Leading Innovation among Tourism Small and Medium Enterprises: Examining the Mediating Role of Climate for Innovation

ABSTRACT

Purpose – This study investigated the effects of empowering leadership, directive leadership, and initiating structure on innovation in small and medium enterprises (SMEs) and examined the mediating role of climate for innovation on those relationships.

Design/methodology/approach – Applying structural equation modelling, the study empirically tested the model on a sample of 330 employees from tourism SMEs in Vietnam.

Findings – Results indicated that climate for innovation mediated the relationship between empowering leadership and innovation and also initiating structure and innovation. Whereas empowering leadership was found to have a negative direct influence on innovation, directive leadership was unrelated to innovation.

Research limitations/implications – The results of this study contribute to the literature by expanding the existing research on SME innovation, assessing the effect of diverse leadership styles and a climate for innovation on the innovation performance of SMEs. The findings enrich the literature by indicating the contribution of empowering leadership, directive leadership and initiating structure on encouraging innovation in SMEs.

Practical implications – When leading subordinates in the SME context, leaders who have a clear understanding of the effect of empowerment, direction and initiating structure can optimally seek to stimulate innovation. These leadership approaches influence employees’ task, interpersonal and role related processes that shape a climate for innovation.

Originality/value – The novelty of this study is that it examines the differential influences of empowering leadership, directive leadership and initiating structure on innovation and the mediating role of climate for innovation on these relationships.

Keywords – Innovation, Empowering Leadership, Directive Leadership, Initiating Structure, Climate for Innovation, Tourism SMEs

Paper type – Research Paper
1. Introduction

Innovation is important for sustaining organizational effectiveness, competitive advantage and the economy in general (Slåtten & Mehmetoglu 2014). Organizations seek to be competitive through innovation and continuous improvement of products, processes or services in a competitive market (De Dreu & West 2001). According to Hart et al. (2002), innovation is a form of prosocial behavior that has an essential impact on the success of an organization. Typically, innovation is prioritized in organizational strategy to build competitive advantage and guarantee sustained economic survival (Hyland & Beckett 2004). Researchers have identified a range of factors affecting the innovation capability of firms; amongst these are leadership (Chan, Liu & Fellows 2014) and organizational climate (Shanker et al. 2017), which are the focus of this study.

Leadership remains one of the most consequential contextual influencers on employee creativity and innovation (Newman et al. 2018). A wealth of studies offer insights as to what and how leadership behaviors affect innovation. A number of leadership styles have been implicated in influencing innovation such as transformational, transactional, leaders-member exchange and authentic leadership (Elrehail et al. 2018; Howell & Avolio 1993; Hughes et al. 2018; Wilson-Evered, Härtel & Neal 2001). Theoretically, leadership operates within various work conditions, relationships and contexts to enact behaviors to influence others to innovate. For example, leaders may distribute responsibilities to create autonomy or collaborative approaches; they may provide close and supportive direction and supervision of work. Contemporary leadership theories recognize a more complex relationship between the leaders’ approach and employees’ innovative response such that divergent styles of empowering leadership, directive leadership and initiating structure may be required (Gaudet & Tremblay 2017; Hoang, Wilson-Evered & Lockstone-Binney 2017; Lorinkova, Pearsall & Sims 2013). This study addresses the limited studies comparing different leadership approaches and reports the effect of three of these on innovation in SMEs.

To encourage innovation, an organizational climate for innovation creates the workplace conditions and processes for innovation to occur (Isaksen & Akkermans 2011). Schneider, Ehrhart and Macey (2013, p. 362) described organizational climate as “the shared perceptions of and the meaning attached to the policies, practices, and procedures employees experience and the behaviors they observe getting rewarded and that are supported and
expected”. An organizational climate that supports innovation is conceptualized as practices and norms that motivate employees to take initiative, and implement new ideas, processes, or products that benefit organizations (West et al. 2003). Employees’ perceptions of a positive climate, which provides easy accessibility to organizational resources, mediates the effects of leadership on employee creative performance (Scott & Bruce 1994). However, the indirect effect of empowering leadership, directive leadership and initiating structure on innovation mediated through climate for innovation has received limited if any attention and warrants further study (Sims, Faraj & Yun 2009).

Innovation has long been recognized as important for the development of firms of all sizes (Tucker 2002). Though a substantial number of theoretical and empirical studies have identified the link between leadership and innovation in large enterprises, few published works have sought to study how different approaches result in innovation in the SME context (Jaiswal & Dhar 2015; Kenny, B & Reedy 2006; Muenjohn & McMurray 2016). SMEs, particularly in developing economies, not only contribute to but also drive innovation outcomes in terms of social advances (Allocca & Kessler 2006; Salavou, Baltas & Lioukas 2004). Despite smaller firms having less resources, they are considered key engines for innovation and technological development (Clark & Douglas 2014). Notwithstanding being disadvantaged due to economies of scale, scarcer resources, smaller market size and more vulnerability to market changes compared to large companies (Cagliano, Blackmon & Voss 2000; Tether 1998), many SMEs embrace innovation as central to their business model (Wikhamn, Wikhamn & Styhre 2016).

Drawing on the identified gaps in the literature and the unique characteristics of SMEs, the present study develops a conceptual model in which empowering leadership, directive leadership and initiating structure are related to climate for innovation and implemented innovation in the SME context. As part of the model, we also examined the mediating role of climate for innovation in determining how these three leadership styles influence innovation. This study contributes to current knowledge and practice by expanding the existing research on SME innovation, assessing the effect of diverse leadership styles and climate for innovation on the innovation performance of SMEs and providing implications for SMEs to enhance their innovation capability. The results also offer substantive insights into scholarly debates on leadership and innovation by revealing findings from SMEs in Vietnam; an expanding and dynamic economy in the Asia-Pacific region.

