ENTREPRENEURIAL LEADERSHIP AND EMPLOYEES’ INNOVATIVE WORK BEHAVIOUR IN SMALL FIRMS: MEDIATING ROLE OF CREATIVE SELF-EFFICACY

Olawale Fatoki, University of Limpopo

ABSTRACT

The business environment in which small, medium and micro enterprises (SMMEs) operate in South Africa can be described as volatile and uncertain. An entrepreneurial approach to leadership is needed for SMMEs to survive the challenging business environment. The study investigated the effect of entrepreneurial leadership (EL) on employees’ innovative work behaviour (IWB). In addition, the study examined the mediating role of creative self-efficacy (CSE) in the relationship between EL and IWB. The study adopted the quantitative research design and the cross-sectional survey method was used to collect data from employees in 230 SMMEs. The Partial Least Square Structural Equation Modelling (PLS SEM) was used for data analysis. The results indicated a significant positive relationship between EL and employees’ IWB. The mediating effect of CSE is significant. Theoretical, empirical and managerial implications are discussed.

Keywords: Entrepreneurial Leadership, Employees’ Innovative Work Behaviour, Creative Self-Efficacy, SMMEs.

INTRODUCTION

Small, medium and micro enterprises (SMMEs) play a significant role in the economies of both developed and developing countries. SMMEs represent 90% of businesses and more than 50% of jobs worldwide (World Bank, 2021). SMMEs account for 66% of all employment in South Africa. The number of SMMEs in South Africa grew by 4.4% and number of employees in the sector increased by 29% between 2018 and 2019 indicating a big shift in employment from large to small firms. Despite the growth in the number of SMMEs and their significant contribution to employment, these firms are negatively affected by South Africa’s challenging economic situation (Pasara & Garidzirai, 2020). The failure rate of SMMEs is very high in South Africa with approximately 70% of small firm failing in the first ten years (Small Enterprise Development Agency, 2019; SME Landscape Report, 2019).

Anju & Mathew (2017) and García-Vidal et al. (2019) point out that firms that want to survive the current dynamic business environment cannot depend on old management theories and leadership is a major force behind successful change. Today’s aggressive and tumultuous business environment requires a new type of leadership termed entrepreneurial leadership (EL) as distinct from other forms of managerial leadership (Gupta et al., 2004). Renko et al. (2015, 55) define EL as “influencing and directing the performance of group members toward the achievement of organisational goals that involve recognising and exploiting entrepreneurial opportunities”. EL is needed by new and established SMMEs to adapt their organisational structure and business models towards growth, capitalise on opportunities, adapt to high velocity
leadership and uncertain business environments and direct performance of employees toward the attainment of organisational goals (Harrison et al., 2019; García-Vidal et al., 2019).

Kijkasiwat & Pongsutti (2020) point out that the current competitive and turbulent business environment requires SMMEs to be innovative to survive and grow. Innovation by a firm can be done by management or employees. One of the ways for a firm to innovate is for employees to show innovative work behaviour and devote time and effort to developing and implementation new ideas in the workplace. Employees’ innovative work behaviour (IWB) can be described as the ability of employees to create and executive new ideas at work (Kheng & Mahmood, 2013; Niewman et al., 2017). Leadership has a critical role in promoting innovative behaviour in the workplace and employees’ IWB is not created automatically, but shaped by leaders through support and encouragement. The theoretical link of the relationship between employees’ perception of the EL of managers and employees’ IWB can be linked to the Upper Echelons Theory by Hambrick & Mason (1984). The theory argues that organisational outcomes, strategic choices and performance levels can be partially predicted by the background characteristics of managers. In addition, the Self Efficacy theory (Bandura, 1977) describes an individual’s belief in his/her capabilities to exercise control over their functioning and events that have an impact on their lives and provides the foundation for motivation and personal accomplishment.

Furthermore, it is important to understand the mechanism through with EL can affect employees’ IWB. The Self Efficacy Theory argues that individuals with high levels of self-efficacy tend to perform riskier and more challenging tasks compared to individuals with low levels of self-efficacy (Bandura, 1977). Creative self-efficacy (CSE) can be defined as the belief that an individual has the skills and knowledge to perform creative tasks (Tierney & Farmer, 2011). Individuals with high levels of CSE tend to be more flexible in absorbing information and new experiences compared to individuals with low levels of CSE who tend to perceive challenging tasks as uncertain and dangerous. Therefore, employees’ CSE may affect creative performance and innovative behaviour (Karwowski et al., 2018; Newman et al., 2018). CSE has been used in different ways across investigations by many studies. Some studies have used CSE as a direct predictor of creative or innovative outcomes. Other studies have used CSE as a moderator or a mediator. However, empirical research has primarily used CSE as a mediator in the link between leadership and innovation (Tierney & Farmer, 2011).

