The present research was an attempt to identify how servant leadership fuels employee innovative behaviour. Based on the notion of social cognitive theory, we assume that servant leadership enhances employee innovative behaviour via motivating knowledge sharing. Furthermore, the impact of servant leadership on knowledge sharing is strong when employee organisational identification is high. We tested the proposed model using cross-sectional data collected from 180 supervisor-employee dyads from five leading electrical companies in Pakistan. We found that servant leadership has a strong association with employee innovative behaviour. Knowledge sharing partially mediates the indirect effect of servant leadership and innovative behaviour. Furthermore, we also found that organisational identification moderates the relationship between servant leadership and knowledge sharing. Implications and theoretical contributions are also discussed.

**Key words:** Servant Leadership, Knowledge Sharing, Organisational Identification, Innovative Behaviour
1. Introduction

In today's dynamic business environment, organisations are to regularly explore how to be innovative because innovation is considered the soul of the organisation and essential for sustainable organisational performance and for gaining a competitive edge (Shin et al., 2017). Employees are the primary source of innovation in organisations; thus, organisations must exert considerable efforts to make their employees more innovative and creative (Khattak et al., 2015; Pieterse et al., 2010). How this innovative ability of employees will be enhanced is the question that needs a solution. However, Eva et al. (2019) suggested that servant leadership (SL) is growth-oriented and allows organisations to improve their employees' innovative skills. Greenleaf's theory of servant leadership was first proposed in 1970, based on employee development in their critical areas like self-motivation, community, future leadership capabilities, stewardship, and task effectiveness (Liden et al., 2014).

A mounting body of research assured the desirable results of SL for both employees and organisations, such as enhancing service climate and procedural justice (Walumbwa et al., 2010), fostering employee work outcomes (Newman et al., 2018), creating serving climate (Liden et al., 2014), and improving subordinates’ creativity through political skills and workplace spirituality (Williams et al., 2017). Regardless of these findings, it is still under investigation of how SL triggers employee innovative behaviour (Eva et al., 2019). Past research highlighted that SL influences employee creativity by creating a serving culture and prototypicality with leaders (Yoshida et al., 2014). Though, Hughes et al., (2018) argued that innovation and creativity are two different constructs having distinct processes and lead to different outcomes. The process of innovation involves more diverse and more profound individual inputs.

Moreover, the organisation's sustainability and innovativeness have more of a strong effect than creativity (Chiniara and Bentein, 2016). Hence, it is essential to empirically examine the mechanisms through which SL prompts innovative behaviour (Zhu and Zhang, 2019). To address this phenomenon, we took a social cognitive perspective in the current research.

Based on social cognitive theory (SET), Bandura (1986) poses that learning occurs in a social environment through an active and mutual collaboration of the person, behaviour, and environment. In an organisation setting, a leader's behaviour is considered an external factor that influences workers' behaviour (Carmeli et al., 2013). The inherent employee-oriented qualities of servant leaders help followers know from them (e.g., Van Dierendonck et al., 2014). Furthermore, researchers also argued that innovation or innovative behaviour of employees without in-depth knowledge is intolerable (Woodman et al., 1993). The link between knowledge and innovation is just like the link between the trunk and branches of a tree (Andersson et al., 2016). The assimilation of knowledge from different people may encourage them to think diversely and should not be based on their self-knowledge only (Woodman et al.,
Although the knowledge sharing phenomenon is not an automatic process, the leader has the quality to strongly influence knowledge sharing behaviour of employees (Carmeli et al., 2013). Under the canopy of SL, employees are likely to share their knowledge and expertise with their colleagues (Liden et al. 2014). Hence, we propose that through knowledge sharing, SL may conjure innovative behaviour.

In the SET view, an employee's internal cognitive factors can significantly affect the indirect path (Wang et al., 2017). We believe that organisational identification (OI) can help as an internal cognitive element that strongly affects SL and the innovative behaviour relationship. OI is the tendency of an employee in an organisation to identify with that organisation (Elsbach, 2004). Employees having a high level of identification are more likely to be psychologically in touch with their jobs and gather information for self-improvement (Lee et al., 2015). Hence, playing a role of boundary condition, OI moderates the relationship of SL and knowledge sharing.

