# The Role of Leadership Behaviours and Organizational Culture on Effective Knowledge Sharing; Case of State-owned Enterprises in Pakistan

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#### Abstract

The purpose of the study is to explore the influence of leadership style on knowledge sharing in state-owned enterprises. We also study the role of organizational culture that is cultivated by the servant and transformational leaders in the workplace. A sample of 297 respondents from state owned enterprises of Pakistan was used in the research. Data were collected by conducting a survey and was analyzed through multivariate analysis; PLS "partial least squares" and SEM "structural equation modeling". The results of the study reflect that both leadership styles i.e. servant and transformational, significantly and positively effect knowledge sharing in state-owned enterprises of Pakistan and organizational culture also has a positive and significant mediating role in the relationship between two leadership styles and knowledge sharing process in the targeted state-owned enterprises. The current study provides the mechanisms of organizational culture in terms of systems and procedures which evaluate its impact on knowledge sharing effectiveness in organizational managers with the help of examining the relationship between servant leadership, transformational leadership, organizational culture, and knowledge sharing.

**Keywords:** transformational leadership; servant leadership; organizational culture; state owned enterprises; knowledge sharing.

#### 1. Introduction

Knowledge is deemed as information holding high value and therefore, it is very crucial to perform the task of managing knowledge with utmost precision and appropriateness in an organization so the organization can make sustainable competitive benefit among the competitors in its respective markets (Birasnav et al., 2011). The knowledge management process involves the tasks of identifying, selecting, organizing, and classifying the information in an enterprise in such a way that the knowledge makes a positive impact on individual performances by improving them and by developing a competitive edge over rivals. All the tasks of knowledge management processes can be effectively accomplished by creating a supportive organizational culture that promotes production and sharing of knowledge among the organization from top to bottom and across the organization. Considering this, it can be deduced that the work environment and culture of an organization indeed play a vital part in effective knowledge management on the organizational level (Akhavan et al., 2014).

Having said that, another aspect which cannot be ignored in the success of processes pertaining to knowledge management in an organization is the tile of leadership in the firm as it is leadership that breeds an appropriate and most suitable culture in an organization that can promote an effective way of knowledge management processes and its correct sharing. It can be observed that the leadership styles in an enterprise are the driving factor for its operations and productive workforce and so if the leadership style of organizational leader is efficient and effective then it is must likely that the required environment and benefit of knowledge management will be achieved by the organization (Faroogi et al., 2017). Another known fact tells us that leadership styles, especially those who are aligned with the modern world elements successfully mitigate problematic factors in an organization and workforce which results in a knowledge-oriented environment in a workplace that is beneficial for all stakeholders. All these significances that are associated with leadership styles direct human attention towards the importance of studying the precise effect of leadership style on measures of knowledge management which further holds importance for progressive organizational performances (Mushtaq & Bokhari, 2011). In nutshell, it is conclusive that acquiring the most suitable style to lead a workforce is a critical step towards the development and enhancement of knowledge management processes in an enterprise and this can be particularly done if a leadership style is capable of cultivating a culture that is favorable for knowledge management in a workplace. The importance of knowledge management and the effect of leadership styles on its processes steers the attention to formulate the current paper with a clear objective of finding out the nature of interrelation in particular leadership styles and knowledge sharing and management in the context of business organizations. Moreover, it can also be observed that leadership styles affect knowledge management by breeding effective culture in the firm therefore the current study also undertakes the organizational culture as a mediating variable between leadership styles and knowledge management in state-owned enterprises of Pakistan.

The state-owned enterprises of Pakistan are chosen in the current paper because like many other areas, state-owned enterprises of countries also heavily rely for their success on their intellectual capital rather than physical capital. It is already established that knowledge being the most important information is one of the most valuable intellectual assets for the enterprises and therefore it can play an important role in the growth of government organizations (Abbas et al., 2011). It is also closely observed that the government sector of Pakistan has received very little attention from researchers and practitioners when it comes to their governance of knowledge management. Also, the area is less developed in terms of the mechanism of knowledge management and also lacks sufficient investment in knowledge sharing systems (Amber, Khan & Ahmad, 2017). Therefore, the study has selected the said area to conduct the research on the interrelation of leadership styles, organization culture, and knowledge sharing processes.