The study has two objectives. First, the study will examine the relationship between EL and employees’ IWB. Second, the study will investigate the mediating effect of CSE in the relationship between EL and employees’ IWB. The study will be significant in the following ways. First, although an increasing number of studies have explained that EL is a leadership style and behaviour that can foster opportunity recognition and innovation in a dynamic business environment, few studies have examined the impact of EL on innovation performance and research on the effect of EL on employees’ IWB is scarce (Bagheri, 2017). In addition, theoretical frameworks on how CSE mediates the relationship between EL and IWB are scarce. According to Iqbal et al. (2020), the mediating role of CSE in transmitting the effect of EL on followers’ IWB has not been adequately tested by empirical research.

**LITERATURE REVIEW**

**EL and Employees’ IWB**

Li et al. (2019) investigate the relationship between EL and employees’ IWB based on a sample of 350 employees working in SMMEs in the Jiangsu province of China. The findings
show that EL positively affects employees’ IWB. Mehmood et al. (2019) explore the effect of EL on employees’ IWB and the mediating role of psychological empowerment (PE). Data was collected from 301 managers and employees of SMMEs in Pakistan. The findings indicated that EL has a direct effect on IWB and an indirect effect on IWB through PE. Sarwoko (2020) using data collected from 190 employees find that EL positively impacts on the IWB of employees. Entrepreneurial leaders motivate employees to be creative and innovative and provide encouragement and support to employees. This invokes employees to exhibit innovative behaviour at the organisational level (Cai et al., 2019; Iqbal et al., 2020). Consequently, it is hypothesised that:

\[ H_1 \quad \text{There is a significant positive relationship between EL and employees' IWB} \]

**EL and CSE**

Cai et al. (2019) point out that CSE is influenced by contextual factors and employees tend to seek information at work to develop self-efficacy regarding their creativity. Leaders can support and nurture the development of employees CSE through positive behaviour especially by providing support and encouragement and by acting as role models for engagement (Gupta et al., 2004; Tierney & Farmer, 2011). Cai et al. (2019) and Sarwoko (2020) find a significant positive relationship between EL and CSE. Because entrepreneurial leaders are creative, they tend to serve as role models and communicate with employees to achieve creative endeavours. This can lead employees to develop creative feelings. It is hypothesised as below.

\[ H_2 \quad \text{There is a significant positive relationship between EL and employees' CSE} \]

**CSE and IWB**

Newman et al. (2018) remark that research evidence shows that CSE is positively linked to creativity at work and can lead to innovative behaviour in two ways. First, individuals with high levels of CSE tend to engage in innovative behaviour because they have confidence in their ability to generate and implement new ideas. Such individuals tend to spend more time on creative processes through the identification of problems, generation of new ideas and the promotion of implementation by management. Second, individuals with high levels of CSE are better able to address uncertainty and more likely to perceive challenges as opportunities in the workplace compared to individuals with low CSE. Newman et al. (2018) in a study that involved 66 managers and 346 subordinates in a large multinational Chinese firm find that CSE significantly affect IWB especially when leaders are entrepreneurial. Hsu et al. (2011) in a longitudinal study that involved 120 employees of a beauty company in Taiwan find that employees with high levels of CSE demonstrate high levels of IWB. Employees with high CSE have the capabilities to develop and implement tasks that lead to innovation and tend to perceive challenges and uncertainty related to innovation as an opportunity (binti Ibus & binti Ismail, 2018). Consequently, it is hypothesised as below.

\[ H_3 \quad \text{There is a significant positive relationship between employees' CSE and their IWB.} \]