Based on the proposed conceptual framework, our research contributes to the existing body of knowledge in many ways. First, our research introduces servant leadership as an environmental factor that inspires the innovative behaviour of employees. Servant leaders are generous and ready to share their knowledge and skills and offer timely assistance to their subordinates to develop their knowledge and expertise. Employees are more likely to replicate their leader's behaviour and serve others by sharing what he/she knows, thus serving leadership to promote innovative behaviour (Presenza et al., 2019). Therefore, our study highlights essential insights into the role of SL that enhances innovative employee behaviour. Second, we contribute to the past research by considering knowledge sharing as a mediator that extends our understanding of how SL contributes to innovative behaviour from an individual behaviour perspective rather than of identification constructs (Yoshida et al., 2014; Liden et al., 2014). By doing so, our research can explore how knowledge sharing transfers the benefits of servant leadership to innovative behaviour (Bavik et al., 2018). Third, our study introduces organisational identification as a critical boundary condition for servant leadership and innovative behaviour. Lastly, to test the proposed hypotheses, we collected data from non-Western participants, i.e., managerial level employees from large electronic firms in Pakistan.

2. Hypotheses Development

2.1. Servant Leadership, Innovative Behaviour and Knowledge Sharing

The founder of servant leadership, Greenleaf (1977), argued that 'going beyond the self-interest' as the main attribute of SL. Here the leader gives priority to the followers' interest instead of self-interest. The power of a leader becomes a means to serve their followers, and the leader practises both leading and serving interchangeably (Van Dierendonck et al., 20104). Such an attitude helps develop a sense of fairness, trust, and psychological safety between workers (Hu
The relationship between employees and leaders will be enhanced when employees' psychological demands are satisfied. Such a positive work environment may motivate employees to work creatively (Qi Zhang et al., 2019).

Grounded on the social cognitive theory of Bandura (1986), individuals get knowledge primarily from two possible sources i.e., mastery model experience and enactive mastery experience. In the mastery model, experienced employees observe the situation, memorise it, and learn from their role models or leaders. On the other hand, in enactive mastery experience, an individual practises a task or skill and becomes a master of it. Thus, observers engage in behaviour learned from external situational and internal cognitive factors (Bandura, 1986). Based on this notion, we considered servant leaders as an external factor that is imposed on employees. Frequent interaction with their leaders makes employees learn unconsciously and behave what he/she learns from their servant leaders. Such employees act as a servant, and they eagerly share what he/she knows to their colleagues. Thus, they share their tacit and explicit knowledge with others (Liden et al., 2014).

Furthermore, servant employees are considered more responsible for their results and explore new ways to find the best solutions. Such employees are inclined to work cooperatively, listen to others, and share their views to find the best acceptable solutions (Zhang et al. 2016). In this way, an active, sundry, and outspoken community is generated, allowing employees to share unique ideas (Gong et al. 2012).

The proposed model of Woodman et al. (1993) indicates that innovation is determined by intrinsic motivation, personality, cognitive abilities, and knowledge. Besides one's knowledge, knowledge assimilated from diverse sources makes individuals learn new things and based on it, generate new and unique ideas. The best way to acquire knowledge is to share what you know or share your knowledge (Zhou and Li, 2012). Sharing knowledge with colleagues will help you to get benefits from their diverse field of expertise, which makes employees able to generate new and diverse ideas (Sosa 2011). Furthermore, employees disseminating their knowledge with colleagues is also considered a vital enabler of innovation. To solve a problem, an employee first generates basic ideas, but if he/she shares this idea with their co-workers, new ideas or knowledge will be created through their tacit and explicit knowledge (Gong et al. 2012). Besides, past research also mentioned that internalisation, socialisation, combination, and externalisation of knowledge are perceived to intensify innovative ability (Zhou and Li 2012). Based on the cited literature, we proposed that:

$H_1$: Servant leadership is significantly related to employees' innovative behaviour.

$H_2$: The relationship between servant leadership and employee's innovative behaviour is mediated by knowledge-sharing.
2.2. Organisational Identification (OI) a Possible Moderator

The concept of organisational identification (OI) is entirely new, and it explains the degree to which one identifies with the organisation behaviourally, emotionally, and cognitively (Elsbach 2004). It includes one's identification extending from awareness, shared characteristics, emotional investment, and goal congruence to detect positive behaviour (Ashforth et al., 2008). OI explains the attitude and behaviour of employees in organisations because it is considered as a base where these attitudes and behaviours are provoked (Lee et al., 2015). An employee with higher OI is likely to benefit the whole organisation instead of for their benefit. Employees' emotional responses to their jobs are also enhanced due to OI, as they typically view themselves positively. Taking extra roles such as voice behaviour and citizenship behaviour is the possible outcome of OI. These behaviours are not part of job descriptions and formal reward systems of an organisation (Riketta, 2005). Moreover, employees with high identification perceived that helping their co-workers solve problems related to their organisation seemed like helping themselves. Thus, such employees are good organisational citizens, and they do their best to achieve organisational goals. SET (Bandura 1986) suggested that external mastery models (servant leaders) bring employee innovative behaviour and knowledge-sharing behaviour. When employees perceive servant leaders as their ideal members, they become primary sources and role models from which employees learn organisational objectives (Panaccio et al., 2015).