It is identified that in many small or less-resourced enterprises such as government organizations, identification, creation, storage, capture, mapping, and dissemination of knowledge is challenging. Therefore, it is crucial to identify what factors can contribute to effective knowledge management in such enterprises. Studies (Farooq et al. 2017; Akhavan et al. 2014) prove that leadership and its particular styles have important parts in mitigating the difficulties that arise in the accomplishment of knowledge management processes, therefore this paper seeks to investigate the different classifications of modern organizational leadership styles such as transformational style, servant style, and transactional style and also that how can these styled (transformational, servant and transactional) affect knowledge management processes in an enterprise and how organizational culture mediates the relationship. Moreover, the

literature reveals that the two concepts of leadership styles and organizational culture have been linked to Knowledge sharing processes individually.

This means that researchers have investigated the correlation of leadership and knowledge management (Mushtaq & Bokhari; Farooqi et al., 2017), and the correlation of organizational culture and Knowledge sharing (Tseng, 2010)but the literature lacks in addressing the phenomenon that how leadership style creates and 'maintains' particular organizational cultures to promote knowledge sharing. Addressing this gap, the current paper aims to provide empirical evidence to prove the existence or nonexistence of interrelation between the modern leadership styles (servant and transformational), organizational culture and practices associated with knowledge sharing practices which gives way to the following research questions:

#### 2. Theoretical Background

It is important to investigate the theoretical background of the notions to understand the correlation of leadership styles and knowledge management processes by reviewing the concepts and conclusions given by various reputed literature associated with the relevant area over the past few years.

## 2.1 Leadership Styles

If one wants to understand the concept of leadership styles, it is integral to go through the concept of leadership which is a process of influencing the followers and orienting them (Banai & Reisel, 2007). A definition defines leadership as a process of penetration among subordinates to accompany them with utmost support in the achievement of common goals and milestones (Akhavan et al., 2014). Well-known and leadership theories that are brought under discussion in current researches are servant style of leadership and transformational style (Smith et al., 2004). When their definitions are observed closely then it is evident that both styles of leading a workforce are very different from each other. Where transformational leadership gets engaged with peers to create a strong connection which subsequently increases the level of motivation and morality in the workforce, Servant leadership places the need and welfare of followers over their own interests. Servant leadership emphasizes on the development of followers and demonstrates solid moral behavior for the followers, organization, and all the other stakeholders (Northouse, 2016). When the two definitions are compared, it

can be seen that transformational leader motivates others to work, while servant leader focuses on helping others to work. However, both leadership styles are concerned with interaction with followers (Anderson, 2018).

Initially, the specifics of transformational theories reflected that leaders with this style inspire their subordinates which results into the benefit that subordinates and leader are clear on organizational vision and also such leaders are known to develop the potential in followers by providing them resources and thereby empowering them to achieve the vision that is shared with them by the leaders (Bass, 1996). Leaders with transformational leadership style not only act as role models but also support optimism and attain commitment from their followers while focusing on tasks while simultaneously working on subordinates' professional development and personal and career growth (Bass and Avolio, 1988). The transformational style of leadership focuses on the accomplishment of the leader rather than on his or her personal traits and relationship with peers and subordinates. Transformational leadership can also be described as the leadership process that transforms the behavior of individuals. In simpler words, this leadership style inspires followers to be changed under leadership.

Likewise, the initially presented theory of Servant leadership not only depicts leaders as servants of their followers but the theory shows such leaders placing their followers' interest before their own (Greenleaf, 1977). The primary object of a servant leaders is to serve and fulfill the requirement of others and such leaders think that this should optimally be the core motivation for effective leadership. Servant leaders gain credibility and immense trust from their followers by influencing them with their own contributions and efforts (Anderson, 2018).

# 2.2 The Theory of Knowledge and concept of Knowledge Sharing

Polanyi (1966) explicitly divided the concept of organizational knowledge in 2 separate dimensions namely explicit and tacit. The concept of explicit knowledge pertains to the recorded form of knowledge and information such as books, records, reports, softcopies of documents and other well- managed formally recorded sources. While tacit knowledge is the form of information and knowledge which is stored and nurtured in the minds of human beings (Amber, et al., 2017). Transferring both classes of knowledge i-e explicit knowledge and tacit knowledge in stakeholders and the organizational population is a constant learning process and this leads to the eventual success and progress of the organization (Dingsoyr, 2002). This is the reason behind the

constant discussion of a wide range of knowledge management models that runs in the organizational literature, such as in the work done by Nonaka (1994); Demarest (1997); etc. Among other models, the one proposed is considered ideal because it provides a comprehensive understanding of knowledge management processes such as knowledge sharing. Their model includes four fundamental processes that organizations need to adapt to conduct effective knowledge management processes in their workforces. These four fundamental processes are discovery, capture, and sharing, and application of organizational knowledge.