2. Development of the Study Hypotheses
2.1. Leadership and innovation in SMEs

Empowering leadership and innovation

Innovation comprises three interrelated activities: 1) idea formation, related to the generation of new ideas and the seeking of new methods, techniques, or instruments to advance knowledge and practice; 2) idea promotion that seeks to support innovative ideas and acquire approval for them; and 3) idea realization, consisting of transforming innovative ideas into realizable applications (Janssen 2000; Kanter 1988; Scott & Bruce 1994). Based on different dimensions (i.e., type, magnitude, and form), innovation can be classified as either: (1) technological and administrative innovation; (2) radical exploratory and incremental exploitative innovation; or (3) product and process innovation (Rosenkopf & Nerkar 2001). In this article, innovation is classified in relation to its form and focus on product and process advances (Villaluz & Hechanova 2018). The terms innovation and creativity are often used interchangeably due to the similarities and connection between the two concepts. We recognize the view of Hughes et al. (2018) and Amabile (1996) that creativity and innovation in the workplace are two distinct but closely related concepts. “Creativity is generally defined as the production of novel, useful ideas or problem solutions. It refers to both the process of idea generation or problem solving and the actual idea or solution” (Amabile et al. 2005, p. 368). With the focus of this study is on innovation, being the implementation of novel solutions to problems, this study is distinct from many studies that have researched creativity in relation to leadership.

Empowering leadership has been credited with boosting innovation and autonomy, resulting in better team performance (Chow 2017). Scholars (Hoch 2013; Zhu & Chen 2016) have found similar results in terms of a positive relationship between empowering leadership and innovation at both individual and team levels. Empowering leadership focuses on leader behaviors related to goal orientation and encouraging initiative and motivates the potential of employees, as well as supporting their self-efficacy (Kim & Beehr 2017).

Due to the flat structure of, and the close leader-subordinate relationship in SMEs, empowering leadership theoretically offers the enabling mechanisms to encourage innovation (Arnold et al. 2000; Sharma & Kirkman 2015). SMEs usually have minimal layers of operational structure, a small number of staff, and bounded business activities (Mintzberg 1979). A study of SMEs in the Malaysian manufacturing sector found that empowering leadership positively related to knowledge sharing in SMEs (Eze et al. 2013). These scholars
argued that employees in SMEs are motivated to share their knowledge and learn from co-workers when they receive reasonable recognition from their empowering leaders, allowing them to become more innovative (Eze et al. 2013). Similarly, findings from SMEs in the electronics and engineering sectors indicate that empowering leadership was significantly associated with innovation (O'Regan, Ghabadian & Sims 2006).

Cheong et al. (2016) identified that greater levels of empowering leadership does not always result to better outcomes. In particular, empowering leadership has the potential to have two faces, enabling and burdening for subordinates. Despite this potential criticism, much of the available empirical evidence indicates that empowering leadership is positively associated with employee innovative behaviors and team innovativeness across a range of settings. At the individual level, empowering leadership directly affects innovative behaviors (Hoch 2013) and at team level, Zhu and Chen (2016) demonstrated that group-focused empowering leadership was crucial for encouraging team innovativeness and performance through intra-team collaboration. Based on the foregoing evidence, this study proposes that:

H1a: Empowering leadership positively relates to innovation in SMEs.

**Directive leadership and innovation**

Directive leadership is necessary for achieving short-term goals and when leaders are more experienced than subordinates (Sims, Faraj & Yun 2009). Existing literature on directive leadership has mainly focused on its impacts on individual performance and employee behaviors (Lorinkova, Pearsall & Sims 2013; Martin, Liao & Campbell 2012). Little is known about the impact of directive leadership on innovation.

Research suggests that highly directive leadership helps teams to achieve improved in-role performance, compared to those subjected to other leadership behaviors (Somech 2005). Hogan, Curphy and Hogan (1994) argued that directive leaders tend to encourage teams to reach challenging goals. West et al. (2003) and Lorinkova, Pearsall and Sims (2013) suggested that directive leadership has a role to play in setting up the early processes and procedures for innovation and creativity. On the other hand, innovation studies report that high levels of authoritative or controlling behaviors from leaders likely have negative effects on employees’ innovative behaviors (Amabile et al. 2004). Directive leadership, when similar to aversive leadership, leads to low flexibility and less innovation amongst employees (Sims, Faraj & Yun 2009). However, some employees prefer direction over empowerment so an individual follower’s preferences likely affects their interaction with their leader (Cruz, Henningsen &
Smith 1999; Sims, Faraj & Yun 2009). Directive leaders can tend to reduce team members’ confidence (Peterson 1997), which in turn prevents them from being innovative (Parker & Collins 2010). These mixed research findings suggest on balance that directive leadership discourages followers’ innovative behaviors and may decrease firm innovation, though it might have a place in setting structures for innovation and when role clarity is required to deliver urgent and swift action. Based on this empirical evidence, it is postulated that directive leadership will be negatively associated with innovation in SMEs in the context of Vietnam. Therefore, notwithstanding possible contrasting effects, we propose that:

**H1b: Directive leadership negatively relates to innovation in SMEs.**

*Initiating structure and innovation*

Initiating structure concerns the extent to which leaders are oriented toward attainment of objectives; define and organize their own role and those of their subordinates to attain these objectives; and establish precise methods and clear communication channels (Gaudet & Tremblay 2017; Judge, Piccolo & Ilies 2004). A meta-analysis by Judge, Piccolo and Ilies (2004) and a study by Burke et al. (2007) offer a different view of initiating structure, suggesting it is positively linked to group or team productivity. Initiating structure is also highlighted as an element that enhances work outcomes and effectiveness at individual and team levels (Gaudet & Tremblay 2017).

