



## Impact of Servant Leadership, Transformational Leadership and Cultural Intelligence on Firm Innovativeness through Climate for Inclusion

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### ARTICLE INFO

#### Article History:

Received: September 20, 2022

Revised: December 25, 2022

Accepted: December 30, 2022

Available Online: December 31, 2022

#### Keywords:

Firm innovativeness

Climate for inclusion

Servant leadership

Transformational leadership

Cultural intelligence

#### Funding:

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

### ABSTRACT

The purpose of this study is to investigate the effects of servant leadership (SL), transformational leadership (TL), and cultural intelligence (CQ) on firm innovativeness (FI). Especially it explores the mediating role of climate for inclusion (CI) between the relationships. Data collected from manufacturing companies in Pakistan and use a sample of 115 employees for analyzes of this study. A confirmatory factor analysis/ Reflective Measurement Model was applied to construct validity. The hypothesis was tested with the help of smart PLS. The relationship between servant leadership, transformational leadership, cultural intelligence, firm innovativeness, and climate for inclusion is debated in the existing literature. But the debate is characterized by a lack of climate for inclusion as a mediating variable because in previous researches climate for inclusion used an independent or dependent variable only. Additionally, this is one of the first studies that empirically investigate the relationship between two leadership style (servant leadership, transformational leadership) and cultural intelligence with firm innovativeness in the presence of a worth able mediator climate for inclusion. Through structural model, technique results show that servant leadership and transformational leadership have a remarkable influence on FI but cultural intelligence was not found to be significantly related to FI. The results further demonstrated that SL and TL have a positive and significant impact on FI under an intervening effect of CI. Furthermore, this study concluded that TL has more impact on FI as compared to SL. There are also some interesting observations that other researchers have not achieved before.



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## 1. Introduction

All over the world managers and supervisors are facing unavoidable challenges because the Global economy is rapidly changing in both scenarios of technology as well as customers' demands. It's a big crucial issue for any organization to meet the desired need for surviving and maintaining its position in the market in long run (Berggren, Pregmark, Fredberg, & Frössevi, 2020). Many organizations are so much worried about the employee's performance and increasing demands of customers due to upcoming new technologies and new lifestyle as well as the huge impact of organization complexity (Boone, Lokshin, Guenter, & Belderbos, 2019). Nowadays struggling economy is facing marvelous changes and competition due to the high level of embracing situations in a different organization (Berggren et al., 2020). So it's very difficult to attain long term development and sustain their competitiveness, so organizations are progressively looking for proactive input from employees because organization functioning is expected to increase through proactivity (Guzman & Espejo, 2019). Therefore, there is a need

for some suitable and desirable strategy, such current strategy is firm innovativeness. Firm Innovativeness is the action or behavior of all individuals related to tasks activity, job assignment, and all others function in a novelty standard. This plays a unique thought for a manager or organization. Basically which is quickly different from other assignments which may be part of enhancement for organization at any level (Taylor, Santiago, & Hynes, 2019). It explains some more important aspect, such as opportunity searching, new idea generation, new procedures, new techniques, new ways, new IT techniques as well as application (Guzman & Espejo, 2019). Leadership is one of the greatest factors that shape worker's innovative actions and organizational creativity (Shafi, Lei, Song, & Sarker, 2020). That's why in this study two styles of leadership (servant leadership and transformational leadership) and cultural intelligence are used for seeing a remarkable impact on firm innovativeness. Servant leadership refers to which a universal leadership point of view that focuses on subordinates' development and encouragement in behavioral, reasonable, spiritual, related and psychological parameters or scopes (Eva, Robin, Sendjaya, van Dierendonck, & Liden, 2019). Main purpose of this type of leadership is to create awareness and self-motivation. The reason is that, servant leader is improved importance in both theory and practices. That's why servant leadership main focuses on self-absorption and accomplish the desired needs of employees (Andersen, 2018).

Servant leader wants to demonstrate that their workforce members increment, become sustainable behaviors, and finally development themselves. Servant leadership can be control by providing benefits for the society of an organization to provide support to subordinates enhancement (Amah, 2018). Transformational leadership refers to which give an understanding level and inspiration to believe subordinates in a leader's vision to achieve a high level of achievement and accomplish their goals. It demonstrates the concept of the understanding ability of cultural, social, and religious to a new vision (Buil, Martínez, & Matute, 2019). This type of leader wants to accomplish goals and achieve a high level of success and transform the organization to face challenges and support subordinates to work with full concentration and empower others to achieve great visionary outcomes. This type of leader influences the workforce that this is the mission and without achieve this mission we are incomplete (Farahnak, Ehrhart, Torres, & Aarons, 2020). Cultural intelligence (CQ), defined as the perceived quality of a person to handle a diverse situation and reasonably manage all the diverse situations efficiently and effectively according to culture and suitable climate (Vlajčić, Caputo, Marzi, & Dabić, 2019). The purpose of cultural intelligence is the ability to solve a problem that arises in an organization and create a barrier for development, it is possible with the help of systematic and suitable intelligence which can provide a favorable climate and employee satisfactory behavior for the purpose of batter understanding level and development (Caputo, Ayoko, Amoo, & Menke, 2019). Additionally, in organization there should be a connection between the employees and the organization, and should be a favorable climate between firm performance and a capable leader in which employee can show their talent and capabilities (Slatten, Bendickson, Diamond, & McDowell, 2020). Therefore we used climate for inclusion as a mediator between leadership and firm innovativeness for accurate and meaningful observations.