Knowledge sharing is the third and important process of knowledge management because the knowledge I not available to all members of the organization then it becomes rather useless (Micic, 2015). Knowledge sharing has two sub-processes of Exchange and Socialisation where Socialisation is effective for tacit knowledge sharing and Exchange is transferring of explicit knowledge within an organization among groups and individuals (Amber, et al., 2017). In the study by Akhavan et al. (2014) knowledge sharing is explained as a voluntary diffusion of acquired experiences and skills to other people. It is also considered as a systematic give and take of knowledge in an organization. All in all, knowledge sharing is conceptualized as a process that converts an individual's knowledge into a form that is more usable and understandable by others (Mishra & Pandey, 2018).

# 2.3 Leadership Styles and Knowledge Sharing

In the phase of knowledge sharing in the knowledge management process, leadership plays a very important role by forming mutual knowledge sharing practices, by encouraging the members of the organization members to exchange ideas and have knowledge-based discussions and dialogues among them (Micic, 2015). Empowering leaders takes one step higher and get engaged in knowledge sharing activities (Mishra & Pandy, 2018). When employees perceive their leaders as encouraging and supportive of knowledge sharing in an organization then their involvement in knowledge sharing activities is also positively influenced as such leaders encourage the followers openly in discussion meetings to share their skills and ideas with others. This openness elevates both internal and external knowledge-sharing behavior in subordinates (Carmeli et al., 2013).

The relationship of servant leadership style with knowledge sharing can be seen through theories of social learning and social exchange (Bandura, 1977) and social

exchange theory (Blau, 1964). Social exchange theory indicates a social exchange between employees and leader behaviors (Tuan, 2016). The leaders with the Servant leadership style lead employees by providing service to them, transcending their selfinterest, demonstrating care and empathy for others, and acting in the best interest of subordinates (Van Dierendonck, 2011). In social exchange theory, people are inclined to return favors to the ones who act in their interest. This reciprocity increases till a perceived balance is emerged in the exchanges (Blau, 1964). The more servant leadership demonstrates and practice care to the employees, the more employees respond. This reciprocation is not only in terms of treatment but also happens in the leader's commitment to organizational mission and transcendent contributions, important contributions such as knowledge sharing. IN nutshell, employees get engaged in knowledge-sharing practices as an exchange to sustain and support the serving environment to reciprocate the serving behavior of their leadership (Tuan, 2016). Likewise, Social learning theory by (Bandura, 1977), indicates that employees are inclined to learn by matching their leader's behaviors which further elaborates the influence of servant leadership on the process of knowledge sharing. Social learning theory depicts that people learn when they pay attention to and emulate the values, attitudes, and behaviors of credible and attractive role models (Brown and Treviño, 2006).

It is observed that employees see their servant leader as an attractive model because servant leaders transcend their interests for the interests of others, and such leaders go to the extent to give away powers and opportunities to employees so the employees can grow and develop (Robbins & Judge, 2013). According to Social learning theory, employees tends to learn from their servant leader who is their model, and practice the same values as that of their models which includes sharing their skills and knowledge with others to let them grow and develop as their leaders do with them (Mayer et al., 2012).

Transformational evidently is a leadership style that promotes and develops the methods of organizational learning by creating opportunities in the firm so the organizational members are enabled to gain learning through can learn through dialogues, communication, interaction and experimentation (Liu and Li, 2018). The interrelation of transformational leadership style and knowledge sharing is seen in the light of exchange relationship by various researchers where exchange relationship occurs between subordinates and transformational leade201according to the social exchange theory (Lee, et al., 2010, Han, et al., 2016). Li et al. (2014) deduced that the

transformational style of leadership positively influences the exchange between leaders and organizational members which leads to improved and increased knowledge sharing in the workforce. Transformational leadership facilitates the process of knowledge sharing as this style incorporates and promotes trust among followers for not only leaders but also for each other and for the organization as well. In return, when the leadership asks them to engage in the processes of knowledge sharing then the followers oblige trustingly (Lee et al., 2010).

