



How Servant Leadership Affect the Organizational Trust with Mediating Role of Technological Innovation?

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ABSTRACT

The main objective of this paper is to investigate how servant leadership affects organizational trust with the mediating role of technological innovation. In this paper we discussed that technological innovation played a vigorous role in all types of organizations and leadership having the qualities of a servant also played a vital role in achieving the trust because trust is the most crucial element for an organization. A descriptive cross-sectional survey design was used in conducting the study. The data for this study was taken from public and private organizations that are engaged in providing products and services to their customers. 370 questionnaires were distributed among different respondents. 310 useable respondents were selected and the questionnaire includes close-ended questions related to leaders, organization and technological factors. Cross-sectional quantitative research design was adopted. The purposive sampling technique was used for this study. Findings of this study shows that the mediating variable “technological innovation” strengthens the affiliation among autonomous “servant leadership” and “organizational trust” dedicated to their work, and this is so beneficial to the organisation. Implications based on these finding, the study enticement the attention of mangers concerning the role of Servant Leadership, trust in the organization and flourishing the employee creativity with the help of technological innovation. This study suggests that servant leadership is an important factor that influences organizational trust because trust is the most crucial component and technological innovation with servant leadership qualities emerged to achieve trust.

Keywords: Servant Leadership, Technological Innovation, Organizational Trust

JEL Classifications: M1, 03, M0

1. INTRODUCTION

The theory of servant leadership was first provoked by Robert Green leaf in 1997 in his paper titled “Servant role as a leader” (Washington et al., 2006). The alter pyramid model can be considered as the essence of servant leadership. Now-a-days in advanced countries organizations in different sectors would attract from talent like a workforce (Franco et al., 2020). The organizations assumed that workforce is the way through which organizations accomplished their targets with the help of valued and unique knowledge and workforce also facilitated in competing in an all-out war (Martin et al., 2005). Lopes (2009) described that servant leadership symbolizes as a leader whose priority to serve others and have a passion to work for the organizations and their

workforce and to do so with authentic generosity that puts other’s interests ahead of self-interest also in organizational interest.

SL may be a concept that is attracting a broader audience throughout all types of organizations today. This growing interest is fuelled by many changes happening within the workplace as well as in society at large (Raton and Florida, 1981). The basic objective of servant leadership is to raise the high level of motivation. Now a days the organization have a big edge about the technological innovation, this edge support the leadership to motivate their employees and achieve the high level of satisfaction of employees (Karatepe et al, 2018). SL can be a ideology and collection of activities intended to improve people’s lives, develop stronger institutions and eventually construct a more just and

compassionate environment. This takes considerable account of the value of trust in a social, cultural, and political organization. In studies, organizational trust is referred to as a fundamental factor and thus the researchers conclude that organizations should build trust in their workers while organizational justice includes considering the perceived fairness of social or economic transactions affecting individuals in their relationships with superiors and organizations as a social structure. The most important aspect of making a successful organization, according to Schneider (1987), is that people incorporate followers (i.e., staff and evacuees) as well as members. Eva et al. (2019) has recently introduced new concepts and ideas about servant leadership while servant leadership is a:

- Other focused approaches to leadership
- Demonstrated by one-on-one discussing the individual needs and desires of followers
- Outward reorientation of their self-concern towards those within the company and thus towards the wider community

The concepts of leadership attempt to clarify and organize the dynamics of the character of leadership and its implications (Bass and Bass, 2008). The implicit connection between ethics and leadership has been the focus of several leading scholars over the years. An emerging new field of study and leadership philosophy related to ethics, values and morality acts as SL (Graham, 1991; Lanctot and Irving, 2010; Parolini et al., 2009; Russell, 2001; Whetstone, 2002).

1.1. Purpose of the Study

The rudimentary purpose of this study is to demonstrate the mediating role of TI (technological innovation) between SL and OT. Explanatory research was used for this research, as it is the initial base of research on this theoretical framework taking SL as an independent variable, OT as a dependent variable and TI as a mediating.

1.2. Research Objectives

The elementary objective of the research is to inspect how servant leadership affects organizational trust with the mediating role of technological innovation. Firstly, inspect the influence that how technological innovation strengthens the relationship between servant leadership and organizational trust. Secondly, a conceptual framework and hypotheses are developed. Third, the method practiced to test these hypotheses is defined, tracked by the analysis and results. Lastly, implementations, limitations, and directions for further researchers are discussed.

1.3. Scope and Background of the Study

SL's significance cannot be ignored, as it has become one of leadership's most critical features. Leadership may be a ability used to motivate a company's followers to be passionate about particular commonweal goals. (Barrow, 1977; Cyert, 2006, Plsek and Wilson, 2001). It is studied that servant leadership is previously discussed by many researchers and it has been founded that by doing servant leadership, a trustworthy environment can be created in the organization because the level of trust on the leader by the employees will increase due to such environment which shows that these variables have a

significant influence on each other with strong bonding. This study has been done to know what type of factors affecting their relationship and with which variables their relation can become stronger or weaken.