Climate for Inclusion refers to which workforce or employees feel their unique qualities and value for the organization based on desirable characteristics and they feel that they are the pillars of the organization and organization is their living house without any biasness and discrimination .workforce realizes that we are organization and without organization responsibility they are nothing. There is a heart to heart connection between organization and employees (Brimhall & Mor Barak, 2018). The concept of inclusion is to demonstrate inclusiveness is think about a deliberate concept for the reason that it provides a platform for both as conclusive purpose as well as systematic instrument (Goswami & Goswami, 2018). Brimhall and Mor Barak (2018), defines inclusion is the ability to see of workforce that they will get encouragement for distinctive benefaction to the organization and will be support for full contribution in their work with efficiently and effectively. It is an perform activity model that explain the comprehensive organizational environment and climate as well as culture that focus to provide a land for a bigger combination of the business with the community and resident groups. By focusing on it, it is more beneficial plat form and initiatives and essential part for modern organization performance at small level as well as high level achievement. From which organization can enhance some basic improvement like TQM ,schemes and kaizen and procedures and schemes (Abdallah, Dahiyat, & Matsui, 2019).

## **2. Theoretical Background and Hypotheses**

### **2.1. Servant Leadership and Firm Innovativeness**

The attributes of servant leaders will act as a typical foundation of firm innovativeness. That modesty in leadership positions is a strong strategy for allowing the presence of firm creativity (Cable, 2018) and service leaders to best match the strength (Sun & Shang, 2019). Such leaders display sincere attention in knowledge with others (Van Dierendonck & Patterson, 2015) and are then talented to stand aside and promote the routine among others while creating an atmosphere that promotes the study and the current of thoughts and ideas (van Dierendonck & Rook, 2010). Servant leadership enhances the performance of employees and promotes new ideas and new thinking, it is particularly the situation when they obtain locations, as recommended by the theory upper echelons (Hambrick & Mason, 1984). Servant leader qualities must assist as a traditional facilitator for the innovativeness of a firm. Signifying modesty in leadership spots is a worthy technique to empower the appearance of innovativeness of a firm (Cable, 2018). A servant leader can therefore promote high innovativeness and both have a positive impact. Recent findings suggest optimistic productivity disparities in companies run by modest executives (Brynjolfsson, Rock, & Syverson, 2017) or service executives (Yoshida, Sendjaya, Hirst, & Cooper, 2014) respectively.

**H1:** There is a positive and significant impact of servant leadership on firm innovativeness.

### **2.2. Transformational Leadership and Firm Innovativeness**

The best influence on innovation + creative action is extracted from the smart stimulus on followers by the chief. Followers are urged to seek new ways to tackle issue studies. Some studies require shown that revolutionary leaders will have an imaginative environment conducive to groundbreaking clarity (Mittal & Dhar, 2015). Of notice, on a limited yet valuable basis from previous study decisions, a specific reading in Asia is concluded through 340 workers and superiors led by Mittal and Dhar (2015), who established that imaginative self-efficacy (CSE) can fairly convey revolutionary leadership and motivation to followers. The findings of the analysis stressed that there is a strong relation between innovativeness and transformational leadership. An imaginative approach to direction seeks to foster an inventive environment and pleasant attitude within institutional subscriptions (Van Laar, Van Deursen, Van Dijk, & De Haan, 2017). The upper-echelons theory is applied in the association between Transformational Leadership and Firm Innovativeness because an effective leader's performance is an evaluation of a good organization performance (Van Laar et al., 2017). On the projection of leadership style, in organization membership, the workforce follows the friendly environment and focuses on a specific vision for developing the organization's productivity in a new way (Van Dijk et al., 2017). Transformational management is focused on an antique-style belief that innovation is to be overlooked by accident or by mistake. A prevalent belief among well talented and good reputation business representatives from companies with verified creativity in fostering performance suggests that although innovation cannot be fulfilled, leaders will excel in innovation (Amabile & Khaire, 2008). An indorsed leader responsibilities of business representatives to handle for innovation allow ideas of corporate participants to operate through collaborative work according to diverse viewpoints with frankness, strengthen processes by regulating innovative approaches or innovations in all times of creativity, and inspiring citizens by brilliant tasks, human interests, appreciation of imaginative messages, and awareness of disappointment welfare (Amabile & Khaire, 2008).