H1: Servant leadership style has positively related to knowledge sharing in an organization

H2: Transformational leadership style has positively related to knowledge sharing in an organization

## 2.4 Organizational Culture

Organizational culture can be defined as basic shared assumptions that an organization and its members learn while coping with the internal and external environment and solving problems related to internal integration and external adaptation. The same is then taught to new members so they can also solve problems in the same way (Parket al., 2004). Tseng, (2010) defined organizational culture as the thoughts and acts of members in an organization (Tseng, 2010). Robbins and (1994) and Nicholls (1984) described organizational culture as the shared beliefs, values, and perceptions of employees and other stakeholders in an organization. Culture is learned socially and organizational members transmit it in the organization. It can be cultivated in a stable social setup of any type and size (Yang, 2007).

The concept of culture in the organization is considered a fundamental criterion of social behavior. As a matter of fact, organizational culture demonstrates the organization's personality and drives employees towards establishing relationships and organizes their behaviors (Tseng, 2011). In nutshell, the culture of an organization provides norms and rules for optimal behavior in every type of organization. Each organization carries a unique culture that is developed over time and reflects the identity of the organization in main dimensions, i-e visible and invisible. The visible cultural aspect in an organization reflects espoused values, mission, and philosophy of the firm while the invisible cultural aspect reflects unspoken value sets that guide the perceptions

and deeds of all members working for an organization. An organizational culture that entails a supportive environment is can be considered as a strongly favorable enabler of knowledge sharing behavior in organizational members. This level of support particularly comes from top leadership to motivate members in sharing knowledge with others in a workplace (Wang and Noe, 2010).

# 2.5 Leadership and Organizational Culture

Once the concept of organizational culture is examined closely along with the role of leadership in an organization, it can be conveniently concluded that both concepts are strongly interlinked with each other. One concept cannot be understood completely without understanding the other. A leader forms an organization that can reflect his or her beliefs and values, which means he or she shapes the organizational culture accordingly. On the other hand, the cultural conditions shape the actions, values, and beliefs of its members and support those of the leaders (Northouse, 2016) If the organizational culture doesn't support leaders, it is impossible to form a leadership style that is based on the common values. Therefore, organizational culture determines the major part of leadership styles and what and how the leaders operate in an organization (Nguyen and Mohamed, 2011). The leader in an organization needs to understand the culture on the organizational and community level both in order to successfully establish knowledge management practices in a workplace (Rijal, 2010). The employees and other members of organizations must be substantially willing to exchange and share skills and knowledge with peers and another organizational members. Leadership needs to understand that while culture exists often on an organizational level, but employees belong to various communities and each community may possess its own norms, values, and perspectives and the willingness of an employee towards knowledge sharing may be greatly influenced by this phenomenon. In this scenario, only the culture of an organization cannot be sufficiently influential to push employees towards knowledge sharing but leadership has to work with cultural influences to promote knowledge sharing in an organization (Akhavan et al., 2014).

Employees in an organization are more inclined towards knowledge sharing in an organizational climate where they can highly trust each other along with leaders (Hinds & Pfeffer, 2003). This is because trust reduces an individual's fear of losing the uniqueness that certain knowledge gives them among others. Once trust reduces this fear, the individuals will ultimately increase and enhance their intentions to share

knowledge with peers in an enterprise. This trust is only built in an organization culture when a particular leadership style mainly servant leader plays the unique role that entails the value of integrity and competence which nurtures interpersonal trust among individuals. Trust is the essential ingredient of a knowledge-sharing culture that is conveniently and effectively elevated by a servant leader (Sial et al., 2014). Moreover, as per Bass (1985), the leaders with transformational styles change the culture of their respective organizations frequently with a new vision and revised shared assumptions, norms, and values. In such an organizational culture, a sense of purpose generally exists at all times along with the feeling of familiarity among employees (Nguyen & Mohamed, 2011). Values, norms, and assumptions do not preclude employees from going after their personal goals and resulting rewards. This way superiors and seniors feel compelled and obligated to support and assist new organizational members in assimilating into the culture. This is why such leadership establishes a culture that promotes knowledge sharing. Leaders and subordinates, share mutual perceptions, interests, and ideas of interdependence in this regard which promotes the behavior of knowledge sharing in the atmosphere (Ghasabeh & Provitera, 2018).