2. LITERATURE REVIEW

2.1. SL (Servant Leadership)

The importance of leadership in any organization is known by everyone. It cannot be denied as it has become a compulsory part of today's society and organizational culture. Servant leadership has now become one in all the foremost leading characters of the leadership; it has been implemented through many centuries and works because of the most successful leadership figures. SL described the panache in which a leader motivates those in the management process to efficiently thru the management process, also encourages subordinates to create prospects, trains minions to be excellent service providers, and finally benefits the organization (Greenleaf, 1977; Bande et al., 2016; Eva et al., 2019). The SL's top priority has to serve others. SL provide career development guidance for employees and provide opportunities also have a positive impact on employees, work attitude, behaviour, and performance (Panaccio et al., 2015).

Servant leadership has the following important dimensions:

- Emotional rebuilding
- Empowering
- Helping supporters to grow
- Priority to help their followers
- Conceptual abilities
- Creating values for the community
- Behaving ethically.

SL gives feedback and challenges obligations, offering empathy, moral encouragement, suggestions and resources. SL placed the fulfillment of the followers' needs at the center ground of their efforts, before their own needs, creating an atmosphere where followers felt appreciated and empowered to do more and do more. (Chiniara and Bentein, 2016). SL theory emphasizes service to others and recognizes that the role of organizations is to make people who can create a better future resonate with scholars and practitioners who respond to the perception that corporate leaders have become selfish and try a viable theory of leadership to help solve the challenges of the first 21st century. Even though SL was invented in 1970 by Greenleaf over the past three decades, it remains recognized but still exercised prominently in boardrooms and corporations (Bass and Bass, 2008) (Spears, 2005). It gained considerable coverage in the mainstream press (e.g., Fortune magazine and Dateline) and leading organizational managers addressed the beneficial impact of servant leadership on corporate income and employee satisfaction; see Max DePree (Leadership is an Art, 1989), Stephen Covey (Principle-Based Leadership 1990), Peter Senge (The Fifth Discipline: The Art and Styles of the Learning).

Ehrhart (2004), the seven aspects of servant leadership were described. He claims that the first element of servant leadership is to build relationships with employees by spending time with them

and filling the contact gap with them. According to the second dimension, the leaders of the servants will inspire followers by, for example, cooperating with them to consider their views and thoughts in any organizational decision. He explained in the third dimension that these leaders support the workers by giving them opportunities to improve their skills. In the fourth dimension of SL empowering, determining the degree to which the leader entrusts accountability, flexibility, and authority in decision-making to followers. SL act responsibly and obey their promises for the display of true principles. These leaders demonstrate their conceptual know-how through a daily routine. In the fifth dimension, servant leadership helps subordinates develop and flourish, capturing to what degree the leader helps followers achieve their full potential and flourish in their careers. They put their followers/employees first, according to the sixth dimension, to improve their capabilities and for their advancement. The servant leaders then, according to the last paragraph, establish values for staff in external activities by involving them in community services rather than in organizational services. SL are those who can concentrate first on their customers than on employees than on management and who, in contrast to conventional leadership, focus more on themselves than on employees than on our customers. If the leadership has servant efficiency that is so legatee for the organizations and workers to attain the competitive advantages. SL use the knowledge to consciously seek to please their followers, they must bring out the simplest in their followers and encourage them to realize their potential (Tang et al., 2016).

SL is not about contrasting workers' inferior abilities to their superiors, but it does offer organizational superiors a challenge. This definition believes every individual within the organization has equal dignity (Jaiswal et al., 2015). Everybody is a member of an organization and every viewpoint is important to the company because they all work for their organization's sake. Servant leadership thus brings trust, ethical use of resources, cooperative atmosphere and the idea of service to others (Lee, 2004). The SL's basic goal is to increase the high degree of motivation. The company now has a big advantage over technical advancement for a few days, this advantage helps leadership in empowering its employees and maintaining a high level of employee satisfaction (Karratpue et al., 2019).

2.2. OT (Organizational Trust)

The importance of trust is considered significant in all economic, political and social organizations. Organizational trust is now known as an ultimate feature and according to the researchers; organizations must create trust in their workforces (Baried and Amand, 1995). Organizational trust has been defined previously by many researchers (Max DePree, 1997). Trust is the atmosphere which is designed by the organization's managers. Trust is the most essential component for all natures of organizations to work smoothly. Trust atmosphere is molded when the managers are fully concerned with their commitments and then their actions and reactions played a vital role in achieving success for organizations. Russell (2014) supposed that trust is the essence of servant leadership. Greenleaf also claims that servant leadership can be supposed as the commencing and bear fruit

of organizational trust (Bobbie et al, 2014). The best role-play of servant leadership in an organization is offering crucial and necessary context including inspiring the members positively, articulating support and care to their overall staff, consideration about their status as well as establishes a sense of trust among the employees.