**H2:** There is a positive and significant impact of transformational leadership on firm innovativeness.

### **2.3. Cultural Intelligence and Firm Innovativeness**

This essay makes several valuable additions to the activities on cultural intellectual ability, self-motivated knowledge, and roll-cultural management. First, though many scholars have well-defined a collection of conventional competencies at a personal or community level; little attempt is made to verbalize CQ at a hierarchical stage. This essay has provided the theoretical basis of cultural wisdom on the macro scale above its present micro-level focus. At the person stage, CQ researchers have offered insights into why certain men, under ethnically diverse situations, function more strongly than others (Earley & Ang, 2003). Specific cultural

understanding accelerates the intercultural adaptation of a person into the modern paradigm to work effectively in circumstances perceived by mainstream diversity and CQ has a huge impact on the creativity of a firm (Earley & Ang, 2003). Social identity and optimal distinctiveness theory are used in the relationship between cultural intelligence and firm innovativeness because if a loyal cultural will raise the level of innovation. Cultural intelligence based on the individual as well as group facilitates intercultural modification to the effective and new culture in a meaningful way and everything will be controlled and managed in a new way. This theory is fit between the relationship because if a system and climate is like cultural intelligence than performance boom up and improve new ideas (Earley & Ang, 2003). This research has projected an analogous definition at the corporate stage, describing it as the CQ (cultural competence). Illustration of the expectations in various authors, this study has tried to cover some of the voids in our understanding of why the rise of certain companies in the global economy is possible and others are not. Through reflecting on the prestige of company-level CQ, the institutional CQ design in this analysis may attract the attention of scholars beyond its current micro-level scope and thus encourage experimental work on the organization level. The results indicate that conventional brain capacity and creativity in the business have a clear connection and that the phenomenon of cultural wisdom has an immense impact on the enterprise and generates the latest concepts for preventive feedback (Moon, 2010).

**H3:** There is a positive and significant association between cultural intelligence and firm innovativeness.

#### **2.4. Servant leadership, Climate for Inclusion, and Firm Innovativeness**

The characteristics of servant leaders will become the typical foundation of corporate innovation. Humility in leadership positions is a powerful strategy that allows a company to be creative (Cable, 2018) and the leaders that best match the company's strength (Sun & Shang, 2019). Such leaders show sincere attention to knowledge in communicating with others (Van Dierendonck & Patterson, 2015), and then they are talented and stand aside to promote other people's daily activities while creating a way to promote learning and ideas and concepts. The atmosphere of the latest development (van Dierendonck & Rook, 2010). A servant leader can therefore promote high innovativeness and both have a positive impact. Recent findings suggest optimistic productivity disparities in companies run by modest executives (Brynjolfsson et al., 2017) or service executives (Yoshida et al., 2014) respectively. The atmosphere of development refers to mutual worker view for the degree, to which the gathering cultivates new besides valuable thoughts, procedures, items, or techniques that altogether advantage the gathering, association, or bigger civilization (Somech & Drach-Zahavy, 2013). Differing mortal assistance workers may develop and improve the nature of execution comparative with homogenous human help representatives. Brimhall and Mor Barak (2018), gave the nearness of a comprehensive hierarchical atmosphere. Consideration has been connected to expanded trust among hierarchical individuals and shows a positive relationship with the development of a firm (Downey, van der Werff, Thomas, & Plaut, 2015). Which is connected to an expanded ability of authoritative individuals to share and team up on new thoughts, a basic part of advancement (Sankowska, 2013).