## 2.6 Organizational Culture and Knowledge Sharing

When it comes to organizational culture, various authors have shed light on the significance of a culture in knowledge sharing, transfer and its creation in an organization (Rijal, 2010; Poul et al., 2016; Kathtiravelu et al., 2014). Culture is an essential element of an organization because it has the potency to immensely influence the behaviours and attitudes of organizational members. This is one of the main reasons that organizational culture directly affects knowledge sharing processes in an organization (Rijal, 2010). Effective knowledge sharing requires constant and operative interaction among organizational members. Other than that market orientation, trust among individuals, intrinsic motivation, element of enjoyment in helping others, support from leadership are some other factors that are very influential in the process of knowledge sharing (Khatiravlu et al., 2014).

Culture of an organization interacts with the process of knowledge sharing in various ways. It identifies and explains the worth of organizational knowledge particularly when it is exchanged among employees. It also defines the interrelation of employees' knowledge and organizational knowledge in terms of their dependency on each other (Karlsen & Gottschalk, 2004). Organizations that have a culture and work

environment to encourage knowledge sharing have more propensities to share knowledge and ideas as compared to other organizations because they believe that knowledge sharing is not a favour from their side but a natural occurrence of their job function. Therefore, organizations that want enhance their knowledge sharing should put effort in their management and leadership in a way that strengthen a culture for employees where individuals are more inclined towards sharing their ideas and knowledge (Mushtaq & Bokhari, 2011).

According to the frame work given by Uriarte (2008) implementation of effective system related to knowledge management contains three separate layers. First consists of enablers which means the topmost layer in an organization, the second layer is that of levers which is the middle layer of the framework and the last layer is that of foundations at the bottom of framework. The top layer of enablers is the first layer in organization's structure which mainly is made up of core culture of the organization along with its leadership which are interdependent and encourage the creation and then sharing of knowledge. In absence of the said enablers, knowledge sharing cannot be promoted in the firm (Mushtaq & Bokhari, 2011).

Another influence to a knowledge sharing willingness in an organization's culture is the reciprocity. This means the need of an individual to perceive a future or current return on knowledge that he or she chooses to transfer or share in a workplace. This may be a direct compensation, something intangible such as enhanced reputation or the trade of knowledge against knowledge. A leaser plays an important role in cultivating such culture of reciprocity in organizations to promote knowledge sharing behaviour and intentions (Tuan, 2016). All in all, authors have particularly emphasized in their studies (Ngyen & Mohamed, 2011; Yang, 2007; Rijal, 2010; Akhavan et al., 2014) that the cultural component which mainly influence the process of knowledge sharing in organizations is the way in which it is managed by its leadership or the organizational culture in itself.

The theoretical background helps in formulating the below hypotheses

- **H3:** Organization culture positively relates with knowledge sharing in an organization
- **H4**: Organizational culture mediates the positive relationship between Servant leadership style and organizational knowledge sharing.

**H5**: Organizational culture mediates the positive relationship between Servant leadership style and organizational knowledge sharing.

## 3. Methodology

The current paper has taken Pakistan's state-owned enterprises to study the conceptual framework of the study. In this study, positivist research philosophy is being utilized which will test the theories through quantitative techniques and tools.

The study has employed the approach of quantitative calculations because the research is emphasized on statistical and numeric analysis of the collected data to fulfil research objective. Generally, quantitative method starts with data collection against proposed hypothesis and mostly it employs the of deductive approach (Babbie, 2009). Ahimbisibwe, Omudang, Tusiime and Tumuhairwe (2016) and Perepelkina (2018), have employed the combination of quantitative and deductive approach in their studies because it is suitable to explain and draw inferences from results on relationships of variables. Considering the mentioned logics, the current study has utilized the said approaches by formulating hypothesis by extensive reviewing the relevant literature and available theories. There is also an element of exploratory research design in the study as the purpose of an exploratory design is to establish a better perceptive of the aspects that are being investigated in a study and to produce an innovative data to form a suitable base for future investigations. This type of research design is used to study new developments and is characterized by the flexibility. Such design is also helpful to understand new insights, clarify concepts, and to assess them (Routio, 2007).

### 3.1 Population and Sample

The current study is considering state-owned enterprises of Pakistan as the target population. The state-owned enterprises refer to those that are owned by the government of the country. The state-owned enterprises of Pakistan are chosen in current paper because like many other areas, state-owned enterprises of countries also heavily rely for their success on their intellectual capital rather than the physical capital. It is established fact that knowledge being the most important information is one of the most valuable intellectual assets for the enterprises and therefore it can play a significant role in growth of government organizations (Abbas et al., 2011). It is also closely observed that government sector of Pakistan has received very less attention by researchers and

practitioners when it comes to their governance of knowledge management. Also, the area is less developed in terms of mechanism of knowledge management and also lacks sufficient investment in knowledge sharing systems (Amber, Khan & Ahmad, 2017). Therefore, the study has selected the said area to conduct the research on the interrelation of leadership styles, organization culture and knowledge sharing processes. The population for the study is the 581,240 employees who are working in the state-owned enterprises in Pakistan (Establishment division report, 2018-2019). It means the population of the study can be categorized as known or countable population because the number of population is known to the investigator.