The relationship between initiating structure and innovation has received some attention; by initiating structure (Neubert et al. 2008), a message is sent from leaders to employees that might encourage a prevention focus rather than a promotion focus as explained by regulatory focus theory (Higgins 1997). This theory posits that being goal-oriented with a promotion focus enhances growth, success and achievement, compared to a prevention focus, which preferences security, duty and obligation (Higgins 1997). The latter orientation is present when employees seek security, pay attention to losses or the fulfilment of obligations. This tendency predicts in-role performance and deviant behavior. Consequently, employees who are prevention focused tend to be more conservative and less innovative (Forster, Friedman & Liberman 2004; Zhou, Hirst & Shipton 2012). To the authors’ knowledge, no study has specifically examined the relationship between initiating structure and innovation in SMEs. Based on the link between employee creativity, autonomy and innovation, we hypothesize that:

**H1c: Initiating structure negatively relates to innovation in SMEs.**
2.2. Leadership and climate for innovation

There is empirical evidence to support the vital role of leadership in developing and shaping workplace climate (Amabile et al. 1996; Mumford et al. 2008). Climate is the shared perception of the policies and procedures of an organization and these are formulated and implemented by the vision and characteristics of leaders (Wilson-Evered, Härtel & Neal 2001). Scott and Bruce (1994) identified the effect of leader’s behaviors on organizational climate for innovation and demonstrated that the interaction between leaders and subordinates contributed significantly to perceived climate for innovation. Later, Jaiswal and Dhar (2015) similarly found that leadership contributed to promoting an innovative climate that stimulated creativity among employees. In sum, this body of research points to the importance of particular leader behaviors in encouraging innovation, including the leader’s transformational ways of leading, creating a supportive innovation climate and his/her ability to perform creatively.

Empowering leadership creates an environment where employees perceive they possess a degree of autonomy, have power in decision-making, feel less constrained by rule-bound aspects, and feel self-effective in enacting their work; combined, these features contribute to forming a climate for innovation (Amabile et al. 1996). In addition, Brunetto and Farr-Wharton (2007) proposed that important outcomes of empowerment, such as mutual trust and increased collaboration, are important factors for an innovation climate in SMEs. Empowered individuals have been shown to take more a proactive approach toward shaping and influencing their workplace climate (Spreitzer, Kizilos & Nason 1997). Therefore, we expect that:

H2a: Empowering leadership positively relates to climate for innovation in SMEs.

Directive leadership reinforces employees’ behaviors of adherence to rules and procedure, which is necessary to improve employee’s in-role performance (Somech 2005). Theoretically, directive leadership focuses on giving detailed guidance and excluding followers from decision-making processes (Lorinkova, Pearsall & Sims 2013). Directive leaders usually provide less freedom and autonomy to subordinates than that provided by empowering leaders. Although superiors’ directedness has been found to facilitate subordinates’ task accomplishment processes with specific directions, directive leadership tends to reduce individual creativity and discourage innovation (Lorinkova, Pearsall & Sims 2013; Martin, Liao & Campbell 2012). In this sense, employees are encouraged to strictly follow procedures and rather than facilitate open discussions around creative ideas (Somech 2005). As such, it is posited that:
H2b: Directive leadership negatively relates to climate for innovation in SMEs.

Leaders who initiating structure clarify for their subordinates what is required for task completion, define their expectations and emphasize consequences. In a climate developed by leaders who initiate structure, subordinates are aware of their behaviors that could be punished or rewarded (Neubert et al. 2008). Expressing new ideas can be therefore perceived as risky because it signals changes to the established organizational structure (Albrecht & Hall 1991). Mkdashi (1999) observed that freedom to break the rules is vital for employees to formulate new ideas and propose original solutions to problems. The aspects of a climate for innovation, including risk taking, debate, freedom and trust, are likely to contrast with the determinants and consequences of initiating structure, and strengthen the expectation that initiating structure has a negative influence on organizational climate (Shanker et al. 2017). Drawing on the foregoing findings, we hypothesized that:

H2c: Initiating structure negatively relates to climate for innovation in SMEs.

2.3. Climate for innovation and innovation

Theorizing and researching organizational climate is growing and a link between a climate for innovation and innovation has been established. Previous studies have demonstrated the role of climate for innovation as an intervening variable that influences innovation processes in organizations, to contribute to general organizational performance (Kuenzi & Schminke 2009). Hence, climate for innovation becomes a significant variable in the study of innovation and organizational performance (Schneider, Brief & Guzzo 1996). Isaken and Akkermans (2011) identified that firm innovation is dependent on a climate that supports innovation. Although individuals could generate creative and innovative ideas by themselves, their willingness to innovate was contingent on the climate in which they worked (Mumford & Gustafson 1988). Innovative organizations typically have a climate that supports innovation, which differentiates them from complacent organizations, based on the number of patents achieved, technology development, business strategies and success in introducing new products and services (Ekvall 2002). Therefore, it is reasonable to propose that climate for innovation will have a positive relationship with innovation:

H3: Climate for innovation has a positive relationship with innovation in SMEs.

2.4. Mediating role of climate for innovation
Behavioral research on the relationship between leadership and innovation (Liu, Liao & Loi 2012) has found that leaders create a climate for innovation through mobilizing organizational resources and motivating individuals to work toward creative outcomes (Jung, Chow & Wu 2003; Moghimi & Subramaniam 2013). The relationship between leadership and organizational climate has been investigated in terms of whether the effect is direct or indirect. The indirect effect of leadership on innovation exerts its influence through climate for innovation (Wang, P et al. 2013). Scott and Bruce (1994) observed that employees’ perceptions of a positive climate was characterized by easy access to organizational resources, which mediated the effect of leadership on employee creative performance. The existence of such a climate at the group level has been found to facilitate a competitive edge where leaders promote the creativity of their subordinates (Jaiswal & Dhar 2015).