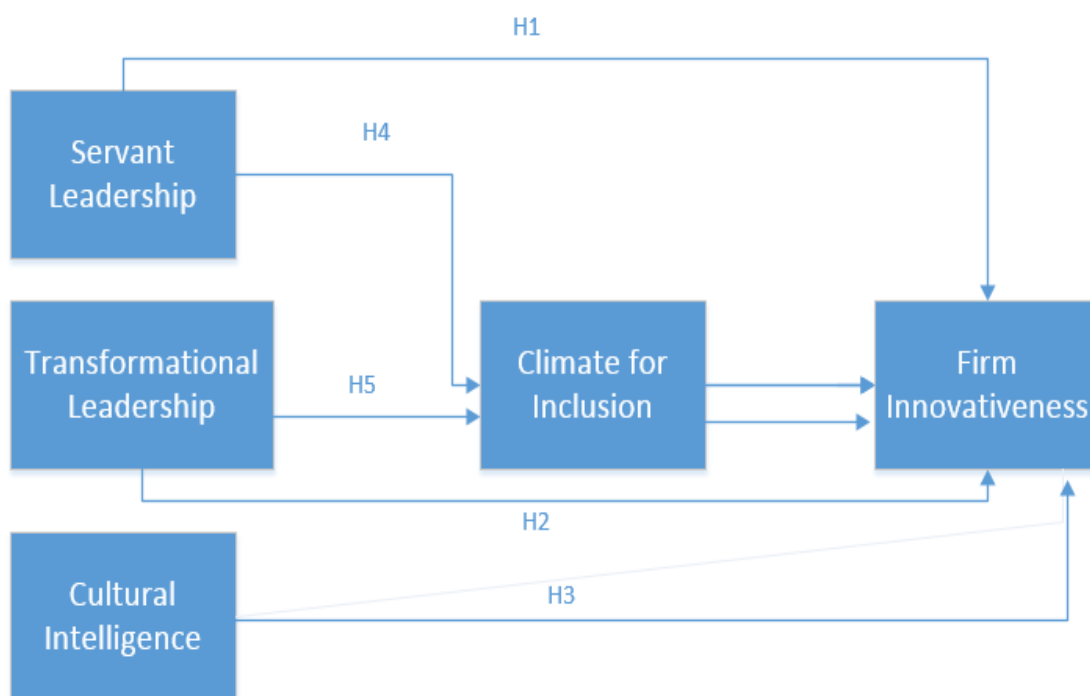
Zhang et al. (2015) initiate that at what time atmosphere on behalf of incorporation was in height, imagination and advancement was more grounded especially for multinational collections, proposing that when representatives from differing foundations sense that they have esteemed for exceptional points of view (normal for an atmosphere for consideration), they might be all the more ready to share their thoughts and team up with others (normal for an atmosphere for development). Social identity and optimal distinctiveness theory is support the relationship between climate for inclusion and firm innovativeness because if a climate is fit in the organization and sustains the heart to heart connection between organization and employee then the concept of innovation exists. Hughes, Lee, Tian, Newman, and Legood (2018) argues that creativity and innovation will be high when climate for inclusion exist in organization. There is a strong relationship and one point mind for multi-cultural team that when employees comes from different background and diverse behavior feel appreciated that they have something new from other. They feel that they are willing to deliver their new ideas and their services in effective way and join forces with other workplace. This theory provides the view that this is the only way to achieve high performance, and the quality of care can be improved with the help of the organization (Brewer & Silver, 2000).

**H4:** There is a positive and significant association between Servant leadership and firm innovativeness under an intervening effect of climate for inclusion.

### 2.5. Transformational Leadership, Climate for Inclusion, and Firm Innovativeness

Some studies require shown that revolutionary leaders will have an imaginative environment conducive to groundbreaking clarity. Deep reading is concluded through some workers and superiors led by Mittal and Dhar (2015), who established that imaginative empowerment can fairly convey revolutionary leadership and motivation to followers. The findings of the analysis stressed that there is a strong relation between innovativeness and transformational leadership. An imaginative approach to direction seeks to foster an inventive environment and pleasant attitude within institutional subscriptions (Van Laar et al., 2017). Transformational management is focused on an antique-style belief that innovation is to be overlooked by accident or by mistake. A prevalent belief among well talented and good reputation business representatives from companies with verified creativity in fostering performance suggests that although innovation cannot be fulfilled, leaders will excel in innovation (Amabile & Khaire, 2008). As indicated by the social character hypothesis, feeling esteemed as a significant piece of an association can encourage shared characteristics among its individuals. At the point when authoritative individuals see that they are like everyone inside, the trust, acknowledgment of each other builds (Brewer & Silver, 2000). Be that as it may, seeing shared characteristic among authoritative individuals is just a single segment of incorporation. Social identity and optimal distinctiveness theory support the relationship between climate for inclusion and firm innovativeness because if a climate is fitted in the organization and sustains the close connection between organization and employee then the concept of innovation exists. Hughes (2018) argues that creativity and innovation will be high when the climate for inclusion exists in an organization. Another perspective is being esteemed for the one of a kind attributes that unique carries to the association (Brimhall et al., 2017). The ideal peculiarity hypothesis sets that people make progress toward harmony between sentiments of closeness among authoritative individuals and acknowledgment of their special qualities as people (Brewer & Silver, 2000). As it were, an atmosphere for consideration is cultivated by accomplishing a balance between having a place with an authoritative gathering and being acknowledged for one-of-a-kind individual attributes (Shore et al., 2011).

**H5:** There is a positive and significant association between transformational leadership and firm innovativeness under an intervening effect of climate for inclusion.



