Social Networks, Market Orientation, Entrepreneurial Orientation and Sustainable Enterprise Development: Study of SMEs in Developing Economy

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The purpose of this empirical study is to determine the impact of social networks on sustainable enterprise development. The study also evaluated the moderated role of entrepreneurial orientation and mediated role of marketing orientation in the aforesaid relationship. Data was collected from 467 managers and owners of SMEs. Results revealed that social networks have positive and significant impact on sustainable enterprise development of SMEs. The study also found that entrepreneurial orientation and market orientation are key for SMEs’ in achieving sustainable development. Social networks are important for sustainable enterprise development. Moreover, the study also focuses on other essential elements i.e. entrepreneurial orientation and market orientation for achieving sustainable enterprise development. The research has numerous theoretical and practical implications for managers as well as for government bodies.

Key words: Social networks; entrepreneurial orientation; marketing orientation; sustainable enterprise development

1. Introduction

Pakistan is a developing economy (Khan, Shenkar, & Lew, 2015), and faces substantial challenges along with numerous opportunities for businesses, especially for small businesses
that have limited resources and employees; also known as SMEs (Small & Medium Size Enterprises). Furthermore, SMEs of Pakistan are also facing higher environmental uncertainty, imbalanced growth, political instability, lack of intellectual capital, lack of infrastructure, energy crises and other structural problems (Saeed & Sameer, 2015). These issues are serious threats for the survival and growth of SMEs (Shah, Yasir, Majid & Javed, 2019). To overcome these problems, different factors are utilised by SMEs. One of those factors is entrepreneurial orientation (EO) (Javed, Yasir & Majid, 2018). EO is the ability of an enterprise to exploit untapped opportunity (Wiklund & Shepherd, 2003) with innovativeness, pro-activeness as well as risk taking as the components of EO (Lumpkin & Dess, 1996). Entrepreneurially oriented SMEs mostly gain first mover advantage and they compete aggressively and have higher market shares (Miller, 1983). According to Lumpkin and Dess (2005), EO has a significant positive influence on meeting current needs without sacrificing the future needs of SMEs; also known as the sustainability of SMEs. Another factor that also helped SMEs to face the foresaid challenges is market orientation (MO) which is defined as a better understanding of the customers’ needs (Boso, Story, & Cadogan, 2013). MO helps SMEs in better understanding the customer needs, better satisfying them in a faster way, creating long term customer relationships (Maatoofi & Tajeddini 2011) and hence helping SMEs attain sustainability. In the context of the developing economy of Pakistan, little research has been conducted connecting MO and EO with sustainable development of SMEs.

In the current era of cutthroat competition, enterprises are trying to remain competitive (Pinho & Prange, 2015). There are many factors which are influencing the competitiveness and survival of the enterprises. One of these factors is enterprise connection with other businesses and individuals for sharing knowledge and resources; known as social networks (SNs). Thus, to survive and grow in the marketplace, the role of SNs is increasingly becoming vital (Eberhard & Craig, 2013; Javed et al., 2019). SNs are particularly important for SMEs as they are facing the problem of resource constraints for achieving social, economic and ecological sustainability (Gilmore, Carson, & Grant, 2001; Gilmore, Carson, & Rocks, 2006). Studies show that SNs are important for sustainable enterprise development (SED) for SMEs (Arregle, Batjargal, Hitt, Webb, Miller, & Tsui, 2015; Borgatti, Everett, & Johnson, 2018; Collins & Clark, 2003; Stam, Arzlanian, & Elfring, 2014). SNs help in making sense of what happens in the market by providing access to the knowledge of other enterprises (Olkonnen, Tikkanen, & Alajoutsijarvi, 2000). Research proved that SNs help in opportunity identification (Fernandez, Castilla & Moore, 2000), bringing new innovation in the product and process (Burt, 1987), getting resources and information (Uzzi, 1997), developing and implementing strategic plans (Zoilo, Reuer, & Singh, 2000), easy access to social resources embedded within a network (Jarillo, 1989), achieving economies of scale (Julien, 1993) and ultimately the desired level of SED. However, in-depth literature has shown that there is very limited work on SNs for explaining enterprise development contextualising SMEs of Pakistan. Explicit research is required.
During the past few decades, researchers from developed countries have paid special attention on SED of SMEs and argued that SED can be determined by SNs (Moore & Manring, 2009), MO (Matsuno, Mentzer, & Özsomer, 2002), and EO (Madsen, 2007). These antecedents of SED have been investigated separately and a comprehensive model is required that can present the simultaneous interaction of MO and EO in the relationship of SNs and SED in the SMEs sector. To fill up this gap, the objective of this study is to evaluate empirically the relationship between SNs and SED. The study also evaluated the moderated role of EO as mediated by MO in the afore-mentioned relationship. The findings of this study can be utilized by SMEs for achieving sustainability.