There is extant empirical evidence for the mediating role of organizational climate on the relationship between empowering leadership and innovation. In the initial phases of team development, empowering leaders create shared learning and decision-making so the workplace climate enhances team members’ innovation and work performance (Lorinkova, Pearsall & Sims 2013). Zhang and Bartol (2010) synthesized theories of leadership, empowerment, and creativity using survey data from professional employees and their supervisors in a large information technology company in China. Their study found that a climate that enabled psychological empowerment mediated the relationship between empowering leadership and innovative behaviors. Therefore, it is hypothesized that:

H4a: Climate for innovation mediates the relationship between empowering leadership and innovation.

Few empirical studies have examined the mediating role of organizational climate on the relationship between directive leadership and innovation. However, evidence suggests that directive leadership, when authoritative and controlling, tends to discourage employee innovation and creativity (Martin, Liao & Campbell 2012). Directive leadership was found to contribute to formulating an ethical climate that resulted in better firm performance through increasing employees’ job satisfaction, effort and job performance (Mulki, Jaramillo & Locander 2009). Therefore, the nuanced effects of directive leaders on organizational climate might be associated with innovation – negatively rather than positively. Therefore, we expect that:
H4b: Climate for innovation mediates the relationship between directive leadership and innovation.

Both direct and indirect empirical evidence supports the intervening role of organizational climate on the relationship between initiating structure and innovation. Leaders who initiate structure are expected to establish a climate of mutual trust in which employees are more likely to implement schedules to achieve objectives (Fleishman & Harris 1962; Politis 2001). Conducting a study of 333 salespeople from a pharmaceutical company in North America, Mulki, Jaramillo and Locander (2009) identified that initiating structure was related to an ethical climate, which in turn affected job satisfaction and job performance. Another study of 484 retail employees indicated that initiating structure affected perceived organizational support, which in turn influenced organizational citizenship behaviors and turnover (Gaudet & Tremblay 2017). Taking these findings together, we expect that:

H4c: Climate for innovation will mediate the relationship between initiating structure and innovation.

The proposed relationships between the leadership styles, organizational climate for innovation and innovation are illustrated in Figure 1.
3. Methods

Study Context

The research was conducted in tourism SMEs in Vietnam which play an important role in the economy. SMEs make a significant collective contribution to the country’s economic development by representing 97% of companies, employing 51% of the labor workforce and producing approximately 40% of GDP each year (Nguyen, Nguyen & Hoang 2016; Phan et al. 2015). The tourism sector also makes a significant contribution to the Vietnamese economy (Tran & Nguyen 2018). According to World Travel and Tourism Council, the direct contribution of tourism to the Vietnamese economy in 2017 was 9.4% of GDP and 4.6% of total employment (World Travel and Tourism Council 2018) and is forecast to grow in both the short and long term (Martínez-Román et al. 2015). SMEs account for over 80% of Vietnamese tourism firms (Ministry of Culture Sports and Tourism 2014). In spite of the growing interest in empirical research on SME innovation, there is little in the way of empirical evidence that explains the impact of leadership behaviors on innovation in SMEs, particularly in the Asia-Pacific region (Bagheri 2017; Hirst et al. 2018).

Sample and Procedures

The data for this study were collected from employees of tourism SMEs in Hanoi, the capital city of Vietnam, where there is a high concentration of tourism companies (Ministry of Culture Sports and Tourism 2014). The language of the questionnaire was translated from English to Vietnamese and then again back to English by two bilingual experts to guarantee the translation quality (Brislin 1970). Tourism SMEs were contacted using an online public list and 37 of them agreed to participate in this study. Initially, the researcher contacted the CEO of each tourism company personally and delivered an information sheet about the study identifying of the need and significance of the research. If the CEO agreed to participate, they provided a list of their full-time and part-time employees for data collection purposes. By way of follow up, a member of the research team visited each company to explain the significance of the study and the survey procedures to all participants. The completed questionnaires were returned directly to the researcher by post or in person without the managers’ participation or direct knowledge of who participated.
Altogether, 400 questionnaires were delivered to the participants in person of which 349 were returned, giving a response rate of 87.3 per cent. However, 19 questionnaires were discarded due to missing data resulting in 330 useable questionnaires (82.5%).

Measures

Existing scales measuring the concepts of interest were used to create an employee survey. All items were measured on a five-point Likert response scale ranging from “1 = strongly disagree” to “5 = strongly agree.” The survey scales have been found to be reliable and valid in previous studies.

Five items were used to assess empowering leadership developed by Martin, Liao and Campbell (2012), which was adapted from Ahearne, Mathieu and Rapp (2005) and Arnold et al. (2000) including items such as “My supervisor gives employees the freedom to work on their own” (α = 0.82). A five-item scale adapted from Martin, Liao and Campbell (2012) was used to measure directive leadership (α = 0.89). A sample item included, “My supervisor checks to be sure employees follow proper procedures.” Initiating structure was assessed using a 15-item scale developed by Halpin (1957) (α = 0.83), which included items such as “My supervisor encourages the use of uniform procedures.”

To assess the climate for innovation, the 16-item climate for innovation scale developed by Scott and Bruce (1994) was adopted (α = 0.92). A sample item was “Creativity is encouraged here.”