**Figure 1. Research Model**

### **3. Methodology**

#### **3.1. Sample and procedure**

A sample of 115 employees is selected through simple random sampling technique from the target leading manufacturing companies in Pakistan. Where possible the researcher also used administered questionnaire for the collection of entire data which help the investigator to harmonize the interaction and to get the true response. Methods that are used for data collection are questionnaire and personal interviews from employees of different organizations. Data is collected from manufacturing companies in Pakistan in which we include such cities: Bahawalpur, Faisalabad, Multan and Sialkot. The research design is survey research in nature as well as correlational and causal. Data is collected by structured questionnaire.

During research it is very hard to evaluate the possible outcomes from the whole population in which we are interested, that's why the researcher selects a sample from the entire population to investigate accurate results. From the questionnaire, we find that majority of the employees in the Selected organization are satisfied with this study in the organization. This matches their expectations and employee involvement is compulsory. They agree that this has so much important for evaluating the firm innovativeness. That study is related to both correlation and causal effect. With the help of Correlation, we can identify either there is a connection between the selected variables or not. It is studying the connection between cause and effect. In this research, Cross-sectional Study is used. In this type of study we selected a specific time for analysis from a representative sample of the population, it is also known as cross-sectional analysis (Christie, 1987). Before the analysis of data, the first data should prepare for the analysis. In which, first data gather then changing means editing then scripting, interpretation and data tasting. Each questionnaire has clear errors because trying hard to minimize errors. Each question has significant codes like numbers or Alphabets for representation then data from the design survey is transcribed into a computer. Finally for data preparation and examination deeply for analysis software is used called Smart PLS and SPSS. A structured technique for study setting consisting of a set of questions, when a respondent response answer either in verbal or written is called questionnaire (Ahmed, Naqshbandi, Kaur, & Ng, 2018), so according to this setting this study is related with the non-contrived setting.

#### **3.2. Measurements**

All the measurement items were taken from the previous researches after thorough readings. The first variable Servant leadership was measured using 14 items of Ehrhart (2004). Second Transformational leadership was measured using 5 items of Avolio, Bass, and Zhu (2004). From O'Keefe, Bourgeois, and Davis scale is used to measure cultural intelligence with 19 items. The fourth climate for inclusion was measured with the help of 10 items by Hedman (2016), the fifth Firm innovativeness is measured using 9 items with the recommendation of Kleysen and Street (2001). All responses were measured using a five-point Likert scale ranging from strongly disagree to strongly agree.

### **4. Findings**

#### **4.1. Demographic findings**

In demographic statistic, it collected the information of gender, age in years, qualification in term of degree and profession about the respondents: 66 out of 115 respondents are male which is 57.4% of the total sample and 34.8 % are female and 7.8 % are preferred not to say contribution in the Responses, 4.3% of the total sample of respondents are having qualification up to Matriculation level, 13.0 % having intermediate, 20.9% having bachelor, 25.2 % are master qualified and 36.5% have MPhil levels of education. So most of the respondents are MPhil and master level, the frequency distribution of age of respondents 20% of Responses are from the employees having 18 to 22 years of age, 43.5 % having 22 to 26 of age, 18.3 % are having 26 to 30 of age and 18.3 % are above. So mostly respondents are 22 to 26 of age and professional status distribution of 12.2 % are Govt. employees, 35.7% are private employees, 13.9 % are self-employed, 27.8 % are students and 10.4 % are teachers. So in this study mostly respondents are private employees.