The paper begins with an introduction section followed by the hypothesis. The next section discusses the detailed research methodology applied in the study. Detailed description of the statistical analysis is provided in the subsequent section of methodology. In the last section conclusion and recommendation are discussed.

2. Hypothesis Development

2.1. Social Networks and Sustainable Enterprise Development

A group of interconnected businesses and individuals who essentially share resources and ideas are known as SNs (Greve & Salaff, 2003). According to Phelps, Heidl, and Wadhwa, (2012), it is a social phenomenon among different social interdependent entities. SNs are made up of social actors and the set of ties between them. SNs are important for the survival and growth of a firm as firms are no longer self-sustained units (Terjesen, Bosma, & Stam 2016). Uzzi, (1997) advocates that entrepreneurs use SNs for acquiring resources, information, support, targeting opportunities, knowledge and advice relating to the market. On the other side, SNs also facilitate in creating an environment where members of the network can learn from each other and thus contribute to an enterprise’s sustainable development (Jarillo, 1989). Several studies have proved that SNs are important for growth and the sustainability of an organisation (Chell & Baines, 1998; Greve, 1995; Jenssen, 2001). Similarly, SNs are also an important component for SMEs survival and growth. Based on these arguments the following hypothesis was formulated:

\[ H_1: \text{There is a positive relationship between social networks and sustainable enterprise development.} \]

2.2. Mediating role of market orientation in the association of social networks and sustainable enterprise development

Modern market orientation (MO) revolves around the concept of how customer needs are satisfied by the firm (Kirca, Bearden & Jayachandran, 2005). According to Jaworski and Kohli (1993), MO is the implementation of marketing concepts. Marketing concepts revolve around
offering superior customer value (Mahmoud & Hinson, 2012). The MO of the enterprise is its internal capability that enhances the acceptability of firm’s product in the market. Thus, it helps in achieving higher profit. Thus, it can help result in achieving sustainable enterprise development (Ellis, 2000; Menguc & Auh, 2006). On the other hand, SNs help firms in understanding the needs of customers and provide access to needed resources for meeting customers’ needs at profit. Thus, strong SNs provide a platform to enhance the mechanism of MO (Zhou, Wu, & Luo, 2007). Therefore, MO should act as a mediator in the relation between SN and SED. Founded upon these arguments, the following hypothesis was formulated:

H2: The relationship between social networks and sustainable enterprise development is mediated by market orientation.

