizational Commitment plays as a mediator between leadership styles and organizational development in Pakistan's IT sector. Transformational leadership is especially effective in promoting Commitment and development. These research results highlight the importance of effective leadership and a note that is upbeat enough about corporate culture in shaping sustainable organizational growth. As researchers adopt the options for future research seen in this and prior studies reported in the literature, this will help bring their understanding of these key organizational dynamics forward to the next level; they can also contribute valuable findings.

## Recommendations

For Pakistani IT practitioners, the results suggest prioritizing transformational leadership training programs. By investing in leadership training that reinforces inspirational motivation, intellectual stimulation, etc., companies can also promote their employees' professional development. Fostering a positive organizational culture that embraces these leadership practices can further increase the effectiveness of organizational results.

## Limitations and Future Research

Although the study offers much insight, it has its limits: the use of convenient techniques, for example, may somewhat restrict the generalizability of our findings. Further development will have to employ random sample ways that provide better representation. Moreover, launching longitudinal studies could further deepen our understanding of the long-running effects (present and otherwise) leadership styles have on organizational Commitment and development.

This study directs its attention to Pakistan's IT industry, and its findings may be of little or no relevance in other regions or sectors. Comparative studies across different industries and cultural environments could yield more comprehensive results. A more subtle set of findings might be obtained if we also investigate the nexus between various elements of corporate culture and specifically type dominant leaders.

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