Yamamoto (1990) suggests trust is a vital part of social life. Individuals in the communities are in regular communication with each other as a direct result of their anticipation of positive outcomes from these experiences (Yamamoto, 1990). Such experiences result in trust-based relationships in which individuals behave in such a way as to maintain potential positive experiences, instead of acting out of self-interest (Gambetta, 1988).

Coffa (2007) explained that there are seventeen different meanings of trust depending upon various departments like management, psychology, economics, sociology, international relation, automation, computing and networking and it can be measured individually and organizationally (Table 1) Coffa, Wahlsten., (2007).

According to Gopinath and Becker (2000), the organizations during which the amount of trust is low, there always exists communication gaps that fade the bond of relationship and this leads to less worthy resolutions. In such organizations, there all along occurs lack of innovative ideas because everyone thinks that their thoughts would lead to the failure of organization and due to that fear, they do not reveal their ideas that might be unique ones and can benefit organizations in some aspects. Robbins (2002) said trust in an organization is very important because trust not only affects the quality but it also badly affects the output given by the members working in the organization. One simply cannot work efficiently and effectively if there is a lack of trust in the working

Table 1: Trust in different department

Discipline	Meaning of trust	Sources
Philosophy	Chancy actions were taken by a personal, moral association between two objects	Lahno (1999)
Economics	Expectations on chancy actions under ambiguity and ignorance based on considerable incentives for the actions	James (2002)
Sociology	Particular probability on which other parties will take action and will not ruin any interest under uncertainty	Gambetta (1988)
Psychology	Cognitive learning experiences that would come from social-based expertise's on the values of trusting behavior	Rotter (1980)
Management	Ready to take actions and risk for the betterment of the organization	Mayer et al. (1995)
International relation	Attitudes and behavior where one mediator will achieve another mediator's target where a dented acquaintance is given	Lee et al. (2006)
Automation	Projected subjective probability in which object parades reliable behavior for certain operations under the condition of risk	Cho et al. (2011)

era. Organizational trust enhances the level of job satisfaction of employees and satisfied employees always give the best of them to their firms (Robbins, 2002).

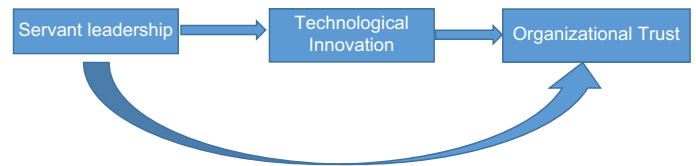
2.3. Technological Innovation

Tech innovation is the term used to describe the implementation of new technology and equipment that is incorporated into specific products, services or processes to increase the efficiency and performance of an organization (Yoonghong et al., 2005). Nieto (2004) proposes a specific concept of technological innovation, the process through which technical innovations evolve and improved through which the obstacles faced by the organization and the market overcome efficiently and also strengthen the relationship between employees and organizations as well as customers and organizations. Wang (2009) explained that nowadays, in global organizations with advanced technical creative arrangements, knowledge sharing is the term that is commonly discussed since knowledge sharing (KS) refers to an employee or group of employees who share or discuss information and experience related to working within or across organizations across different networks such as networks for seminars, meetings, exchange of perspectives, knowledgebase, etc. Improvement is an essential factor for all natures of organizations to attain their rivals in the market, and technical innovation is also the curial reason for organizational survival (Tamer Cavusgil et al., 2003). Organizations need to improve their current structure to tackle environmental instability, and their advanced technological technologies and skills also play a significant role in enhancing organizations and employees' efficiency (Lin, 2007).

Several researchers described that innovation has a direct relationship with organizational performance as well as employees' trust in an organization. Organizations are seen as an adaptive approach that brings a change in their system to deal with uncertainty and carry out their functions efficiently. Pressures coming from the internal environment and as well as external environment, these pressures forced the organizations to innovate them and ensure adaptive behavior and these innovations tend to move toward the success of the organization (Damanpour and Avellaneda, 2009). (Damanpour, 1997) build the technical advances are essentially structured strategies the define the use of new technologies, devices, equipment, designs, procedures, processes or systems that improve the organization's ability to meet consumer demands and often contribute to the invention of new goods, facilities, processes and the continuation of old or current ones at a much lower cost with innovation (Normaa and Daanny, 2002).