The strategy of Sampling encompasses the technique that researcher adopts to select a certain sample population of the study. Sampling techniques are generally classified into two classes. One is probability sampling and the other is non-probability sampling. When every population unit has an equal chance to get selected then it is probability sampling. While non-probability sampling provides each population unit with variation in chances of getting selected. The population of current research is the state-owned enterprises of Pakistan and in order to select the sample the method of purposive sampling which is method for non-probability sampling is adopted. For which the formula is as follow

$$N = N/1 + N (e)^2$$

Where, 'n' denotes sample size, 'N' population size and 'e' is the level of accuracy at 5% which is most suitable as per the population size.

By putting the values in the formula and sample proportion of 50%, the required sample is 399 participants for the survey from all public sector organizations purposively.

Initially, 399 questionnaires were distributed and response rate was 81.2 % and further at the point of data entry other 27 questionnaires were also discarded owing to the incomplete responses. However, sample of 297 used in process to analyse data against hypotheses developed.

#### 3.2 Research Instrument

Leadership styles' items adapted from Avolio's (1997) to measure the transformational and servant leadership behaviours. The items representing organizational culture are adapted from Denison's Organizational Cultural Survey (DOCS) (Fey and Denison, 2003). Knowledge sharing items are adapted from Becerra-Fernandez and Sabherwal (2001) study. These items are used to let participants to

specify how frequently each of the acknowledged effective knowledge sharing processes are used within their particular organization (Sabherwal and Becerra-Fernandez, 2003).

#### 3.3 Data Analysis

Data is collected by conducting a survey and then the collected data is analysed through multivariate analysis PLS SEM, where PLS stands for "partial least squares" and SEM for "structural equation modelling". This method is widely recognized widely as a variance based, descriptive and predictive technique of structural equation modelling (Hair et al., 2017). This method is deemed among most suitable ones when the objective of the research is to maximize and expand dependent variables via variance comprehended by the independent ones (Richter et al., 2016). The current study adopts the PLS method for its further suitability due to the aim of predicting dependent variables and also due to the extensive intricacy in terms of complex relationships in hypotheses.

Since, SEM is applied to determine the impact of respective leadership styles (Servant and Transformational Leadership) on Knowledge Sharing directly and indirectly with organizational culture. First, results from confirmatory factor analysis (CFA) were extracted by employing SEM. As convergent validity was assessed by computing factor loading its value should exceed 0.60 (Fornell and Larcker, 1981). If value does not exceed 0.60 then item is removed to maintain the convergent validity of instrument. Next, composite reliability, cronbach's alpha and average variance extracted (AVE) were computed to confine reliability and internal consistency of items. Composite reliability should exceed 0.80, AVE 0.50 (Fornell and Larcker, 1981) and reliability 0.70 (Fornell and Larcker, 1981; Nunnally, 1978).

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Table 1 Convergent Validly & Reliability

Variables	Items	Loadings	T-value	p- value	CR	α	AVE
Knowledge Sharing					0.931	0.910	0.695
	KS-1	0.618	11.513	0.000			
	KS-2	0.780	23.652	0.000			
	KS-3	0.877	44.462	0.000			
	KS-4	0.904	59.660	0.000			
	KS-5	0.907	66.925	0.000			
	KS-6	0.879	54.674	0.000			
Organization Culture					0.853	0.801	0.554
	OC-1	0.629	16.830	0.000			
	OC-2	0.636	13.477	0.000			
	OC-3	0.643	13.703	0.000			
	OC-4	0.692	16.491	0.000			
	OC-5	0.729	19.428	0.000			
	OC-6	0.730	17.704	0.000			
	OC-7	0.652	11.910	0.000			
Servant Leadership					0.852	0.784	0.537
	SL-1	0.642	12.470	0.000			
	SL-2	0.773	29.853	0.000			
	SL-3	0.798	32.042	0.000			
	SL-4	0.738	19.180	0.000			
	SL-5	0.704	16.346	0.000			
Transformational Leadership					0.925	0.902	0.673
r	TL-1	0.861	44.702	0.000			
	TL-2	0.836	31.559	0.000			
	TL-3	0.828	31.766	0.000			
	TL-4	0.860	44.050	0.000			
	TL-5	0.823	29.562	0.000			
	TL-6	0.706	16.804	0.000			