Innovation was assessed using a 10-item scale which includes six product innovation items adopted from Paladino (2008) (α = .87) and four process innovation items adopted from Wang, CL and Ahmed (2007) (α = .79). Sample items include, “The quality of this new product is superior to that of our competitors,” and “We are constantly improving our business processes.”

Control variables. Following previous research (Chang, Bai & Li 2015), we controlled for several key variables deemed to be related to innovation, including gender, age, experience and education level.

4. Results
The hypothesized model was investigated using Structural Equation Modelling (SEM) with AMOS 24. A two-step analysis was adopted from Anderson and Gerbing (1988) to test the model. First, Confirmatory Factor Analysis (CFA) was conducted to investigate the convergent validity of the construct measures. Next, SEM was performed based on the measurement model to examine how the hypothesized model fit the data (Gyu Park et al. 2017). Items were averaged for empowering leadership, directive leadership, initiating structure, climate for innovation and innovation and each dimension was treated as a separate indicator in their corresponding constructs in the SEM analyses (Bianchi, Glavas & Mathews 2017; Gyu Park et al. 2017). The results of data analysis are presented below.

Descriptive statistics

The respondents’ profile is outlined in Table 1. Of note, among 330 respondents, 75.5% were female and 24.5% were male. This gender distribution reflects the female-male ratio (3:1) in the worker population of the Vietnamese tourism industry (World Bank 2011).

Table 1. Sample Characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Demographics (n=330)</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>249</td>
<td>75.5</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td>81</td>
<td>24.5</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-22</td>
<td></td>
<td>28</td>
<td>8.5</td>
</tr>
<tr>
<td>23-30</td>
<td></td>
<td>160</td>
<td>48.5</td>
</tr>
<tr>
<td>31-40</td>
<td></td>
<td>127</td>
<td>38.5</td>
</tr>
<tr>
<td>41-50</td>
<td></td>
<td>13</td>
<td>3.9</td>
</tr>
<tr>
<td>Over 50</td>
<td></td>
<td>2</td>
<td>0.6</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary/High School Certificate</td>
<td>6</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>Tertiary Diploma or Certificate</td>
<td>34</td>
<td>10.3</td>
<td></td>
</tr>
<tr>
<td>Undergraduate Degree (Bachelors)</td>
<td>264</td>
<td>80.0</td>
<td></td>
</tr>
<tr>
<td>Postgraduate Degree (Masters/Doctorate)</td>
<td>24</td>
<td>7.3</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>2</td>
<td>0.6</td>
</tr>
</tbody>
</table>
Table 2 shows the means, standard deviations and correlation matrices of all variables. All the values exceeded the benchmark of 0.50 and the square of the correlation between constructs. Although these results did not eliminate the threat of method variance, it does provide evidence that inter-item correlations were not driven purely by method bias (Gyu Park et al. 2017).

Table 2. Means, standard deviations, correlations and scale reliability

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Empowering</th>
<th>Directive</th>
<th>Structure</th>
<th>Climate</th>
<th>Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowering</td>
<td>3.81</td>
<td>0.60</td>
<td>(0.72)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Directive</td>
<td>3.86</td>
<td>0.57</td>
<td>.590 **</td>
<td>(0.76)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure</td>
<td>3.71</td>
<td>0.49</td>
<td>.641 **</td>
<td>.665 **</td>
<td>(0.87)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Climate for innovation</td>
<td>3.85</td>
<td>0.49</td>
<td>.323 **</td>
<td>.211 **</td>
<td>.171 **</td>
<td>(0.75)</td>
<td></td>
</tr>
<tr>
<td>Innovation</td>
<td>3.60</td>
<td>0.52</td>
<td>.261 **</td>
<td>.217 **</td>
<td>.368 **</td>
<td>.367 **</td>
<td>(0.84)</td>
</tr>
</tbody>
</table>

Notes: N = 330. Reliability coefficients for the scales are shown in parentheses along the diagonal. *p < .05; **p < .01
Common method variance was assessed using a number of scale anchors to avoid simple annotation from respondents. In addition, independent and dependent variables were separated and different types of questions asked for each to accelerate a specific response for a particular item (Podsakoff et al. 2003). Moreover, the questionnaire included reversed items to reduce repetitive response bias (Bianchi, Glavas & Mathews 2017). This procedure was suggested to satisfy the statistical contention of common method bias by Bianchi, Glavas and Mathews (2017). In addition, Exploratory Factor Analysis (EFA) applying the procedure of Podsakoff and Organ (1986) was used to assess common method variance. Five constructs – empowering leadership, directive leadership, initiating structure, climate for innovation and innovation – in the pooled sample were factor analyzed utilizing a principal components method with varimax rotation. The results showed that there were nine factors justified and there was no general factor. These nine factors were named and showed good internal consistency with the five constructs of the theoretical model. Therefore, it was confirmed that common method variance was not sufficient to invalidate the findings (Gyu Park et al. 2017).

**Factor analysis**

A CFA step was conducted to assess the measurement model and to confirm whether the measures load on their respective *apriori*-defined constructs (Browne & Cudek 1993). The baseline five-factor model (i.e., empowering leadership, directive leadership, initiating structure, climate for innovation, and innovation) yielded a good fit to the data ($\chi^2 = 844.475$; CFI = 0.907; IFI = 0.908; RMSEA = 0.047). These statistics meet the suggestion of Browne and Cudek (1993), who identified that a satisfactory model fit can be inferred when CFI and IFI are greater than .90 and the RMSEA is lower than .08. To establish internal consistency and reliability, all Cronbach’s $\alpha$ coefficients exceeded the optimal level of 0.7 (see Table 2). The values for the average variance extracted were above the threshold of AVE. 0.5, indicating convergent validity (Hair et al. 2010). These results support the discriminant validity of the measures.