Technological innovation reacts to internal and external environmental factors such as technical expertise, e-commerce capacity, willingness to change/rate response to new technologies, identification of technological opportunities, consumer focus, responsiveness to competitive/consumer conditions, technological feasibility perceptions, e-skills growth mechanisms, and uncertainty market conditions (Kim, 2010). TI is exemplified by four idiosyncratic elements that involve body tools and equipment, an authentic component of expertise, an interpersonal component

Figure 1: Theoretical framework



of skills, and a structured component of methods through these rudiments, the company achieved a major business victory (Haines and Sharif, 2006). The involvement of a lower-level workforce in the process of technological innovation is productive because the lower level workforce played a significant role in the process of production and meet up with the demands of customers (Daft, 1987). Furthermore, technical advancement is classified into gradual and critical developments important developments concentrate on evolving, innovative new technologies, markets and business models that are changing the world. Incremental innovation is the invention practice that seeks to increase the existing structures and goods to make them stronger and more powerful, meaner or sharper, depending on the degree and level of the invention (Kim et al., 2012). (Kim, 2010) argued that technological innovation is not only used to address technical problems and impediments but also has a deep-rooted connection with the adoption of new technology to develop innovative goods and services, as well as promoting the development of new markets.

2.4. Theoretical Framework and Research Hypothesis

Based on the above literature review, the following model is purposed taking SL as an independent relationship and OT as dependent variable with the mediating effect of TI (Figure 1).

2.4.1. Relationship between independent variable and mediating

In the theoretical context TI is occupied as a mediator. There are both internal and external paybacks to technical advancement. External benefits include compact production costs, higher profits, and epochs of curter distribution (Daamanpoour, 2010), while external benefits include distinguished goods and services (Porter, 1985). If the leader sustenance the technology than it is quite comfortable for the organization to compete their opponents efficiently and accomplish extraordinary turnover. TI frolicked an imperative role to take a position in the marketplace and attain the extreme profit for the organization. Such great earnings, however, had not been planned to last long as rivals would reproduce. TI empowers an organization to develop, refresh and adapt technological means as the multinational organization nowadays confirms that technological means are the competent way to attract consumers and produce value from their goods with the aid of varioustechnological means and also to demonstrate and reassembledtimely responsiveness and rapid and flexible products and services innovation to attract the clients (Teece et al, 1997). The progressive technologies will placate customer demands and satisfaction and through this the organizations get sustainability and sustainability results high outcomes. If technological innovation and sustainability unite than organizations easily enhance loyalty factors toward their valuable customers (Pratali, 2003). Technological innovation has various outcomes, one of the

most important outcome are increasing and enhancing the quality of products and services with the help of innovativeness from this the organizations attract a high volume of customers. Technology empowers organizations to diminish the labor cost, labor hours, raw materials, energy and other resources and improve the quality of work efficiently (Haines, 2004). Through their studies, most previous researchers demonstrate that technological innovation is positively related to organizational efficiency, operational efficiency, cost performance, flexibility, production performance, quality performance, and innovative performance (Srgolzaei et al., 2019).

H₁: There is a significantly positive relationship between servant leadership and technological innovation.

2.4.2. Relationship between technological innovation and organizational trust

In the theoretical framework the technological innovation taken as mediating and organizational trust are taken as a dependent variable. There is a significantly positive relationship between TI and OT because if the organization well-appointed with advanced technology then it is fairly easy for the organization to achieve the trust of employees if the organization achieves the trust of employees then the organization becomes self-assured to accomplish their target and strive their opponents (Udin, 2020). TI aids organizationsto generate, renew the existing and adjust technological resources to demonstrate and reconstructtimely to attract their customers (Divya and Suganthi, 2018). The progressive technologies will placate customer demands and satisfaction and through this the organizations get sustainability and sustainability results high outcomes. If technological innovation and sustainability unite than organizations easily enhance loyalty factors toward their valuable customers (Pratali, 2003). According to Gopinath and Becker (2000), the organizations in which the level of trust is low, there always exists communication gaps that fade the bond of relationship and this results in less worthy resolutions. In such organizations, there all along occurs lack of innovative ideas because everyone thinks that their thoughts would lead to the failure of organization and due to that fear, they do not reveal their ideas that might be unique ones and can benefit the organization in some aspects as compared to those organization in which trust level is high, there are wonderful cooperation and positive bonding between organization and employees and this bonding enable an organization to adopt latest technologies for their employees to compete their competitors in the marketplace.

H₂: There is a significantly positive relationship between technology innovation and organizational trust.

2.4.3. Relationship between independent and depended variable

The SL and OT have a good relationship. Most of the previous researchers explained and clarified that these two variables are closely related to leadership and organizational trust. This research explains that SL and OT have positively influenced each other and they have a direct relationship taking SL as an independent variable and OT as a dependent variable. Previously this study has also been proven by some other researchers such as according to (Bennis and DePree, 2002), leaders are selected and persist based on their behaviours and attitude toward their employees and organization.

Trusties the concept that shows the relationship among the leader and an employee if the employees trust their leader than the leader have a positive impact on employees and organization and create a positive environment in an organization thus, the terminology of SL works positively for creating a trustworthy environment in organizations (Laub, 1999; Nyhan, 2000).