### 4.2. Testing of Measurement Model

**Table 1**  
**Construct Reliability and Validity**

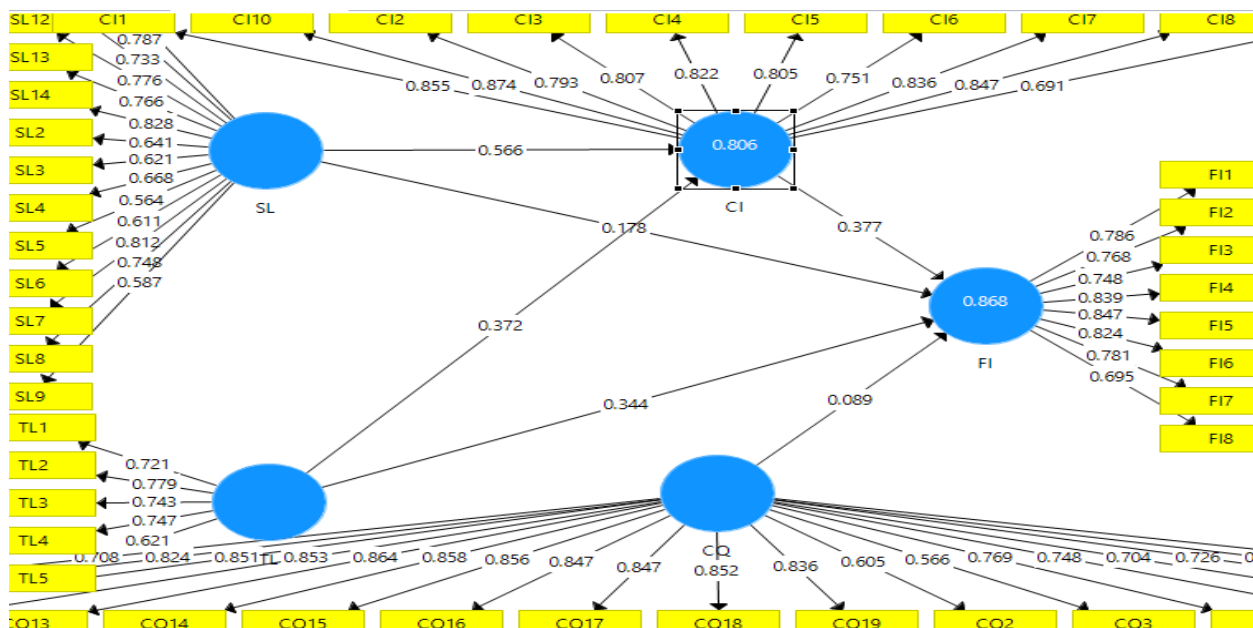
Column1	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
CI	0.941	0.944	0.95	0.656
CQ	0.964	0.966	0.967	0.613
FI	0.912	0.915	0.929	0.62
SL	0.923	0.931	0.933	0.504
TL	0.771	0.777	0.846	0.524

Usually, the reliability coefficient of Cronbach’s Alpha lies among 0 to 1. Hair (1998) suggests that if Cronbach’s alpha is equal to or above 0.8 then it indicates a good scale, if it is 0.70 then it is acceptable but if it is 0.6 then can be used for exploratory research (Rouf & Akhtaruddin, 2018). Results in the above table show that the Cronbach’s alpha coefficients of all variables are more than 0.8 and one variable has 0.77, so it is meant that the scales of all variables are good that can produce satisfactory results. Composite reliability as a test for convergent validity in a reflective model is used as an alternative to Cronbach’s alpha test.

It would be considered as necessary for reliability measure because Cronbach’s alpha might be underestimated or they overestimate the scale for reliability. In Table 1 It can see that all values lie above 0.8 and 0.7 and less than 1 that is considered as a valid and reliable scale of measurement. The acceptable results of the average variance extracted value are 0.5 or above. Convergence validity explains that (AVE) of the specific values lies between 0 to1. According to Ringle and Spreen (2007), if this value is equal to 0.5 it means that 50% of the items of scale represent the construct (Sander, 2014). In table 1 the values of CQ, CI, and FI are above 0.5, and SL and TL have their AVE equal to 0.5 from this requirement are fulfilled.

**Table 2**  
**Discriminant Validity**

Column1	CI	CQ	FI	SL	TL
CI	0.81				
CQ	0.879	0.783			
FI	0.898	0.839	0.787		
SL	0.871	0.809	0.863	0.71	
TL	0.839	0.811	0.878	0.826	0.724



**Figure 2: Factor Loadings**

MacKinnon (2008), claimed that for establishing discriminant validity, AVE’s root square should be greater than the correlation of constructs with other scales in the structural model.

The correlation among inter constructs represents that each construct share greater variance by its measures (Rouf & Akhtaruddin, 2018).

The Factor loading analysis tells that how much an indicator is consistent with its constructor variable or it presents the reliability of the indicator. Generally, if the statistical value of the indicator is  $> 0.5$  then the indicator is acceptable otherwise it should be removed from the analysis. According to C. Ringle and Spreen (2007) outer loadings having a value of more than 0.6 are acceptable if the criteria of convergent reliability are fulfilled (Sander, 2014). In the above table, 1 out of 19 indicators of Cultural intelligence practices is excluded. From Servant leadership dimensions variables 2 out of 14 are excluded for further analysis. Data analysis used in this study included confirmatory factor analysis (CFA) to test the discriminant validity of all used measures and mediation testing of hypotheses following the VAF technique (indirect effect/direct effect) confirmed through hierarchical regression.