Against this baseline model, four alternative models were tested, which were formulated based on the theoretical similarities of the constructs, to confirm if construct measures loaded on respective prior-defined constructs (Browne & Cudek 1993; Gyu Park et al. 2017). Model 1 was a four-factor model with directive leadership and initiating structure combined into one factor. Model 2 was a two-factor model with empowering leadership merged with directive leadership and initiating structure to form a single factor. Model 3 was
a two-factor model with empowering leadership, directive leadership and initiating structure combined into one factor, while climate for innovation and innovation merged into another factor. All of four constructs were combined into a single factor to form the Model 4. Table 3 shows that the hypothesized model fit the data better compared to other simplified models. The $\chi^2$s were significantly different between the hypothesized model and alternative models. Therefore, it was concluded that the constructs of empowering leadership, directive leadership, initiating structure, climate for innovation and innovation were distinct. The results of CFA are presented in Table 3.

Table 3. Comparison of measurement models

<table>
<thead>
<tr>
<th>Models</th>
<th>Factors</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\Delta\chi^2$</th>
<th>CFI</th>
<th>IFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline model (hypothesized model)</td>
<td>Five factors</td>
<td>844.475</td>
<td>485</td>
<td></td>
<td>0.907</td>
<td>0.908</td>
<td>0.047</td>
</tr>
<tr>
<td>Model 1</td>
<td>Four factors: directive leadership and initiating structure were combined into one factor</td>
<td>895.653</td>
<td>489</td>
<td>51.178*</td>
<td>0.895</td>
<td>0.896</td>
<td>0.05</td>
</tr>
<tr>
<td>Model 2</td>
<td>Three factors: empowering leadership, directive leadership and initiating structure were combined into one factor</td>
<td>960.397</td>
<td>492</td>
<td>115.922*</td>
<td>0.879</td>
<td>0.88</td>
<td>0.054</td>
</tr>
<tr>
<td>Model 3</td>
<td>Two factors: empowering leadership, directive leadership and initiating structure were combined into one factor; climate for innovation and innovation were combined into one factor</td>
<td>1105.923</td>
<td>494</td>
<td>261.448*</td>
<td>0.842</td>
<td>0.843</td>
<td>0.061</td>
</tr>
<tr>
<td>Model 4</td>
<td>One factor: all the variables were combined into one factor</td>
<td>1839.408</td>
<td>495</td>
<td>994.933*</td>
<td>0.652</td>
<td>0.655</td>
<td>0.091</td>
</tr>
</tbody>
</table>

Notes: n=330. CFI, comparative fit index; RMSEA, root-mean-square error of approximation; IFI, Incremental Fit Index *p<0.01.

Tests of hypotheses

Structural modelling results showed that the hypothesized model fit the data well ($\chi^2 = 844.475$, df = 485, $p < 0.01$; CFI = 0.907, IFI = 0.908, RMSEA = 0.047). Then a series of
nested model comparisons were conducted to evaluate how the alternative model fit with the data in comparison to the hypothesized model (Anderson & Gerbing 1988). Paths were specified from empowering leadership, directive leadership and initiating structure to climate for innovation and from organizational climate to innovation. This model also had direct paths from empowering leadership, directive leadership and initiating structure to innovation.

The hypothesized model was compared with an alternative model, which represented a full mediating role of climate for innovation. In the alternative model, three direct paths from empowering leadership, directive leadership and initiating structure to innovation were deleted. Table 4 shows model fit indices of the two models. The model fit indices suggested that the difference between χ²s was significant (p<0.01) and that the hypothesized model fit the data better than the alternative model (Gyu Park et al. 2017). Tables 5 and 6 present the results and standardized path coefficients of the SEM analyses.

Table 4. Structured equation model comparisons

<table>
<thead>
<tr>
<th>Models</th>
<th>χ²</th>
<th>df</th>
<th>Δχ²</th>
<th>CFI</th>
<th>IFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partially mediating (hypothesized) model</td>
<td>844.475</td>
<td>485</td>
<td></td>
<td>0.907</td>
<td>0.908</td>
<td>0.047</td>
</tr>
<tr>
<td>Fully mediating model</td>
<td>854.573</td>
<td>488</td>
<td>10.098*</td>
<td>0.905</td>
<td>0.906</td>
<td>0.048</td>
</tr>
</tbody>
</table>

Notes: n=330. CFI, comparative fit index; RMSEA, root-mean-square error of approximation; IFI, Incremental Fit Index, **p<0.01.

Table 5. Standardized direct path coefficients of the hypothesized model.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Paths</th>
<th>Estimate</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>Empowering leadership → innovation</td>
<td>-0.314*</td>
<td>0.127</td>
</tr>
<tr>
<td>H1b</td>
<td>Directive leadership → innovation</td>
<td>-0.320</td>
<td>0.277</td>
</tr>
<tr>
<td>H1c</td>
<td>Initiating structure → innovation</td>
<td>0.374*</td>
<td>0.174</td>
</tr>
<tr>
<td>H2a</td>
<td>Empowering leadership → climate for innovation</td>
<td>0.312*</td>
<td>0.161</td>
</tr>
<tr>
<td>H2b</td>
<td>Directive leadership → climate for innovation</td>
<td>-0.320</td>
<td>0.277</td>
</tr>
<tr>
<td>H2c</td>
<td>Initiating structure → climate for innovation</td>
<td>0.374*</td>
<td>0.174</td>
</tr>
<tr>
<td>H3</td>
<td>Climate for innovation → innovation</td>
<td>0.536**</td>
<td>0.076</td>
</tr>
</tbody>
</table>
Table 6. Standardized indirect path coefficients of the hypothesized model.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Paths</th>
<th>Bootstrapping</th>
<th>BC 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Estimate</td>
</tr>
<tr>
<td>H4a</td>
<td>Empowering leadership → climate for innovation → innovation</td>
<td>0.204*</td>
<td>0.200</td>
</tr>
<tr>
<td>H4b</td>
<td>Directive leadership → climate for innovation → innovation</td>
<td>-0.125</td>
<td>0.180</td>
</tr>
<tr>
<td>H4c</td>
<td>Initiating structure → climate for innovation → innovation</td>
<td>0.218*</td>
<td>0.145</td>
</tr>
</tbody>
</table>

*p < 0.05, **p < 0.01.