2.3. Moderating role of entrepreneurial orientation in the relationship of social networks and sustainable enterprise development

EO is the willingness to form a new venture (Kumar, 2013). EO includes an entire set of procedures, techniques, decision making styles and practices that are utilised by management to ascertain novel ventures. EO entails definite attributes including inclination to operate autonomously, readiness for establishing something innovative (novel), risk taking; propensity of being aggressive to competitors, as well as pro-activeness in response to opportunities in the market (Lumpkin & Dess, 1996; Shah et al., 2019). EO is the process of strategy formulation that supports firms in innovation processes, adaptation of pro-active strategies along with risk taking in order to gain a competitive edge (Khan et al., 2021; Stam & Elfring, 2008). From an organisational perspective, EO is described as the attitudes (risk-taking) and behaviours (innovativeness and pro-activeness) of organisational members (Rutherford & Holt, 2007). Researchers have argued that the association among social networks and sustainable enterprise development is affected by different variables including entrepreneurial orientation (Rootes, 2006; Walter, Auer, & Ritter, 2006). SNs help in identifying opportunities and MO guides the firm in formulating strategy and capturing the opportunity. According to Wheeler et al., (2005), entrepreneurial orientation further strengthens the relationship between social networks and sustainable enterprise development. Thus, when MO is added in the relationship of SNs --> SED, it further strengthens the relation. Based on these arguments, the following hypothesis was developed:

H3: The relationship between social networks and sustainable enterprise development is moderated by entrepreneurial orientation.

3. Theoretical Framework

Founded on a detailed literature review, the theoretical model of this study is presented in figure 1.
4. Research methods

4.1. Sampling and data collection

In this study, we employed a cross-sectional design to test the hypothesised model. A sample of owner/managers from SMEs is drawn for the empirical analysis of this study. To accomplish the objective of this study, data was gathered utilising questionnaires from the sample of SME owners and managers. The sample for the existing study was selected from the list of SMEs registered with SMEDA (Small and Medium Enterprise Development Authority), and the Federation of Pakistan Chambers of Commerce and Industry (FPCCI).

Data was gathered during the period of June 2019 to March 2020. We also calculated a power analysis to estimate the appropriate sample size required for statistically significant results. According to Wolf, Harrington, Clark and Miller (2013), a minimum 450 sample size is required to check the intricate mediation models. Primarily, a total of 651 owner/managers of SMEs in Pakistan were approached. For that reason, we acquired the services of five research assistants for the collection of data from five different cities of Pakistan (Sialkot, Gujranwala, Faisalabad, Lahore, and Haripur).

In the six-month data collection process, only 503 questionnaires were received, thus the response rate was 77%. Out of the received responses, only 467 were complete in all respects and were considered for analysis.
4.2. Measurement

4.2.1. Social Networks

The 14-items scale adapted from Inkpen, and Tsang (2005) was used to measure the construct of social networks. Consistent with the work of Inkpen, and Tsang (2005), we adapted the dimensions of social networks i.e. structural dimension, cognitive dimension, and relational dimension, for the study. The structural dimension was measured through 5 items on 5-point Likert scale. The cognitive dimension was measured through 4 items on a 5-point Likert scale. The relational dimension was measured using 5 items. Single additive index was developed to measure social networks that generated Cronbach’s $\alpha$ coefficient value of 0.85.

4.2.2. Market Orientation

Market orientations were measured through a 9-item scale developed by Morgan, Anokhin, Kretinin, and Frishammar, (2015). Study computed Factor analysis for the items adapted for the measuring of market orientation, loaded on one factor that accounted for 51.67% of the variance. Cronbach’s $\alpha$ coefficient value for these items was 0.81.

4.2.3. Entrepreneur Orientation

The theoretical development of the measure of entrepreneur orientation was adopted from Le Roux and Bengesi, (2014). Consistent with the work of Le Roux and Bengesi, we adopted three dimensions of entrepreneur orientation including innovativeness, pro-activeness and risk taking.

Innovativeness was measured by 3 items adapted from Le Roux and Bengesi, (2014) and generated an alpha vale of .81. Pro-activeness was measured by 3 items adapted from Le Roux and Bengesi, (2014) and its alpha value = .84. Risk taking was measured by 3 items adapted from Le Roux and Bengesi, (2014) and its alpha value = .83. Finally, we created an additive index to reflect a single overall measure of the entrepreneur orientation. The single measure of entrepreneur orientation generated an alpha reliability of .88.