The perception of those employees having a reliable organisational identification as that they would consider themselves as more representative or members of the organisation. Still, they believe that organisational values are their values. This attribute makes them able to resonate and absorb with servant leadership and become more effective and efficient (Elsbach, 2004). In such a scenario, employees are motivated to achieve organisational goals instead of self-achievements. Employees having reliable identification can quickly adopt their leaders' attributes and willingly share their knowledge and expertise with others (Riketta, 2005). Consequently, they consider themselves responsible for disseminating that identification, encouraging them to altruistically share what he/she knows with their co-workers and thus at the end help to boost innovation in the organisation. Thus, we proposed that:
**H3**: The relationship between servant leadership and knowledge sharing is moderated by organisational identification, such that this relationship is more reliable when identification is higher.

![Proposed Model of the Study](image)

**Figure 1: Proposed Model of the Study**

### 3. Method

#### 3.1. Participants and Data Collection

We tested the proposed model on employees working in the large electrical firms operated in Pakistan. We collect the data from the employees through adopted scales. Through purposive sampling, 500 respondents were contacted to fill the survey scale. We received 180 usable responses with a response rate of 36%. Demographics information shows that the majority of the respondents were male (76%). Their length of experience varied from 20 years (15%), 15 years (20%), 10 years (35%), and 5 years (30%), respectively. Most respondents had MA/MS.C. qualification (70%) followed by MS/MPhil (25%) and BA/BS.C. (5%).

#### 3.2. Measurement

Our study used adopted instruments for data collection. All instruments were measured on a five-point scale rating from 1=strongly disagree to 5=strongly agree. We assured the scales reliability through Cronbach's alpha and validity through confirmatory factor analysis. The results of both were reported in the next section. Servant leadership was measured on 23 items with the scale initially developed by Barbuto and Wheeler (2006). Sample items include 'My leader does everything he/she can serve me' and 'My leader puts my best interests ahead of his/her own' (Alpha = 0.845). Employees were asked to report their identification with the organisation through 5 items scale initially developed by Smidts et al., (2001). Sample items include 'I experience a strong sense of belonging to the organisation' and 'I feel strong ties with this organisation' (Alpha = 0.803). Knowledge sharing was measured on a 5 items scale in which 3 items were used to measure explicit knowledge, and 2 items measured tacit knowledge, initially developed by Bock et al., (2005). The sample item includes, 'I am willing to share my work reports and documents with organisational members' (Alpha = 0.732). Innovative
behaviour was measured through a scale developed by Scott and Bruce (1994). This scale consists of 6 items. The sample item includes 'This employee searches out new technologies, processes, techniques, and product ideas' (Alpha = 0.796).

4. Results

Table 1 reports the reliability and validity statistics of the scales used in the study. As depicted the alpha value of all the scales was above 0.6, showing that the scales were reliable. Similarly, CFA results show that the model is a good fit. The values of GFI, AGFI, CFI, RMSEA, and $\chi^2$/df shows good model fitness.

Table 1: CFA and Alpha Statistics

<table>
<thead>
<tr>
<th>Var</th>
<th>Alpha</th>
<th>CMIN</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>RMR</th>
<th>GFI</th>
<th>AGFI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>SL</td>
<td>.845</td>
<td>44.325</td>
<td>24</td>
<td>1.847</td>
<td>.045</td>
<td>.901</td>
<td>.851</td>
<td>.928</td>
<td>.034</td>
</tr>
<tr>
<td>KS</td>
<td>.732</td>
<td>103.132</td>
<td>57</td>
<td>1.812</td>
<td>.047</td>
<td>.960</td>
<td>.866</td>
<td>.950</td>
<td>.042</td>
</tr>
<tr>
<td>OI</td>
<td>.803</td>
<td>105.410</td>
<td>59</td>
<td>1.849</td>
<td>.045</td>
<td>.894</td>
<td>.878</td>
<td>.924</td>
<td>.045</td>
</tr>
<tr>
<td>IB</td>
<td>.796</td>
<td>107.332</td>
<td>56</td>
<td>1.916</td>
<td>.048</td>
<td>.952</td>
<td>.861</td>
<td>.946</td>
<td>.042</td>
</tr>
</tbody>
</table>

The table reported below highlights composite construct reliability (CCR), average variance extraction (AVE), and intercorrelation among the tested variables. The results based on Harman's one-factor test, confirm that there is no common method bias issue (Min et al., 2016). The values of CCR are below 0.7 among variables, and the correlation is significant.