H1a, which proposed empowering leadership would be positively related to innovation was not supported (β = -0.314, p < 0.01). In contrast, empowering leadership was found to have a negative relationship with innovation. Nevertheless, H2a specified that empowering leadership positively relates to climate for innovation. The results supported this hypothesis (β = 0.312, p < 0.05).

H1b, which stated that directive leadership would be negatively related to innovation was not supported (p > 0.05). Similarly, H2b, which stated that directive leadership would be negatively related to climate for innovation, was not supported (p > 0.05).

H1c, which specified that initiating structure would be negatively related to innovation, was not supported (β = 0.234, p > 0.05). H2c proposed that initiating structure was negatively related to climate for innovation and was not supported though initiating structure was positively related to climate for innovation (β = 0.013, p < 0.05).

H3, which proposed that climate for innovation would have a positive relationship with innovation, was supported (β = 0.536, p < 0.000).

To assess the mediating role of climate for innovation on the relationship between the three leadership approaches and innovation, we adopted the procedure of Kenny, DA, Kashy and Bolger (1998) and Cheong et al. (2016). Specifically, a mediation effect exists if the independent variable significantly relates to the mediator, and also the mediator significantly
relates to the dependent variable, though the dependent variable may not directly relate to the independent variable (Cheong et al. 2016).

In H4a we expected that climate for innovation would mediate the relationship between empowering leadership and innovation. The structural coefficients of a partial mediation model indicated that empowering leadership had a positive relationship with climate for innovation and, in turn, climate for innovation was related positively to innovation. The bootstrapping results indicated that this indirect effect between empowering leadership and innovation was significant ($\beta = 0.204$, $p < 0.05$; bootstrap bias-corrected 95% CI [0.090, 0.678]). H4a was therefore supported.

H4b stated that climate for innovation mediates the relationship between directive leadership and organizational innovation. The structural coefficients of a partial mediation model indicated that neither the relationship between directive leadership and innovation and the relationship between directive leadership and climate was significant. The bootstrapping results indicated that this indirect effect between directive leadership and innovation was insignificant. Therefore, H4b was not supported.

H4c stated that climate for innovation mediates the relationship between initiating structure and innovation. The structural coefficients of the hypothesized, partially mediated model indicated that the relationship between initiating structure and climate for innovation was significant, whereas the relationship between initiating structure and innovation was not significant and, in turn, climate for innovation related positively to innovation. The bootstrapping results indicated that this indirect effect between initiating structure and innovation was significant ($\beta = 0.218$, $p < 0.05$; bootstrap bias-corrected 95% CI [0.068, 0.493]). Therefore, H4c was supported.

5. Discussion

The purpose of this study was to investigate how three leadership styles; empowering, directive, and initiating structure affect climate for innovation and examine the way in which these constructs comparatively influence innovation. Based on data collected from 330 employees working in tourism SMEs in Vietnam, the results showed that empowering leadership had a positive effect on climate for innovation but a negative direct effect on innovation in this context. Furthermore, climate for innovation was found to mediate the relationship between empowering leadership and innovation. In addition, leaders’ initiating
structure had a significant impact on organizational climate but did not have a direct effect on innovation. Climate for innovation was found to fully mediate the relationship between initiating structure and innovation. Whereas the relationship between directive leadership and climate for innovation and the association between directive leadership and innovation were not significant.

**Theoretical contribution**

The results of this study contribute to the literature by expanding the extant research on SME innovation, assessing the effect of diverse leadership styles and climate for innovation on innovation performance of SMEs. The findings enrich the literature by indicating the contribution of empowering leadership, directive leadership and initiating structure on innovation in SMEs (Hughes et al. 2018; Sims, Faraj & Yun 2009). Aligning with path-goal (House & Mitchell 1974) and empowerment (Kirkman & Rosen 1999; Spreitzer 1995) theories, this study investigated the relationship between three leadership styles, climate for innovation and innovation in Vietnamese tourism SMEs. This study therefore addresses a number of critical voids in the literature discussed next.

First, the findings indicate that empowering leadership was positively associated with climate for innovation, which is in turn was positively related to innovation as hypothesized. These relationships explain the positive correlation between empowering leadership, climate for innovation and innovation. However, empowering leadership was negatively associated with innovation when climate for innovation was controlled. In other words, whereas empowering leadership had a strong negative effect on innovation, the effect was weakened when a positive climate for innovation leads to product and process innovation. The findings support seminal research studies by Cheong et al. (2016) that found that empowering leadership has two faces, enabling and burdening. The findings indicate that empowering leadership has both positive and negative influence on innovation in the SME context; however, empowering leaders can enhance innovation through creating a climate for innovation. This result is consistent with the Too-much-of-a-good-thing theory, which identified a negative effect of over-empowerment (Pierce & Aguinis 2013) and dual tuning theory (George & Zhou 2007), which stated that both positive and negative moods contribute to creativity in complementary ways. To exploit the advantages of empowering leadership, however, the findings suggest that firms must build up a climate for innovation as this has a strong positive relationship with innovation.
To the best of our knowledge, the current study is the first empirical research examining the effect of initiating structure and directive leadership on innovation. The results suggest that initiating structure has a significant effect on climate for innovation in SME context and enhances SME innovation through shaping a climate for innovation in Vietnamese SMEs. This finding contradicts our hypothesis and previous studies suggesting that initiating structure may obstruct innovation and creativity (Neubert et al. 2008). However, the discovery is consistent with previous empirical studies that have identified that initiating structure predicts performance at all levels, individual, team and organization (Gaudet & Tremblay 2017; Judge, Piccolo & Ilies 2004; Lambert et al. 2012).