In the relationship between SL and OT trust is determined principally by the action and performance of the leader toward their organization. This shows that how much a leader is cooperative, communicative and supportive with their employees. The communicative, cooperative and supportive behaviour of leaders has a positive influence on the efficiency and effectiveness of the employees and also enhances their level of trust in the leader that would be very helpful for the organization to achieve their selected target. The trust played an important role in the organization if the employees have positive behavior and having trust on their leader and the management of organization than the employees become self-motivated toward their management and work efficiently for their organization and give their best in achieving the organizational target and if the employees have not to trust on their leader and management of organization then they do not work efficiently for their organization and this dissatisfaction of employees have a negative impact on organization because due to this the organization did not achieve their organizational target (Dennis, 2004)

H₃: There is a significantly positive relationship with the independent variable and dependent variable.

3. RESEARCH METHODOLOGY

For the current study, the following research design was used:

3.1. Research Design

A cross-sectional quantitative inquiry method (close-ended questions) was adopted. This required concise and empirical research designs to decide how the mediating variable influences the relationship between independent variable and dependent. The design was used because in a given time span, data about the variables could be collected once.

3.2. Type of Study

This research is explanatory, as it tests the hypothesis and describes the relationship between SL and OT in accordance with the TI as a mediating variable for reasons.

3.3. Time Setting

It is a cross-sectional study because the approach to the respondent was only once and the data was collected by approaching the respondent for only 1 time.

3.4. Unit of Analysis

This study's unit of analysis had been individual. As the data was obtained from the workers employed in various organizations. Collecting data from doctors, specialists, physicians, nurses, teachers, bank workers, workers working in different organizations and so on may be dyad.

3.5. Study Population, Sampling Technique and Size

The purposive sampling technique was used for this study. The population of this study is all the employees of different organizations whether they belong to any class or any position in the organization. This population was asked to fill the questionnaire. The respondents who were taken into account in terms of gathering information were randomly selected. The selected sample size was 310 respondents.

3.6. Data Collection

Employees from different organizations were surveyed using an instrument of a questionnaire for data collection. A close-ended questionnaire was used for the collection of data. Three hundred sixty questionnaires were distributed to the employees. A total of three hundred usable questionnaires were obtained and used for analysis.

3.7. Measures/Scale

SL; SL's scale was taken from earlier research (Van Dierendonck and Nuijten, 2010). The respondents valued their impressions of servant leadership by their organizations that they are operating on a five-point Likert-type scale (1 = strongly disagree with 5 = strongly agreed).

OT; A previous research (Cevat Celeb and Ozge Eler Yilmazturk, 2012) also adopted the OT scale. Based on the five-point Likert-type scale (1 = strongly disagree with 5 = strongly agree), the respondents measured their sense of confidence based on their organizational experiences.

TI; The scale of TC was also adopted from a previous study (Abdullah et al., 2016). The sample size is 310 through which we can easily measure the perception of employees toward their specific organization because Kaiser-Meyer-Olkin value and Cronbach's Alpha value are satisfactory.

4. DATA ANALYSIS AND RESULTS

According to the results of statistical analysis which are done with the help of the Statistical Process of Social Science (SPSS) version 22. Means of the variable were obtained as "Servant Leadership 13.4677," "Organizational Trust 33.7452," "Technological Innovation 29.4387." The Median of the variable is "SL 14.0000," "OT 34.0000," "TI 30.0000." The mode is "SL 15.00," "OT 36.00," "TI 32.00." Moreover the standard deviation of variables is "servant leadership 3.09670," "organizational trust 5.46032," "technological innovation 4.82051" (Table 2).

Table 2: Mean, median, mode, std. dev

n	Valid	310	310	310
	Missing	0	0	0
	SL	OT	TI	
Mean	13.4677	33.7452	29.4387	
Median	14.0000	34.0000	30.0000	
Mode	15.00	36.00	32.00	
Std. deviation	3.09670	5.46032	4.82051	

4.1. Correlation

We may also explore the Pearson Correlation for explaining variables relationships. The relationship between SL and OT in this situation is important and positive ($r = 0.476^{**}$) also the relationship between the SL and TI is significant and positive ($r = 0.397^{**}$). In the second case the relationship between the OT and SL is significant ($r = 0.476^{**}$) also the OT has a significant relationship with TI ($r = 0.496^{**}$). Moreover the TI dependent variable have also significant relationship with SL dependent variable ($r = 0.397^{**}$) and also TI has significant and positive relationship with OT ($r = 0.496^{**}$). All the variables are partially highly correlated with each other with the significances value 0.000 which is smaller than 0.05 therefore there is no multicollinearity exist between the variables (Table 3).

4.2. Factor Analysis

KMO and Bartlett's Sphericity Test is a sampling adequacy test that is recommended to check the case to the variable-ratio for the study being carried out. Kaiser-Meyer-Olkin (KMO) Check is a calculation of how well the data are suited to factor analysis. The check tests sampling appropriateness for each model variable and the complete model. The statistic is a measure of the proportion of variance among variables that might be common variance

The following Table 4 shows that the sample size is apposite, as the value of the kmo is >0.7 which is the normal value of kmo and in our study, the value of the KMO is 0.891, the meaning value must be lower than 0.5 and in our study result, the meaning value is 0.000.