4.2.4. Sustainable Enterprise Development

Dependent variable sustainable enterprise development was measured utilising a 17- item scale established and utilised by Paulraj (2011). Consistent with the work of Paulraj (2011), we adopted three dimensions of sustainable enterprise development including the social aspect of organisational development, the ecological aspect of organisational development and the economic aspect of organisational development used for sustainable enterprise development.
The social aspect of organisational development was measured by 5 items adapted from Paulraj (2011), and generated an alpha value of 0.78. Ecological aspects of organisational development was measured by 7 items adapted from Paulraj (2011) and its alpha value was 0.82. The economic aspect of organisational development was measured by 5 items adapted from Paulraj (2011), and its alpha value was 0.85. Finally, we created an additive index to reflect a single overall measure of sustainable enterprise development. The single measure of sustainable enterprise development generates an alpha reliability of 0.91.

4.2.5. Controlled variable

Several factors related to SMEs and study respondents were utilised as controlled variables in order to better estimate the impact of independent, mediating, moderating variables on the dependent variable. Demographic factors includes age group, qualification; marital status and experience were taken as controlled variables on the basis of previous research. The age of the respondents were measured in number of years. Code of 0 for married and 1 for unmarried was used. Four dummy variables post graduate degree, bachelors, intermediate and high school level or less was used to measure qualification of the respondents. For the job experience of the respondents, a code of 1 for 1 to 5 years, 2 for 6 to 10 years, 3 for 11 to 15 years, 4 for 16 to 20 years, and code of 5 for more than 20 years, was used.

5. Data Analysis and Results

To analyse the collected data, descriptive statistics, correlation statistics, and hierarchical regression were utilised. In order to verify the mediating role, this study considered two tests: PROCESS Macro (Normal Test Theory) recommended by Preacher and Hayes (2008) and the Baron and Kenny approach (causal steps approach). Furthermore, multiple hierarchical regressions analyses were used to verify the moderating role.

5.1. Confirmatory factor analysis (CFA)

Confirmatory factor analysis (CFA) was considered to evaluate the scale validity used in this research with AMOS version 23. The construct validity was tested using convergent and discriminant validity. Convergent validity was evaluated through composite reliability (CR) and average variance extracted (AVE). Convergent validity was confirmed. Results of CR were greater than the threshold level (CR > .70). Similarly, the results showed that the value of AVE was greater than the cutoff level (AVE > 0.50) and (CR > AVE). Results showed that square roots of AVE were greater than the correlation coefficients of other constructs. The results of the standardised loadings (SL), average variance extracted (AVE), composite reliability (CR) and t-values are depicted in Table 1.
To check overall model fit and construct validity several indicators were used. Four distinctive models with different configurations were verified. The single-factor model combines social networks, market orientation, entrepreneur orientation and sustainable enterprise development into one factor ($\chi^2 = 128.25; df = 113$ $p < .001$; SRMR = .17; GFI = .86 and CFI = .84). The two-factor model combines social networks and market orientation into one factor and sustainable enterprise development as the second factor ($\chi^2 = 125.11; df = 109; p < .001$; SRMR = .09; GFI = .90 and CFI = .88). The three-factor model consists of three factors i.e. social networks and market orientation into one factor, entrepreneur orientation into the second factor as well as sustainable enterprise development into the third factor. ($\chi^2 = 140.21; df = 116; p < .001$; SRMR = .08; GFI = .90 and CFI = .88). The four-factor model consists of four factors i.e. social networks, market orientation, entrepreneur orientation and sustainable enterprise. The outcomes of CFA relating to the four-factor model shows data best fits ($\chi^2 = 144.21; df = 118; p < .001$; SRMR = .07; GFI = .92 and CFI = .90) as the values of $\chi^2$, $df$, RMSEA, CFI, and GFI, which rationally met the threshold values. The acceptable value of CFI and GFI is equal to or above 0.90 as suggested by Hu and Bentler, (1999) and was 0.90 and 0.92. The RMSEA value was 0.07, while the recommended score is 0.08 or less as suggested by Brown and Cudeck (1993).