Directive leadership has been predicted to prevent employees from initiating innovative behaviors in Western contexts (Sims, Faraj & Yun 2009). However, the relationship between directive leadership and innovation was not significant in SME context of Vietnam. The current study did not support the relationship between directive leadership and climate for innovation.

The present results indicate the intervening role of climate for innovation on the relationship between empowering leadership and initiating structure and innovation notwithstanding these differing leadership approaches. Our findings are consistent with current literature, which implies that climate for innovation is vital in encouraging innovation and facilitating translation of the aspirations of leaders into innovative products and services (Ekvall & Ryhammar 1999; Isaken & Akkermans 2011). A climate for innovation, which includes including risk taking, debate, freedom and trust, enables team members to raise original ideas and find new ways of solving problems (Ekvall & Ryhammar 1999).

**Managerial contributions**

The research findings have important implications for practitioners. First, these insights allow SME managers to decide when to empower and when to initiate structure for employees. The findings highlight that empowering leadership and initiating structure do not work by themselves in enabling innovation; therefore, it is necessary to engender an innovation climate in SMEs. Managers, particularly in the tourism sector, while showing confidence in their employees, should inspire them with a vision for innovative performance and create the enabling structures and processes to achieve that goal. Managers should provide regular development opportunities for their employees to improve their skills and enable them to develop a creative approach toward their work (Tran, Hoang & Vo 2019).
Second, the findings suggest that empowering leadership can have both a positive and negative effect on innovation, such that leaders of SMEs need to ensure there are supporting processes which reduce the burden of empowerment for some employees. Leaders should be conscious of the negative effects of empowering behaviors and exploit the positive effects on innovation. Leaders should carefully balance their approach to provide employees with autonomy through empowerment and structures to achieve positive effects (Argyris 1998).

Third, initiating structure is important for SMEs, particularly when the leader is substantially more experienced than the subordinates, and when short-term objectives and compliance are prioritized (Sims, Faraj & Yun 2009). This approach is even more applicable for SMEs in emerging markets which often recruit young employees with limited experience (Bianchi, Glavas & Mathews 2017). Therefore, SMEs should have detailed job descriptions and set clear objectives for employees, provide incentives and rewards and initiate organizational structures and processes to support a climate for innovation.

6. Limitations and future research

First, in regards to the data collection, the current study is limited to a cross sectional sample of Vietnamese tourism SMEs, which limits the external validity of this study and its generalization to other populations (Muenjohn & McMurray 2017). In addition, as data were collected at a single point in time, this means that the study cannot reflect the dynamic interactions among innovation and leadership over time in SMEs (Limaj & Bernroider 2017).

We offer some recommendations for further research based on the findings of the current study. For example, replicating the study in other developing countries and other sectors in the region of Asia-Pacific where SMEs are focusing on innovation and creativity, would improve the generalizability of the results. In addition, scholars can explore how other variables which might act as moderators or mediators beside organizational climate in further clarifying the nuanced effects of leadership styles on innovation in the SME context. Finally, longitudinal studies would be valuable to investigate the causal relationships between constructs to provide richer understandings of the associations between leadership styles, innovation and organizational climate (Lorinkova, Pearsall & Sims 2013; Wilson-Evered, Härtel & Neal 2001).
References


De Dreu, C & West, M 2001, 'Minority dissent and team innovation the importance of participation in decision making', Journal Of Applied Psychology, no. 86, pp. 1191-201.


Fleishman, E & Harris, E 1962, 'Patterns of leadership behavior related to employee grievances and turnover', Personnel psychology, vol. 15, no. 1, pp. 43-56.


Halpin, AW 1957, 'The leader behavior and effectiveness of aircraft commanders.', in RM Stogdill & AE Coons (eds), Leader behavior: Its description and measurement Bureau of Business Research, Columbus, pp. 52–64.

of the Society for Industrial and Organizational Psychology, Toronto, Canada, 12-14 April 2002.


Hoch, JE 2013, 'Shared leadership and innovation: The role of vertical leadership and employee integrity', *Journal of Business and Psychology*, vol. 28, no. 2, pp. 159-74.


Kim, M & Beehr, TA 2017, 'Self-efficacy and psychological ownership mediate the effects of empowering leadership on both good and bad employee behaviors', Journal of Leadership & Organizational Studies, vol. 24, no. 4, pp. 466-78.


Mumford, M & Gustafson, S 1988, 'Creativity syndrome: Integration, application, and innovation', *Psychological Bulletin*, vol. 103, no. 1, pp. 27–43.


Peterson, RS 1997, 'A directive leadership style in group decision making can be both virtue and vice: Evidence from elite and experimental groups', *Journal of Personality and Social Psychology*, vol. 72, pp. 1107–21.


Schneider, B, Ehrhart, M & Macey, W 2013, 'Organizational climate and culture', *Annual Review of Psychology*, vol. 64, no. 3, pp. 61-88.


Sims, H, Faraj, S & Yun, S 2009, 'When should a leader be directive or empowering? How to develop your own situational theory of leadership', *Business Horizons*, vol. 52, pp. 149-58.