The Component matrix described that the following questions are reliable and these questions are successfully perceived by our respondents which are shown in Table 4 and those questions which are not perceived by our respondents are deleted from the date, the reason is to make the analysis result appropriate. In Table 4, component matrix the questions which are deleted from variable Servant Leadership (independent variable) are SLE1, SLE2, SLE3, SLE7, SLE8, SLH9, SLHU11. From variable Organizational Trust (dependent variable) the question is OT-TM10. From variable Technological Innovation (mediating variable) the questions are TI-PE4 and TI-AT5. The purpose to delete the question to make the questionnaire more reliable and filter for future results (Table 5).

Table 3: Correlation

		Correlations		
		SL	OT	TI
SL	Pearson correlation	1	0.476**	0.397**
	Sig (2 tailed)		0.000	0.000
OT	Pearson correlation	0.476**	1	0.496**
	Sig 2 tailed	0.000		0.000

Table 4: KMO and Bartlett's

KMO and Bartlett's sphericity test		
Kaiser-Meyer-Olkin measure of sampling adequacy		0.891
Approx. Chi-square		3667.299
Bartlett's test of sphericity	Df	465
	Sig.	0.000

Confirmatory factor analysis (CFA) is a special type of factor analysis, most widely used in social cases (Table 6). It is used to check whether a construct measures are consistent with a researcher’s perception of the essence (or factor) of that construct. As such, the purpose of confirmatory factor analysis is to check whether the data fits into a hypothesized model of measurement.

Table 5: Component matrix

	Component matrix		
	1	2	3
OT_TWT1	0.760		
OT_TWT4	0.683		
OT_TWT2	0.677		
OT_TWT3	0.653		
OT_TWS6	0.629		
OT_TWS7	0.593		
OT_TWS5	0.572		
OT_TWS8	0.548		
OT_TM9	0.456		
TI_8		0.758	
TI_PP9		0.724	
TI_PP10		0.720	
TI_A7		0.675	
TI_AT3		0.606	
TI_A6		0.593	
TI_AT2		0.590	
TI_AT1		0.434	
SLS5			0.840
SLS6			0.777
SLH10			0.573
SLE4			0.474

4.3. Reliability Test

Cronbach’s Alpha is a reliability test that is conducted with Statistical Package for Social Sciences (SPSS) to measure the internal consistency of measuring instruments. It is a commonly used method when the questionnaire is adopted using multiple Likert scale statements and to check that the scale is reliable or not.

To test the reliability of the questionnaire we used Cronbach’s alpha for each variable which is clearly shown in the following given Table 7. The standard or reliable value of Cronbach’s alpha is 0.7 or above and if the calculated alpha value is >0.7 than it is clearly shown the high credit questions and questionnaires are reliable and the results are completely satisfactory.

It was also observed in this analysis of Cronbach’s Alpha value to evaluate the variables’ reliabilities. According to the study of reliability it was discovered that all scales have strong alpha values of Cronbach as; SL ($\alpha = 0.706$), OT ($\alpha = 0.842$), TI ($\alpha = 0.830$) (Table 7).