Table 2: Correlation, AVE and CCR

<table>
<thead>
<tr>
<th></th>
<th>IB</th>
<th>SL</th>
<th>KS</th>
<th>OI</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SL</td>
<td>.648**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KS</td>
<td>.574**</td>
<td>.412**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>OI</td>
<td>.512**</td>
<td>.403**</td>
<td>.343**</td>
<td>1</td>
</tr>
</tbody>
</table>

Mean 3.52 3.39 3.80 3.76
SD .863 .837 .763 .717
AVE .708 .794 .683 .749
CCR .813 .901 .945 .889
4.1. Hypotheses Testing

We tested the proposed hypotheses through a bootstrapping method in PROCESS. As per Hayes and Preacher's (2014) suggestion, model 7 was selected for moderated mediation. We found that servant leadership has significant relation with innovative behaviour ($B = 0.36, p = .000$) on a 95% confidence level. Furthermore, KS mediates the relationship of SL and innovative behaviour ($B = 0.61, p = .000$). Thus, $H_1$ and $H_2$ are accepted. The direct and indirect effects of $X$ on $Y$ through the value of the mediator are also reported.

Table 3a: Model Summary and Coefficients

<table>
<thead>
<tr>
<th>R</th>
<th>R-sq</th>
<th>MSE</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>.87</td>
<td>.75</td>
<td>.13</td>
<td>229.36</td>
<td>2.00</td>
<td>177.00</td>
<td>.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>coeff</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>constant</td>
<td>.02</td>
<td>.17</td>
<td>.14</td>
<td>.89</td>
<td>-.32</td>
</tr>
<tr>
<td>KS</td>
<td>.61</td>
<td>.05</td>
<td>12.75</td>
<td>.00</td>
<td>.52</td>
</tr>
<tr>
<td>SL</td>
<td>.36</td>
<td>.04</td>
<td>8.43</td>
<td>.00</td>
<td>.27</td>
</tr>
</tbody>
</table>

Outcome: IB

Table 3b: Direct effect of $X$ on $Y$

<table>
<thead>
<tr>
<th>Effect</th>
<th>SE</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>.36</td>
<td>.04</td>
<td>8.43</td>
<td>.00</td>
<td>.27</td>
<td>.44</td>
</tr>
</tbody>
</table>

Table 3c: Conditional indirect effect(s) of $X$ on $Y$ at values of the moderator(s): Mediator

<table>
<thead>
<tr>
<th>ID</th>
<th>Effect</th>
<th>Boot SE</th>
<th>BootLLCI</th>
<th>BootULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>KS</td>
<td>2.66</td>
<td>.06</td>
<td>-.06</td>
<td>.17</td>
</tr>
<tr>
<td>KS</td>
<td>3.51</td>
<td>-.04</td>
<td>.05</td>
<td>-.14</td>
</tr>
<tr>
<td>KS</td>
<td>4.36</td>
<td>-.15</td>
<td>.05</td>
<td>-.26</td>
</tr>
</tbody>
</table>

We tested the proposed hypothesis 3, and as stated in the table reported below, OI significantly moderates the relationship between SL and knowledge sharing. As per Hayes and Preacher (2014), the interaction effect's value must be significant for moderation analysis. As seen in the
The value of interaction effect is significant (i.e., $p = 0.000$); thus, our third hypothesis that is 'OI moderates the relationship between SL and knowledge sharing' is accepted.

**Table 4: Model Summary and Coefficients**

<table>
<thead>
<tr>
<th>R</th>
<th>R-sq</th>
<th>MSE</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.57</td>
<td>0.33</td>
<td>0.36</td>
<td>31.89</td>
<td>3.00</td>
<td>176.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>coeff</th>
<th>se</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.02</td>
<td>0.69</td>
<td>0.03</td>
<td>0.97</td>
<td>-1.34</td>
</tr>
<tr>
<td>SL</td>
<td>0.65</td>
<td>0.24</td>
<td>2.73</td>
<td>0.01</td>
<td>0.18</td>
</tr>
<tr>
<td>ID</td>
<td>1.18</td>
<td>0.19</td>
<td>6.10</td>
<td>0.00</td>
<td>0.80</td>
</tr>
<tr>
<td>int_1</td>
<td>-0.20</td>
<td>0.06</td>
<td>-3.45</td>
<td>0.00</td>
<td>-0.32</td>
</tr>
</tbody>
</table>

Following Aiken and West's (1991) method, the plot for interaction effect is created as elaborated in Figure 2. The relationship between servant leadership and knowledge sharing is higher for employees who have higher organisational identification, thus, supporting our third hypothesis.