**Mediating Effect of CSE in the Relationship between EL and IWB**

Farmer & Tierney (2017) remark that CSE has been used in different ways by many studies. Some studies have used CSE as a direct predictor of creative and innovative outcomes. Some studies have used CSE as a moderator and others have used the construct as a mediating variable. In the area of leadership research, studies have tended to use CSE as an important mediating variable. Cai et al. (2019) argue that EL may motivate employees to put more effort
into accomplishing innovative goals through their CSE. The findings of the study by Cai et al. (2019) indicate that CSE exerts a mediating effect in the EL-employee creativity relationship. Li et al. (2019) find that a firm’s innovative environment mediates the relationship between EL and employees’ IWB. Sarwoko (2020) finds that CSE positively mediates the relationship between EL and employees’ IWB. The entrepreneurial behaviour of leaders can effectively foster employees’ CSE which in turn can positively mediate the relationship between EL and employees’ creative performance and innovative behaviour (Iqbal et al., 2020). It is hypothesised that:

$$H_4: \text{CSE mediates the relationship between EL and employees' IWB.}$$

METHODOLOGY

The study utilised the quantitative research design. Data was collected from respondents who are employees of SMMEs through the cross-sectional survey method. The sample population was all employees working for SMMEs in South Africa. The survey was conducted in the Capricorn and Waterberg District Municipalities in the Limpopo Province of South Africa. Before the actual survey, a pilot study was conducted with thirty employees of SMMEs. Two experts in the areas of entrepreneurship and leadership also helped to validate the questionnaire. Based on the results of the pilot study, minor adjustments were made in developing the final version of the questionnaire. The questionnaire was divided into four sections: demographic variables, entrepreneurial leadership, employees innovative work behaviour and creative self-efficacy. According to the National Small Business Act of South Africa (2019), a micro enterprise will have between 0-10 employees, a small enterprise between 11-50 employees and medium-sized 51-250 employees. The convenience sampling method was used to select the participating SMMEs and employees in the study areas. This is because it was difficult to obtain a formal sampling frame of SMMEs in the study area. This is consistent with previous studies on SMMEs in South Africa (Matchaba-Hove et al., 2015). The cover page of the questionnaire contained information about the objectives of the study and that participation is voluntary. The study employed the Partial Least Square Structural Equation modelling for analysis. The Cronbach’s alpha was used as a measure of reliability.

Measures

**Entrepreneurial leadership (EL)**

Employees’ perception of the EL of owner/manager was measured using the eight items (ENTRELEAD-scale) by Renko et al. (2015). The Cronbach’s alpha of the original ENTRELEAD-scale is 0.93. The response scale ranged from “1 strongly disagree to 5 strongly agree”.

**Creative self-efficacy (CSE)**

Employees’ CSE was measured using the CSE scale by Tierney & Farmer (2002). The Cronbach’s alpha of the original scale is 0.83 and the response scale ranged “1 strongly disagree to 5 strongly agree”.

**Innovative work behaviour (IWB)**

Employees’ IWB was measured by an eight-item measurement scale from De Jong & Den Hartog (2010) and adapted to fit employees. The Cronbach’s alpha of the original scale is greater than 0.70 and the response scale ranged from “1 never to 5 always”.
RESULTS

Response Rate and Biographical Characteristics

600 hundred questionnaires were to employees of 100 SMMEs in the hospitality, retail and wholesale sectors and 230 questionnaires were returned and found usable. The respondents were (136) females and (94) males. The majority of the respondents (179) have Matric qualification and (51) post Matric qualifications. The majority of the respondents that participated in the survey are between 31-40 years (143), 21-30 years (49), and 41-50 (38). In addition, the majority of the respondents (168) have been with the SMME for 1-5 years, while (51) 5-10 years and (11) respondents 10-15 years.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measurement items</th>
<th>Mean and SD</th>
<th>Item loading</th>
<th>Cronbach’s alpha</th>
<th>Composite reliability</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entrepreneurial leadership (EL)</strong></td>
<td></td>
<td>3.62 1.08</td>
<td>0.804</td>
<td>0.911</td>
<td>0.562</td>
<td></td>
</tr>
<tr>
<td>Radical improvement</td>
<td>EL1</td>
<td>0.801</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Idea of new products/services</td>
<td>EL2</td>
<td>0.726</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Takes risk</td>
<td>EL3</td>
<td>0.769</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creative solutions</td>
<td>EL4</td>
<td>0.725</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passion for work</td>
<td>EL5</td>
<td>0.742</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vision for business</td>
<td>EL6</td>
<td>0.755</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenges to act in innovative way</td>
<td>EL7</td>
<td>0.728</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenge way of doing business</td>
<td>EL8</td>
<td>0.742</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Innovative work behaviour (IWB)</strong></td>
<td></td>
<td>3.45 1.02</td>
<td>0.792</td>
<td>0.913</td>
<td>0.569</td>
<td></td>
</tr>
<tr>
<td>Wonder how things can be improved</td>
<td>IWB1</td>
<td>0.814</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Search for how to improve or new working methods</td>
<td>IWB2</td>
<td>0.749</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Search for new or novel approaches to improve a task</td>
<td>IWB3</td>
<td>0.738</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create enthusiasm by manager or owner for innovative ideas</td>
<td>IWB4</td>
<td>0.729</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convince employees and/or managers to support new ideas</td>
<td>IWB5</td>
<td>0.801</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduce new ideas at work</td>
<td>IWB6</td>
<td>0.731</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assist in the development of new ideas</td>
<td>IWB7</td>
<td>0.726</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help in the implementation of new ideas</td>
<td>IWB8</td>
<td>0.741</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Creative self-efficacy (CSE)</strong></td>
<td></td>
<td>3.52 1.01</td>
<td>0.802</td>
<td>0.801</td>
<td>0.802</td>
<td>0.574</td>
</tr>
<tr>
<td>confidence in ability</td>
<td>CSE1</td>
<td>0.802</td>
<td></td>
<td>0.801</td>
<td></td>
<td></td>
</tr>
<tr>
<td>knack for developing ideas</td>
<td>CSE2</td>
<td>0.746</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good at generating ideas</td>
<td>CSE3</td>
<td>0.724</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Measurement Model