Table 1 posits factor loading values > than 0.60, t values > 1.96 & p values < 0.05. Factor loading values of knowledge sharing range in between 0.618 to 0.907, loading values of organization culture range in between 0.629 to 0.730, loading values of organization culture range in between 0.629 to 0.730, loading values of servant leadership range in between 0.642 to 0.798 and loading values of transformational leadership range in between 0.706 to 0.861. Next, to the reliability statistics, composite reliability posits all values > 0.80, AVE values > 0.50 (Fornell and Larcker, 1981) and cronbach's alpha values > 0.70 (Nunnally, 1978).

Model fit was assessed by employing fit indices such as SRMR and NFI and these criteria's values with a certain threshold (e.g., SRMR < 0.08 and NFI > 0.90) to assume fitness of model (Hair et al. 2017).

**Table 2 Overall Fit Indices** 

Fit Index	Score	Cut-off Values
SRMR		
	0.079	< 0.08, < 0.10
NFI	0.047	
	0.947	> 0.90

Discriminant validity confined the degree to which items of a variable are supposed to measure a specific construct but must not be correlated with other constructs or to predict the other constructs (Hair et al., 2017). Hence, the correlation values in discriminant validity table (3) are not strongly correlated > 0.50 with other variables which supports discriminant validity.

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**Table 3 Discriminant Validity** 

Variables	1	2	3	4
1.Knowledge Sharing	0.834			
2.Organization Culture	0.270	0.674		
3.Servant Leadership	0.312	0.348	0.733	
4.Transfermational Leadership	0.317	0.350	0.336	0.820

Structural model shows path coefficients of all constructs. Servant leadership shows significant positive relationship with organization culture,  $\beta$  = (0.393), t value = (7.306 > 1.96) and p value = (0.000 < 0.05). Transformational leadership shows significant positive relationship with organization culture,  $\beta$  = (0.400), t value = (7.017 > 1.96) and p value = (0.000 < 0.05). Servant leadership shows significant positive relationship with knowledge sharing,  $\beta$  = (0.203), t value = (2.604 > 1.96) and p value = (0.009 < 0.05). Transformational leadership shows significant positive relationship with knowledge sharing,  $\beta$  = (0.434), t value = (6.624 > 1.96) and p value = (0.000 < 0.05). Both of leadership styles signify positive relationship with knowledge sharing.

**Table 4 Path Coefficients** 

Structural Path	Coefficient	t- value	p- value	Decision
Servant Leadership → Knowledge Sharing	0.146	2.604	0.009	Supported
Transformational Leadership → Knowledge Sharing	0.434	6.624	0.000	Supported
Servant Leadership → Organization Culture	0.393	7.306	0.000	Supported
Transformational Leadership → Organization Culture	0.400	7.017	0.000	Supported

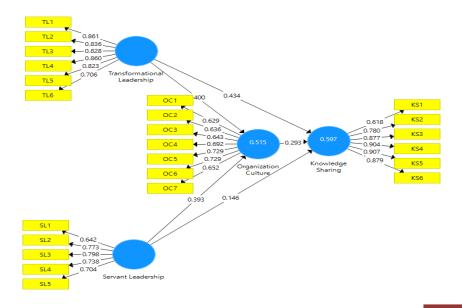
Table 5 & Figure 1 posit results of hypothesis testing based on SEM relationship among the latent constructs. It is found servant leadership significantly influence knowledge sharing,  $\beta=(0.261)$ , t value = (9.672>1.96) and p value = (0.000<0.05), hypothesis 1 is supported. The influence of transformational leadership is significant on knowledge sharing,  $\beta=(0.552)$ , t value = (4.643>1.96) and p value = (0.000<0.05), hypothesis 2 is supported. It is found organization culture significantly influence knowledge sharing,  $\beta=(0.293)$ , t value = (5.369>1.96) and p value = (0.000<0.05), hypothesis 3 is supported.

It is found organization culture mediates (indirectly) relationship of servant leadership and knowledge sharing,  $\beta$  = (0.115), t value = (4.328 > 1.96) and p value = (0.000 < 0.05), hypothesis 4 is supported. The influence of transformational leadership on knowledge sharing is also mediated (indirectly) by organization culture,  $\beta$  = (0.117), t value = (4.054 > 1.96) and p value = (0.000 < 0.05), hypothesis 5 is supported.