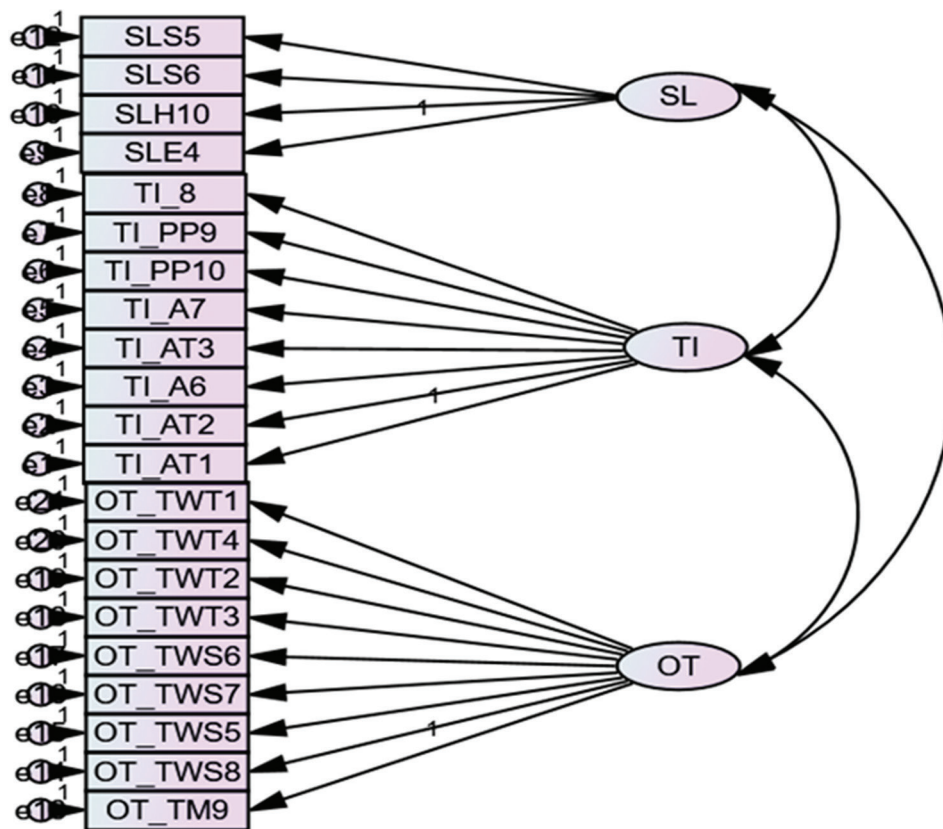
4.4. One-sample t-test

With the help of the t-test we can identify that our hypothesis is significant or not. According to our analysis results the sig value is 0.000 which is <0.05 its means that the hypothesis we made is proved and there is a significant positive relationship between variables. Hence our hypothesis is proved with our result (Table 8).

4.5. Simple Linear Regression

Before simple linear regression we can compute our variables one by one and after computing the variables we can start simple

Figure 2: Confirmatory factor analysis



linear regression analysis. Simple linear regression is a statistical method that allows us to summarize and study the relationship between two variables.

The Table 9 labeled that the predicted value is 25.7962 minimum and 39.2320 maximum which is greater than the residual value of the following Table 8. This shows that the residual statistics results are satisfactory.

This move is done to expose the mediator role of TI in the relationship between SL and trust in the organization. To this end, we used hierarchical regression analyses according to the three-step model by Baron and Kenny (1986). In the first step the relationship between SL and OT should be important. In the second stage the relationship between SL and TI should be important. In the last step, TI and OT to be significantly related. Guebuza (2019) explored that the model turns to meaningless (sig >0.005) it is called full

Table 6: Reliability statistics

Variables	No. of items	Cronbach's alpha value
Servant leadership	4	0.706
Organizational trust	9	0.842
Technological innovation	8	0.830

Table 7: t-test

Measures	t	df	P-value
Gender	55.715	309	0.000
Servant leadership	76.573	309	0.000
Organizational trust	108.811	309	0.000
Technological innovation	107.524	309	0.000

Table 8: Residual statistics

Parameters	Minimum	Maximum	Mean	Std. deviation	n
Predicted value	25.7926	39.2320	33.7452	2.60111	310
Residual	-16.79263	11.64772	0.00000	4.80097	310
Std. predicted value	-3.057	2.109	0.000	1.000	310
Std. residual	-3.492	2.422	0.000	0.998	310

Table 9: Multiple linear regression

Hypothesis 1: The first step of regression
Dependent variable: Organizational trust

Independent variable	Beta	t	Sig.	Durbin Watson
Servant leadership	0.476	18.337	0.000	1.635
	R square	F	Sig.	
	0.227	90.408	0.000	

Hypothesis 1: The second step of regression
Dependent variable: Technological innovation

Independent variable	Beta	t	Sig.	Durbin Watson
Servant leadership	0.397	18.775	0.000	1.611
	R square	F	Sig.	
	1.57	57.489	0.000	

Hypothesis 1: The third step of regression
Dependent variable: Organizational trust

Independent variable	Beta	t	Sig.	Durbin Watson
SL, TI	0.332, 0.364	8.283	0.000	1.720
	R square	F	Sig.	
	0.339	78.645	0.000	

mediation while if the model keeps significant (sig <0.005) but the beta value of the SL is weakened it is appreciated as partial mediation. In our analysis result it is clearly shown that the sig value is smaller than 0.05. Durbin Watson value means that there should be many other factors that could affect the dependent variable but there are not the part of our study its means that this research study has future discussion and this study is not limited we can easily research this with multiple independent variables.

4.6. Frequency Analysis for Demographics

Using frequencies and percentages for data presentation, this section describes the demographic profile of respondents, including gender and education level of 310 respondents. The detailed information is explained as follow (Tables 11 and 12).

This result suggests that at least half of the respondents had a history at university. But to develop their skills and abilities the respondents need to be motivated to continue their studies. Training plays an important part in enhancing the organization's reputation and efficiency.

4.7. Mediation Analysis

In this regard we can also perform Mediation analysis, which is a mechanism that is done to designate the relationship between the independent variable and the dependent variable. This analysis illustrates that the relationship between the independent variable and the dependent variable is strong and explained or there is an issue or weakened the relationship. This analysis is done to predict the effect of the outcome. Mediation analysis is done with the help of a process developed by Andrew F. Hayes. In the mediation analysis, we can check the total effect of X and Y which is 0.3918 that value divided by the direct effect of X and Y value which is 0.4437 and answer is multiplied by 100 and the answer is 88.30% its means that mediation variable has 84% explained relationship between independent and dependent variable. Hence our hypothesis is proved that "There is a significant positive relationship between the independent variable and mediation as well as there is a significant positive relationship between mediation and dependent variable." It is also proved that "There is also a significant relationship between the independent variable and dependent variable."