Hair et al. (2019) point out that the evaluation of the measurement model should include the examination of factor loadings (>0.708), composite reliability (>0.790), Cronbach’s alpha (>0.700) and the AVE (>0.500). Table 1 presents the results of the measurement model. The values of the Cronbach’s alphas are greater than 0.700, the values of composite reliability range from 0.802 to 0.939 and the values of AVE from 0.566 to 0.658. This implies an acceptable level of construct validity. The AVEs ranged between 0.562 and 0.583 suggesting a good convergent validity of the scales. The discriminant validity was assessed through the Fornell and Larcker criteria. The results as depicted by Table 2 showed that the square roots of AVEs are depicted on the diagonals are greater than the corresponding correlation coefficients within the constructs. It can be concluded that the measurement model is satisfactory.

<table>
<thead>
<tr>
<th>Construct</th>
<th>EL</th>
<th>IWB</th>
<th>CSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL</td>
<td>0.749</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IWB</td>
<td>0.626</td>
<td>0.754</td>
<td></td>
</tr>
<tr>
<td>CSE</td>
<td>0.536</td>
<td>0.758</td>
<td>0.501</td>
</tr>
</tbody>
</table>

Diagonals in bold signify the square root of the AVE while the other figures depict the correlations.

Structural Model

To assess the structural model, the common method bias, the goodness of fit, the $R^2$, the $Q^2$ and the effect size were evaluated in line with the requirements of Hair et al. (2019). The variance inflation factor (VIF) was used to test the existence of common method bias (CMB). The VIFs for the three constructs in the models are 1.82, 1.66 and 2.02 (all below 3.3) which is suggestive of the absence of CMD. The coefficient of determination $R^2$ value of 0.53 can be considered as moderate. Henseler et al. (2015) point out that when using PLS SEM, $R^2$ value of 0.75 is regarded as substantial, value of 0.50 moderate and 0.26 weak. According to Henseler et al. (2015), the goodness of fit value (GOF) ranges from 0 to 1. The GOF value of 0.549 suggests that the model has a strong predictive power. The $Q^2$ was used to measure the predictive relevance of the model and the value of 0.474 (>0) suggests that the model has sufficient predictive power. The effect size for EL, IWB and CSE are 0.352, 0.339 and 0.301 is indicative of a moderate effect of the exogenous latent constructs. The Standardised root mean square residual (SRMR) of 0.02 suggests a good model fit. The summary of the results of the path coefficients and T-statistics are presented in tables 3.