**Table 5 Total Effect & Indirect Effect** 

Structural Paths	Coeffici	t-	p-value	Decision
	ent	value		
Servant Leadership →	0.261	9.672	0.000	Supported
Knowledge Sharing	0.201	9.072	0.000	
Transformational Leadership	0.552	4.643	0.000	Supported
→ Knowledge Sharing	0.332	4.043	0.000	
Organization Culture $\rightarrow$		5.369	0.000	Supported
Knowledge Sharing	0.293	3.309	0.000	
Servant Leadership →				
Organization Culture →	0.115	4.328	0.000	Supported
Knowledge Sharing				
Transformational Leadership				
→ Organization Culture →	0.117	4.054	0.000	Supported
Knowledge Sharing				

Figure 1. PLS-SEM



#### 4. Discussion

Results reflect that servant leadership styles make a positive influence on knowledge sharing practices in an organization. The studies by Sial et al., (2014) and Tuan (2016) support the current results that leadership with servant style behaviours positively relate to the attributes of knowledge sharing. The obtained results further show that transformational leadership is another style that positively relates with knowledge sharing processes in organizational context. This is supported by various studies such as that of Nguyen & Mohamed (2011) and Han et al., (2016) stating that transformational leadership provides subordinates with more decision making power and self-determination which results into stronger commitment and engagement in employees in terms of helping behaviours and these psychological and social behaviours become antecedents of norms and values that support knowledge sharing. The study opted organizational culture as a mediating variable between leadership styles and knowledge sharing in an organization. The results draw attention to a significant mediating variable of organizational culture and shows that organizational culture indeed plays a positive role in supporting leadership to enhance knowledge sharing in the organization. Past studies have also stated the same mediating effect of organizational culture to knowledge sharing such as Cabreraet et al., (2006) and Block (2003).

#### 5. Conclusion

The research attempts to evaluate the role of leadership and organizational culture on knowledge sharing in the organization. Results entail positive relationship between knowledge sharing and leadership styles including servant leadership and transformational leadership and also reflects a positive role of mediating variable organization culture. The results are supported by past studies including Sial et al., (2014), Tuan (2016), Nguyen & Mohamed (2011), Han et al., (2016), Cabreraet et al. (2006) and Block (2003). This research paper is an effort to grasp the mechanism as an important identification in an intricate process through which leadership sharing caters and nurture the processes of knowledge sharing in an organization. On the other hand, the current study also embeds the mechanisms of organizational culture in terms of systems and procedures to evaluate its impact on knowledge sharing behaviours in organizational members.

## **5.1 Managerial Implications**

The findings suggest that both servant and transformational leadership behaviours essentially enhance and promote knowledge sharing practices. The successful knowledge sharing system, depends on the way in which leaders balance servant and transformational leadership behaviours to maintain a balanced culture in organization which can support knowledge sharing effectively. It can be seen in the results that transformational leadership allows the leaders to adapt to the organization culture and realign the culture with new vision, whenever needed. Results and literature review also summarize that with servant leadership behaviours, managers can establish trust relationship among organizational members so a culture is formed where individuals trust each other enough to share their knowledge with them by considering that their leader also keep their development and growth on upper most consideration and therefore share as much knowledge and experience with them as he or she can. These way managers can cultivate a culture in their organization where they will not have to put much effort in establishing knowledge sharing processes because the members will engage in the knowledge sharing processes by taking it as a norm and part of their job functions and not a burden or an act of favour. This will more likely affect the overall performance of employees and thus organization as well.

#### 5.2 Future Direction

The literature review and findings of this study present various points and angels that can be further discussed in future researches. The analysis by Wang & Noe's (2010) and has already given a set of individual level and team level measures related to knowledge sharing processes. On the bases of these measures, further research can entail many other types of leadership such as transactional leadership style, charismatic leadership styles, commanding leadership styles and many others to check their effect on knowledge sharing processes so managers are provided with a wide area to adopt from and implement in their leadership of their subordinates. Wang & Noe (2010) also identified various elements of organizational culture such as reward systems and structure that can be checked as influential antecedents for knowledge sharing in future. Also, knowledge sharing is a phase of knowledge management (Micic, 2015), therefore future studies can research more leadership styles and the influence they make on the whole knowledge management system in organizations.

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