5.2 Descriptive analysis

Table 2 depicts the values of mean, standard deviation (SD) and correlation among research variables. Descriptive statistics suggests that the average respondent reported the highest value for sustainable enterprise development. Means and standard deviation of the respondent sample for market orientation with entrepreneur orientation is also high. The average respondents’ age was 30.66 years, and approximately 90% respondents were married. The value for correlation coefficient of study variables were also depicted in Table 2. The results confirmed the significantly positive relationships among study constructs. The statistical outcomes approved the association among social networks and sustainable enterprise development (0.22**), social networks and market orientation (0.36**), market orientation and sustainable enterprise development.
development (0.52**). Additionally, the mediating effects can be evaluated as suggested by Baron and Kenny (1986).

Table 2  
Descriptive statistics and correlation  

<table>
<thead>
<tr>
<th>(Variables)</th>
<th>(M)</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job experience</td>
<td>1.8</td>
<td>.54</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>30.66</td>
<td>12</td>
<td>.12*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td>0.08</td>
<td>.27</td>
<td>-.02</td>
<td>.04</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualification</td>
<td>2.1</td>
<td>.71</td>
<td>.01</td>
<td>.05</td>
<td>.08</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SN</td>
<td>3.3</td>
<td>.60</td>
<td>.02</td>
<td>.06</td>
<td>-.05</td>
<td>.06</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO</td>
<td>3.7</td>
<td>.78</td>
<td>.03</td>
<td>.01</td>
<td>-.05</td>
<td>.04</td>
<td>.36**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SED</td>
<td>3.9</td>
<td>.88</td>
<td>-.05</td>
<td>.04</td>
<td>-.07</td>
<td>.07</td>
<td>.22**</td>
<td>.52**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>EO</td>
<td>3.6</td>
<td>.54</td>
<td>-.06</td>
<td>.07</td>
<td>.03</td>
<td>.08</td>
<td>.30**</td>
<td>.46**</td>
<td>.31**</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note:* (* p < 0.05), two tailed; (**) p< 0.01), two tailed 
SN (Social networks), MO (Market orientation), SED (Sustainable enterprise development), EO (Entrepreneur orientation).

5.3 Mediation Analysis

Primarily, the Baron and Kenny (1986) technique known as causal steps approach was utilised to evaluate the hypothesis of the study along with confirming the mediating effects of market orientation. Table 3 and Table 4 depict the outcomes of the mediation analysis.

Simple and multiple regression analysis was undertaken to approve the four steps suggested by Baron and Kenny (1986). The first step was approved as the outcomes shown in Table 3 reveals that social networks are positively associated to sustainable enterprise development ($\beta = 0.22$, t value = 6.37, $p < 0.00$). Founded on these outcomes, study hypothesis 1 is accepted. The second step was also confirmed and approved because social networks are positively associated to market orientation ($\beta = 0.36$, t value = 11.88, $p < 0.00$). The third step for mediating effects suggested by Baron and Kenny was also approved and confirmed because market orientation is positively associated with sustainable enterprise development ($\beta = 0.52$, t value = 16.14, $p < 0.00$). Founded on these results, study hypothesis 3 is approved. The outcomes of simple regression affirm the steps suggested by Baron and Kenny (1986).
Table 3
Regression with MO as mediator and SED as dependent variable

<table>
<thead>
<tr>
<th>Independent constructs</th>
<th>MO</th>
<th>SED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(R²)</td>
<td>(S.E)</td>
</tr>
<tr>
<td>SN</td>
<td>0.17</td>
<td>0.043</td>
</tr>
<tr>
<td>MO (Mediator)</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: SN (Social networks), MO (Market orientation), SED (Sustainable enterprise development).