<table>
<thead>
<tr>
<th>Hypothesised path</th>
<th>Path coefficient</th>
<th>T-statistics</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 EL→IWB</td>
<td>0.622</td>
<td>11.406 *</td>
<td>Supported</td>
</tr>
<tr>
<td>H2 EL→CSE</td>
<td>0.704</td>
<td>15.001*</td>
<td>Supported</td>
</tr>
<tr>
<td>H3 ESE→IWB</td>
<td>0.608</td>
<td>8.044*</td>
<td>Supported</td>
</tr>
<tr>
<td>H4 EL→CSE→IWB</td>
<td>0.461</td>
<td>7.408*</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Note: *P<0.01
Table 3 depicts the results of the structural model. The results (β 0.622, T 11.406, p<0.01) show a significant positive relationship between EL and employees’ IWB. Hypothesis one of the study is supported. The results (β 0.704, T 15.001, p <0.01) depict a significant positive relationship between EL and CSE. Hypothesis two is supported. The results (β 0.608, T 8.044, p <0.01) show a significant positive relationship between CSE and employees’ IWB. Hypothesis three of the study is supported. The results of the mediation indicate that the total effect between EL and employees IWB (β 0.622, t 11.406, p < 0.01) is significant. The inclusion of the mediator in the model shows a direct relationship of (β 0.161, T 1.644, p>0.05). The indirect relationship when the mediator is included is significant (β 0.461, T 7.408, p<0.01) depicting a significant mediation and that the effect of EL on employees’ IWB completely passes through CSE. Hypothesis four of the study is supported.

**DISCUSSION**

The study investigated the effect of EL on employees’ IWB. In addition, the study examined the mediating effect of CSE in the relationship between EL and IWB. The results indicated that there is a significant positive relationship between EL and IWB. The results of the study suggest that the EL of manager/owner of SMMEs is a key driving force of IWB. Employees’ IWB is not created automatically, but shaped by leaders through support and encouragement. Entrepreneurial leaders motivate employees to be creative and innovative through support and encouragement (Cai et al., 2019; Iqbal et al., 2020). The findings are consistent with the results of prior empirical research on EL and IWB (Bagheri, 2017; Mehmood et al., 2019; Mehmood et al., 2019; Sarwako, 2020; Iqbal et al., 2020). The findings of the study indicate a significant positive relationship between EL and CSE. Leaders that are entrepreneurial tend be creative and support the CSE of employees by providing support and encouragement and by acting as role models and communicating creative endeavours to employees (Gupta et al., 2004; Tierney & Farmer, 2011; Wang et al., 2014). Previous empirical studies by Cai et al. (2019) and Sarwako (2020) also find a significant positive relationship between EL and CSE. Employees with high levels of CSE have the capabilities to develop and implement tasks that lead to innovation and tend to perceive challenges and uncertainty related to innovation as an opportunity rather than a threat (binti Ibus & binti Ismail 2018). Studies by Newman et al. (2018) and Abdullah et al. (2019) also find that CSE is a strong predictor of employees’ IWB. The findings indicate that CSE mediates the relationship between EL and IWB. The entrepreneurial behaviour of leaders can effectively foster employees’ CSE which in turn can positively mediate the relation between EL and employees’ creative performance and innovative behaviour (Iqbal et al., 2020). The findings are supported by prior empirical studies. Sarwako (2020) find that CSE positively mediates the relationship between EL and employees IWB.

**CONCLUSION**

The study investigated the effect of EL on employees IWB in South Africa. In addition, the studies examined the mediating effect of CSE in the relationship between EL and IWB. The findings indicated that EL has a significant positive effect on employees IWB. Also, the findings showed that EL positively impacts on CSE. Furthermore, CSE positively impacts on IWB and also mediates the relationship between EL and IWB. Theoretically, the study developed a model that shows the mediating effect of CSE in the relationship between EL and IWB in the context of
SMMEs. The empirical results showed that EL can help to support the innovative behaviour of employees of SMMEs. The findings have some managerial implications. First, the study confirms the importance of EL as a driver of IWB. Therefore, it is important for the managers/owners of SMMEs to use EL approach to develop employees’ innovative behaviour. Thus, the provision of seminars and training on EL and innovation to management and employees of SMMEs is important. The study finds that CSE is a mechanism through which EL can affect IWB. Management must foster an environment that supports the creative ideas of employees. CSE can be improved through training and the implementation of employees’ novel ideas by management. Government and non-governmental agencies that support SMMEs can help to develop entrepreneurial leaders through training and support. The study has some limitations and also proposes some areas for further study. First, the use of convenience sampling leads to sampling bias. Therefore, the sample may not be representative of the population and care should be exercised in generalising the findings of the study. Second, the survey was cross-sectional in nature. Therefore, causality cannot be definitely established. Therefore, other studies can employ a longitudinal study design to confirm causality. The effect of EL on the sustainable performance of SMMEs and the moderating effect of gender and age can be examined by other studies.

REFERENCES