### 4.3. Testing of Structural Model

**Table 3**  
**Hypothesis Testing**

	Original Sample (O)	Sample Mean (M)	(STDEV)	T Statistics	P Values
CI -> FI	0.377	0.386	0.105	3.571	0
CQ -> FI	0.089	0.093	0.089	1.003	0.316
SL -> CI	0.566	0.564	0.096	5.901	0
SL -> FI	0.178	0.168	0.089	2.871	0.045
TL -> CI	0.372	0.376	0.098	3.792	0
TL -> FI	0.344	0.342	0.093	3.69	0

The t-value of Servant leadership (SL) and firm Innovativeness (FI) is 2.871, which is above 2.57 and the p-value is 0.045, so the hypothesis of servant leadership (SL) and firm innovativeness (FI) have significant positive relation. This explains that SL is a positive impact on FI. Additionally, the t-value of hypothesizing path of Transformational leadership and Firm innovativeness is 3.69 that is above 2.57 and the p-value is 0.00, so the hypothesis of TL and FI is significantly related and there is a positive impact of TL on FI. Furthermore, the t-value of the hypothesize path of Cultural intelligence and Firm innovativeness is 1.003 that is below 2.57 and the p-value is 0.316, so the hypothesis of CQ and FI is insignificantly related and there is no impact of CQ on FI. There may be cultural differences, due to which the result is insignificant. Secondly, the respondent did not fill the questionnaire intentionally or with full concentration. Third, no implementation or concept of transformational leadership in that organization and employee may have shown non-serious behavior during the filling questionnaire.

**Table 4**  
**Mediation Testing**

	Original Sample (O)	Sample Mean (M)	STDEV	T Statistics	P Values
SL -> CI -> FI	0.213	0.218	0.071	3.006	0.003
TL -> CI -> FI	0.14	0.146	0.056	2.496	0.013

In this study researcher used VAF technique for mediation between the variables. According to Nitzl, Roldan, and Cepeda (2016) If the value from VAF Technique is lower than 20% it means no mediation and if VAF value higher than 80 % it means full mediation, and when value lies between 20% to 80% it shows partial mediation. The t-value of climate for inclusion (CI) and firm innovativeness (FI) is 3.006 and the p-value is 0.003, so the indirect or mediating effect of Servant leadership (SL) on firm Innovativeness significantly exists and the hypothesis is accepted. This means that there is a positive but partial mediating effect through VAF testing (indirect effect/total effect=  $0.213382/0.391382$ ) that is 54% among Servant leadership and firm innovativeness according to the above results. Moreover, the t-value of climate for inclusion (CI) and firm innovativeness (FI) is 2.496, and the p-value is 0.013, so the indirect or mediating effect of Transformational leadership (SL) on firm Innovativeness significantly exists and the hypothesis is accepted. This means that there is a positive but partial mediating effect through VAF testing (indirect effect/total effect=  $0.140244/0.484244$ ) that is 28% among Transformational leadership and firm innovativeness according to the results of table 4.



In the last question, the result shows that Transformational Leadership has a more significant impact on firm innovativeness due to its high beta value (0.344) as compared to Servant Leadership (0.178). The p-value under the transformational leadership style is 0.00 and under servant leadership is 0.045.

**Table 5**  
**Variance Explained**

Column1	R Square	R Square Adjusted	Column2
FI	0.868	0.863	

In Variance Explained R square value tells us the summation of an independent variable. The table explained R square value is 0.868 the variance explained in the dependent variable (firm innovativeness) by the independent variable (Climate for inclusion) is 0.806. Because data is collected from a simple random sampling method and the sample size is very small so this can be minimized with a large sample size and by using more advanced techniques of probability sampling. That’s why we have explained whole the model approximately 86 %.

## 5. Discussion

In this chapter different results are shown that are obtained from the analysis of data. Demographic data is explained through using SPSS and another analysis has done through Smart PLS which is more appropriate for the small size of the sample and is updated software that also provides a variable path model to show a clear look at the hypothesized variables and their assumed relationships. According to the structural equation model, servant leadership has a positive and significant impact on firm innovativeness. The study of Ruiz-Palomino, Hernández-Perlines, Jiménez-Estévez, and Gutiérrez-Broncano (2019) supported the first hypothesis. Secondly, transformational leadership has a positive and significant impact on firm innovativeness, the study of Supermane (2019) carries the second hypothesis. Third hypotheses are rejected; that cultural intelligence and firm innovativeness are positively related there are some possible reason and justification behind that relationship which explains above. It is also observed that servant leadership and firm innovativeness are positively related under the partially intervening effect of climate for inclusion and this study (Ruiz-Palomino et al., 2019) supported the relationship. Furthermore, the climate for inclusion partially mediates the relationship between transformational leadership and firm innovativeness under the Study of Supermane (2019). And from the last objective of this study that the researcher concludes that the transformation leadership style has a more significant impact on firm innovativeness as compared to servant leadership. In this chapter, all necessary analysis has been done for true and fair view of data.