Table 4 entails the statistical outcomes of multiple regression analysis that was utilised to verify the fourth condition suggested verifying the mediating effects. Model-1 suggested the effects of independent variables upon the dependent variable. In Model-2, the study control variables were also added. Model-2 also depicted the effects of the independent construct on dependent constructs after the addition of control variables. In model-3 the mediating variable was also added. Mediating effects were computed in model-3.

Table 4 encompasses the information representing the effect of SNs→MO→SED. Model-1 along with Model-2 was utilised to suggest the outcome of the effect of social networks upon sustainable enterprise development including and without including control variables. In both models, social networks are related significantly to sustainable enterprise development (B= 0.22** and SE= 0.052) as well as (B= 0.24** and SE= 0.052). Model-3 evaluates the mediating effects of market orientation in suggesting the relationship among sustainable enterprise development and social networks. After the inclusion of market orientation in the model, the coefficient of social networks depicts insignificant effects on sustainable enterprise development (B= 0.57** and SE= 0.036) as well as (B= 0.09 and SE= 0.49). As a whole, these outcomes show that market orientation fully mediates the effect of social networks on sustainable enterprise development. Thus, Hypothesis 2 is strongly supported.
Table 4
Mediating role of MO in the relationship of SN and SED

<table>
<thead>
<tr>
<th></th>
<th>(Model 1)</th>
<th>(Model 2)</th>
<th>(Model 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \beta )</td>
<td>( SE )</td>
<td>( \beta )</td>
<td>( SE )</td>
</tr>
<tr>
<td>Main Independent Variable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SN</td>
<td>0.22**</td>
<td>0.24** (0.052)</td>
<td>0.09 (0.49)</td>
</tr>
<tr>
<td></td>
<td>(0.052)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job experience</td>
<td>0.08 (0.078)</td>
<td>0.033 (0.066)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.10* (0.042)</td>
<td>0.09* (0.035)</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td>0.01 (0.111)</td>
<td>0.02 (0.092)</td>
<td></td>
</tr>
<tr>
<td>Qualification</td>
<td>0.08 (0.044)</td>
<td>0.11* (0.036)</td>
<td>0.57** (0.036)</td>
</tr>
<tr>
<td>Mediating variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: ** p < .001; * p < .01 (two-tailed test)
SN (Social networks), MO (Market orientation), SED (Sustainable enterprise development), EO (Entrepreneur orientation).

5.4. Mediating analysis through normal test approach

Preacher and Hayes (2008) suggested that Baron and Kenny (1986) techniques entails the occurrence of mediation irrespective of the size and strength of the indirect effects. This research used normal test theory for determining the significance and size of the indirect effects of social networks upon sustainable enterprise development. Statistics for direct, indirect and total effects are provided by normal test theory (Preacher & Hayes, 2008).

The outcomes of Normal Test Theory i.e. \( Z = 3.04, p < 0.00 \) established the indirect effect \( 0.38 - 0.05 = 0.33 \) of social networks on sustainable enterprise development, which approved study hypothesis 2.

5.5. Moderating analysis

To check the moderating effect, the study used hierarchical regression. Step-1 along with step-2 presented in Table 5 entails information related to the study base model. Furthermore, step-3 involves information regarding the moderating effects of entrepreneur orientation on the association of social networks and sustainable enterprise development. Table 5 also entails the coefficient of interaction terms i.e. social networks’ market orientation, which suggests that market orientation affects positively the link between social networks and sustainable enterprise development (\( \beta = .26, p < .01 \)).
Table 5
Multiple hierarchical regressions results