Table 10: Frequency analysis for gender

	Gender			
	Frequency	Percent	Valid percent	Cumulative percent
Valid				
Male	266	85.8	85.8	85.8
Female	43	13.9	13.9	99.7
Other	1	0.3	0.3	100.0
Total	310	100.0	100.0	

Table 11: Frequency analysis of educational qualification

Valid	Educational qualification			
	Frequency	Percent	Valid percent	c-percent
Under Graduate	53	17.1	17.1	17.1
Graduate	166	53.5	53.5	70.6
MPhil/MS	86	27.7	27.7	98.4
PH.D	5	1.6	1.6	100.0
Total	310	100.0	100.0	

5. DISCUSSION OF RESULTS

In our research study we proved that servant leadership has a positive impact on the organization as well as employee's trust. Servant leadership is those who can first focus on their customers than employees than management and that itself as compared to traditional leadership they first focus on its self than management than employees than our customers. If the leadership has a quality of servant that is so legatee for the organizations and employees to achieve the competitive advantages. In our analysis it also proved that the Mediator variable technological innovation has an eighty-four percent 84% effect on servant leadership as well as organizational trust. If the technological innovation is advanced and approved and leadership has the quality of servant leadership that it is quite easy for the organization to achieve success and move the organization on the way to success. Hence the Hypothesis is proved that "technological innovation has a significant positive relationship with servant leadership." The second hypothesis is also proved that technological innovation has a significant positive relationship with organization trust. With the aid of research performed on SPSS Tools, this hypothesis is confirmed. This research explains that SL and OT influence each other positively and that they have a clear relationship taking SL as an independent variable and OT as a dependent variable. Trusties the concept that shows the relationship among the leader and an employee if the employees trust their leader than the leader has a positive impact on employees and organization and creates a positive environment in the organization thus, the terminology of servant leadership works positively for creating a trustworthy environment in organizations.

If the leader supports the technology than it is quite easy for the organization to compete their competitors and achieve high profit. TI played an important role to place in the market place and achieve a high profit for the organization. however, such high profits were not expected to last for a long time as rivals would imitate. TI is characterized by four distinct elements which include physical tools component, a codified knowledge component, a human skills component, and a systemized methods component through these elements the organization achieved the valuable success in the

marketplace. There is a substantially positive relationship between these two variables because if the organization is equipped with advanced technologies then it is very easy for the organization to gain employee confidence. Technological advancement enables the growth, reconstruction, and adaptation of technical tools to demonstrate and restore timely responsiveness and rapid and versatile product innovation to attract customers.

6. CONCLUSION

In the research report the researcher has demonstrated the relationship between SL and OT and TI mediate the relationship independent variable and dependent variable. Technological innovation strengthens the relationship between SL and OT. After performing the analysis on SPSS (Statistical process of social science) completely with the help of organized questionnaire techniques the whole research concluded that the technological innovation played a vital role and helps in strengthening the relationship between SL and OT. These variables are highly combined and also interlinked with each other. If one of these variables is skipped then the relationship between variables becomes weak and the result would also affect them. In conclusion, the current study has made a significant contribution to leadership research by explaining the crucial role of servant leadership and behaviors in the organization.

6.1. Managerial Implications, Limitation and Future Study

The present research is unique in providing objective evidence for a distinct type of leadership. It will be a positive contribution to research into leadership. A couple of practical implications are established from this analysis. Firstly, organizations should integrate this style into their programs of training and development. It would better prepare the boss to deal with organizational problems. Second, managers should regularly contribute to the detection of workers who are working under pressure to balance the situation. Third, managers with dual leadership skills are best reinforced to render the workplace a stress-free environment.

This research study has several limitations. The limitation is called those characteristics or methodologies that have influenced your research study and the results get disturbed. This research has several limitations, the most important is that the independent variable in our theoretical framework is one that affects the relationship between Independent and Dependent variable. If the independent variable is more than one than in Simple Linear Regression analysis the regression value will boost up. The other limitation in our research study is that the respondent is employees they cannot focus while answering the questionnaire that also affects our results.

Future studies may expand this research to study different individual outcomes that could be modulated by implementing service elements and behaviors of transformation leadership. A new model of leadership may be settled by utilizing other servant aspects and types of transformational leadership.

The future study is also present in the research study that we can future research on Visionary Leadership and Solution based

leadership and relates to organizational performance. These two leadership patterns are novel and not so debated too much. In the current scenario, the leadership played a significant role in the organization and if the leadership is Visionary than it is so beneficiary for the employees because visions take the organization on the way to success and the Solution based leadership has also importance because day by day there is new and sudden problems are emerging in the organization. The organizational leader must have that quality through this they can address the problems faced by the organization.

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