![Figure 2](image)

**Figure 2**

**5. Discussion**

The present research proposed and tested a novel model by adding boundary conditions and mediating path to a servant leadership and innovative behaviour relationship. Based on the social cognitive theory, we treated SL as an external environmental factor and interpreted OI
as a personal cognitive factor that affects an employee's innovative behaviour and knowledge sharing. We studied that these environmental and personal factors interact and affect employee innovative behaviour through mediator knowledge sharing.

We found that SL positively effects innovative behaviour through knowledge sharing, indicating that there are other external environmental factors, including leadership styles that affect innovative behaviour (Chiniara and Bentein, 2016). Our findings suggest that sharing ideas willingly and proactively with others enhance innovative employee behaviour. Furthermore, our research reveals that OI moderates the relationship between SL and knowledge sharing at the level first. Finally, our empirical findings recommend that in the case where the level of organisational identification is high, KS bridges the connection of SL and innovative behaviour.

5.1. Theoretical Contributions

Based on the findings of this research, we highlight critical theoretical contributions. First, we contribute to the leadership theory by exploring the mechanisms of how SL motivates IB in Pakistani organisations. Though leadership scholars acknowledged that how servant leader behaviour is essential in a follower's creative performance (e.g., Opoku et al., 2019; Ortiz-Gomez et al., 2020; Newman et al., 2018), the boundary conditions’ insights to the model of leadership and innovative behaviour linkages still need exploration (Eva et al., 2019). By introducing this integrative model, we provide insights for further research in the Pakistani context.

Second, our research identifies how important the individual cognitive factor is, i.e., OI reinforces the association of SL and knowledge sharing. Our findings suggest that SL is more positively related to knowledge sharing when the OI is high. This finding is in line with Johnson’s et al. (2012) findings as they found that OI is highly correlated with knowledge sharing.

Finally, our integrated model contributes valuable insight by highlighting how SL affects innovative behaviour. Past findings suggest that supportive leadership enhances creative performance (e.g., Newman et al., 2018) and employee creativity (Fabio and Peiro, 2018; Alafeshat and Tanova, 2019). But we found that only the serving behaviour of leaders is not enough to promote innovative behaviour in the organisations. It is contingent on personal cognitive factors like employee organisational identification (in our case). Thus, our findings not only confirm the importance of SL but also highlight the mechanisms on how to improve innovative employee behaviour.
5.2. Managerial Implications

Our findings on how SL fuel innovative behaviour is primarily based on electrical firms operated in Pakistan. Innovation is the soul of every organisation, and it is considered an essential element for organisational development. By studying such a relationship, it allows us to explore new ways to aggravate innovative behaviour.

Our results suggest that both internal cognitive factors and external SL are essential pillars of improving innovative behaviour. Thus, facilitating knowledge sharing demanded that leaders should serve first and create a serving culture in the organisation that may motivate followers to follow their role models. Therefore, followers are more likely to share their tacit and explicit knowledge and experience with others, thus, facilitating knowledge sharing. Our findings suggest that HR departments arrange training sessions to enhance employee's organisational identification.

5.3. Limitations and Future Research Avenues

Irrespective of what our study offers, our study has some unavoidable limitations that must be addressed. First, we studied the SL and innovative behaviour relationships and did not control for other leadership-related antecedents. Future researchers may introduce other possible factors like charismatic, ethical, and transformational leadership styles. Second, we collect the data from a single sector, i.e., the pharma industry, that may affect the findings' generalisability. Future researchers could replicate the findings by selecting samples from the diverse nature of organisations. Third, we explore this phenomenon in the Pakistani cultural context. In the future, a sample from other cultures is vital for external validity and generalisability of the findings.

5.4. Conclusion

This research highlighted a few vital issues regarding the relationship between SL and innovative behaviour. Our findings direct that OI moderates the relationship between SL and knowledge sharing. Meanwhile, KS mediates the relationship between SL and innovative behaviour. Based on the findings of this integrative framework, we concluded that managers should exhibit more serving attributes towards their employees; this will make them more innovative through sharing knowledge and useful ideas with their co-workers. We expect that this study motivates future research on SL in different contexts, thereby introducing a mechanism of how servant leadership fuels employee's innovative behaviour.
REFERENCES