### 5.1. Theoretical Contribution

The contribution of this study has a remarkable impact on Pakistan's economy. First, it introduces sustainability rationale into Business literature related to Pakistan to broaden the relatively scarce research in this field (Ehnert & Harry, 2012). The upper-echelons theory by Hambrick (2007) explores that an efficient and ideal leader has a significant and worthwhile influence on the productivity of employees and controls the company's performance from an accurate, honest, and modern perspective. So with the help of this theory, the relationship between servant leadership and firm innovativeness plays a vital role in the organization. And also support the association between transformational leadership and firm innovativeness which shows a remarkable contribution to the economy. Furthermore according to the theory of social identification, feeling valued as an essential indicator of an association will bring about a commonality among its leaders. When organizational supporters perceive that they have been equal to their followers, the confidence increases acceptance (Tajfel, 1982). Second, according to Kramar and De Cieri (2008) sustainable management might be the upcoming foremost important concept after strategic management. According to many authors and researchers, this study is not only important for organizations but is also having a great impact on society, the environment, and the economy. So there is a great need to explore the theoretical concepts and also practical implementations of this concept so this research contributes to this aspect. The third contribution of this study is that it has introduced the concept of incremental and firm innovativeness as an outcome of management perspective prior studies taken organization’s performance as an outcome and found the positive significant relationship between leadership style and organizational performance only very few studies have taken innovation as dependent

variable but this study considered the impact of an able and focusable point on firm innovativeness under the circumstances of different leadership. Fourthly, study tested climate for inclusion as a mediating variable between firm innovativeness and leadership styles whereas most of the previous researches taken climate for inclusion as an independent variable, a dependent variable or as a moderator. The fifth contribution of this is that this study also helped to understand the effect of innovative behavior under a suitable leadership style especially in the telecommunication industry of southern Punjab, Pakistan.

## **5.2. Practical Contribution**

Pakistan industry as well as all over the world has a significant impact on organizational performance and for developing an innovative culture. This study provides insights to firms that are planning to or have embraced the innovation model to remain competitive in the market. Most importantly, this study draws the attention of firms toward the management of firm innovativeness through an effective leadership style. As more and more firms are shifting to the innovation model from their traditional models of innovation, how leaders manage the challenges that entail the innovation process is of paramount importance. This study sheds light on this issue. Findings suggest that firms should promote leaders who empower their followers (Jung & Sosik, 2002). The leaders should role model and mentor their followers to enable effective knowledge exploration and exploitation. Empowering leaders may also appreciate innovative tasks through intrinsic and extrinsic reward systems. In this way, leaders can exhibit their essential role of building and promoting the idea scouts and idea connectors that facilitate knowledge acquisition and utilization. In addition to this, leaders should focus on developing a climate in their firms so that all members are involved in knowledge-based activities that promote innovation. As the manufacturing industry is the largest fast-growing industry in Pakistan so for creating an innovative organizational culture and enhancing innovative performance there is a need to promote a sustainable leadership style under an impactable mediator climate for inclusion. As in this competitive era, there is a need to introduce new strategies not only for innovation in products, service, and technological innovation but also for the survival of organizations because fostering the sustainable human resource system plays a survival strategy itself due to increasing awareness of employee welfare. The concept of climate for inclusion can create a base for removing the barrier between employees and make a strong pillar on which organization can survive in long run.

## **5.3. Limitation of the study**

The sample size of the study is too small that does not represent the whole population of manufacturing companies in Pakistan. There were time and resource constraints that restrict the comprehensive research on this topic. The simple random sampling method is used for data collection due to reducing biasedness but sample selection biasedness can occur because the sample set of the whole population is not inclusive because assessing the whole population for simple random sampling is very difficult. So cluster sample technique may be more useful for this research. In this study, a survey questionnaire is used to collect data. Group discussion and interviews should also include getting more useful responses to the questions with reason. In this study researcher only analyzes the basic relationships between servant leadership, transformational leadership, and cultural intelligence use as an independent variable, climate for inclusion as a mediator variable, and firm innovativeness used as a dependent variable. This study focuses step by step analysis of all the relationships between the variables. The current study only focuses on the employees of manufacturing companies working in Pakistan, this study should enhance the research area up to the national level to get true outcomes effectively.

## **5.4. Future Recommendations**

Prior studies aim to create a better understanding of the interactional relationships between different factors supporting firm innovativeness in sustaining positive organizational outcomes and this study focuses on developing new ideas and productions as a positive outcome. Further studies can be made by taking other aspects of innovation. Also, this study can provide a value addition for new researchers. A larger sample size would be considered by a future researcher to generalize the results of the study and more unbiased techniques for sampling should be used which is representative of the entire population. Future researches

should be considered a new mediator between the relationship of firm innovativeness and leadership style and should focus as a moderator variable of climate for inclusion. More Qualitative and empirical research should be made to authenticate the results of this research not only in Pakistan but also all over the world but Pakistan need more work on it due to its lack of innovative behavior due to conflicts of employees and at the same time having very low progress in firm innovation. Future researchers should focus on services companies because this study focused only on manufacturing companies. Furthermore, an upcoming researcher should take other leadership styles instead of servant leadership and transformational leadership.

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