<table>
<thead>
<tr>
<th>Factor</th>
<th>(Step 1)</th>
<th>(Step 2)</th>
<th>(Step 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Moderating role of entrepreneur orientation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job experience</td>
<td>-0.038</td>
<td>-0.010</td>
<td>-0.003</td>
</tr>
<tr>
<td>Age</td>
<td>-0.027</td>
<td>-0.023</td>
<td>-0.017</td>
</tr>
<tr>
<td>Marital status</td>
<td>-0.004</td>
<td>0.004</td>
<td>0.007</td>
</tr>
<tr>
<td>Qualification</td>
<td>-0.032</td>
<td>-0.036</td>
<td>-0.045</td>
</tr>
<tr>
<td>Social networks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneur orientation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social networks x entrepreneur orientation</td>
<td>.16**</td>
<td>.18**</td>
<td>.26**</td>
</tr>
<tr>
<td>R²</td>
<td>.009</td>
<td>.191</td>
<td>.198</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.003</td>
<td>.159</td>
<td>.175</td>
</tr>
<tr>
<td>Δ R²</td>
<td>.007</td>
<td>.163</td>
<td>.028</td>
</tr>
<tr>
<td>Δ F</td>
<td>3.182</td>
<td>69.83</td>
<td>16.18</td>
</tr>
</tbody>
</table>

Additionally, slope analysis was conducted as per the recommendations of Aiken et al. (1991) and Figure 2 represents the slope analysis results. The results depicted in Table 5 as well as in Figure 2 suggests that SN supports SED with higher EO; on the other side, the effect of SN on SED is lower when EO is low. Based on these statistical outcomes H3 of the study was approved.

Figure II Slope Analysis for SN x EO on sustainable enterprise development
6. Discussion and Conclusion

Sustainable enterprise development is considered an important indicator, a promising avenue, and a key aspect of organisational research (Bos-Brouwers, 2010). This research explains how social networks support SMEs in achieving sustainable enterprise development and how this relationship is fostered by market orientation and entrepreneurial orientation. Entrepreneurial orientation as well as Market orientation is key for enterprise development, and thus have been given particular attention in the research. The findings of this study entail applicable contributions to the stream of organisational and sustainability research.

The study tested three hypotheses exploring the relationship between SN, SED, MO, and EO. From H1, it is proven that social networks are important for sustainable enterprise development. This result is consistent with the result of Moore and Manring (2009) and Wheeler, McKague, Thomson, Davies, Medalye, & Prada (2005). The results confirmed that the structural dimension, cognitive dimension, and relational dimension of social networks are important for sustainable enterprise development in the SMEs sector of Pakistan. However, the study also highlighted the mediating result of market orientation in the relationship of social networks and sustainable enterprise development. The findings illustrate that market orientation fully mediates the effect of social networks on sustainable enterprise development. It proves that SNs results in sustainable enterprise development and this relation in positively catalysed by customer orientation, competitor orientation and inter-functional coordination. Moreover, entrepreneurial orientation moderates the relationship between social networks and sustainable enterprise development. As entrepreneurial orientation was measured using innovativeness, pro-activeness and risk-taking capabilities of entrepreneurs; the results explain that the presence of innovativeness, pro-activeness and risk taking traits among entrepreneurs are important for sustainable enterprise development. The results of this study are unique and valuable as there are no existing studies which evaluated the impact of social networks on sustainable enterprise development along with mediated role of market orientation and moderating role of entrepreneurial orientation.

6.1 Theoretical Implications

This research had three objectives: first, to examine the effects of social networks upon sustainable enterprise development; second, to evaluate the mediating role of market orientation in the association of social networks and sustainable enterprise development; and third, to explore the moderating effects of entrepreneurial orientation on the association of social networks and sustainable enterprise development. Theoretical contributions of this research for the SMEs sector are notable. The most significant addition of this study is that in spite of measuring SMEs performance, it focuses on sustainable enterprise development with its dimensions of social, environmental and economic enterprise development. In prior studies of SMEs in Pakistan, only market performance or financial performance was measured while, the element of measuring social, environmental and economic enterprise development was
missing from the literature. The second contribution of the research is that we proposed a conceptual model for evaluating the impact of social networks on sustainable enterprise development along with the mediating effects of market orientation and the moderating effects of entrepreneurial orientation. The proposed model is also empirically tested. No existing researches proposed any model for assessing the impact of social networks, market orientation, and entrepreneurial orientation on sustainable enterprise development for SMEs sector. Most of the prior studies on SMEs focused on other organisational developmental aspects like profitability (Bulak, Turkyilmaz, Satir, Shoaib, and Shahbaz, 2016), reputation (Whiting, Hansen, & Sen, 2017), and growth (Beck, Demirguc-Kunt, & Levine, 2005). However, less consideration has been given to sustainable enterprise development. Thirdly, this study empirically proved that social networks are vital for the sustainable enterprise development of SMEs. Handling problems like shortage of funds (Bell, & Loane 2010), access to international market (Alexander and Warwick, 2007), low production (Zulkifli-Muhammad, Char, bin Yaso, & Hassan, 2009), adaptation of state of art technology (Javed, Yasir & Majid, 2018), lack of managerial capabilities (Gray, 2006), lack of infrastructure (Mutula & van Brakel, 2006) and lack of government support (Doh & Kim, 2014) etc., social networks among SMEs can prove to be a valuable tool.

6.2 Practical Implications

This study also has a variety of practical implications. First, this research clearly suggests that SMEs should focus on establishing social networks and blend it with market and entrepreneurial orientation for achieving sustainable enterprise development. The aforesaid three factors, when adopted by SME sector, would result in achieving social, environmental and economic sustainability, which is more important than short-term financial gains.

Second, the study recommends that social networks are a strong predictor of social, environmental, and economic sustainability. Social networks create synergies for achieving enterprise sustainability (Crick & Spence, 2005), which ultimately result in high value creation (Moore & Manring, 2009), innovation (Bos-Brouwers, 2010), new markets (Teece, 2007), the development of sustainable products (Maxwell & Van der Vorst, 2003), resilience, and competitiveness (Gunasekaran, Rai, & Griffin, 2011). Thus, the management of SMEs should establish and promote social networks.

Third, the research shows that market orientation mediates the relationship of social networks with sustainable enterprise development. In this research, the notation of market orientation was actually representing the competitor orientation, customer orientation, and inter-functional coordination. Thus, for fostering the pace of sustainable enterprise development for SMEs, management should focus on all the three elements of market orientation (Vorhies & Morgan, 2005). The relationship between IV and DV is also moderated by entrepreneurial orientation. Thus, the dimensions of EO that are pro-activeness, innovativeness, and the risk taking capabilities of entrepreneurs are also essential as they enhance the speed with which sustainable
development for SMEs is achieved. Therefore, management should also focus on these dimensions to achieve sustainable enterprise development.

6.3. Limitations and future research

Beside its significant contributions to literature and for managers, this research has various limitations that can be considered as new directions for future research. Firstly, this study investigated the relationship only for SMEs and not for large organisations. Therefore, the option of investigating the same model for large organisations is available where the issue of sustainability is more prominent. The study of social networks and sustainable enterprise development in the presence of entrepreneurial orientation and market orientation for larger organisations will open new corridors for further research that will test the current study model in different research settings. Cross-industry research will also validate the current study model.

Second, the model introduced in this study can be made more comprehensive by adding more variables that could have an effect on sustainable enterprise development as e.g. sustainable marketing practices, and sustainable HR practices etc. This will enhance the comprehensiveness and strength of the model. Along with this, further research can also be conducted using some other instrument as this research used an organisational-level construct to gather empirical data. In addition, this study was cross-sectional. Further investigation can also be conducted using longitudinal design for testing the causal effect among these variables. Lastly, the study utilised self-reported questionnaires that can raise the issue of common method bias. Data collection at different points of time from respondents might eliminate the issues relating common method bias.
REFERENCES


