

The relationship between entrepreneurial leadership and employees' innovative behavior in the hospitality and tourism industry: The role of organizational agility

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Abstract

This study investigates how entrepreneurial leadership affects employees' innovative behavior in the hospitality and tourism industry through organizational agility as a mediator. PLS-SEM was used to analyze four hundred valid responses gathered from full-time employees working in five-star hotels and category (A) travel agencies operating in Egypt. Data analysis was performed using the WarpPLS 7.0 program. The findings indicated that entrepreneurial leadership is positively correlated with organizational agility and employees' innovative behavior. Findings also indicated organizational agility positively correlated with employees' innovative behavior. Furthermore, organizational agility acts as a mediator in the relationship between entrepreneurial leadership and employees' innovative behavior. The study advances the theoretical understanding of entrepreneurial leadership, organizational agility, and employees' innovative behavior in the context of Egypt's tourism and hospitality industry. Practically, the study provides tourism and hospitality enterprises with recommendations for maximizing the benefits of entrepreneurial leadership in terms of organizational agility and employees' innovative behavior.

Keywords: Entrepreneurial leadership, organizational agility, employees' innovative behavior, hotels, travel agencies, Egypt.

Introduction

Innovation is a significant source of development and provides a competitive advantage for hotels and tourism firms due to the uncertainty and competitive intensity in the hospitality and tourism industry (Tajeddini et al., 2020). Although innovation in manufacturing firms is mostly dependent on research and development activities, innovation in hospitality and tourism organizations depends more on the innovative behavior of employees (Eid & Agag, 2020; Li & Hsu, 2016a). Innovative behavior refers to all employees' actions that are aimed at the formation, introduction, and application of novel and useful ideas to enhance the organization (de Jong & den Hartog, 2007). Employees' innovative behavior is the foundation that promotes the organization's performance and lays the groundwork to allow bottom-up innovation, as employees are the first ones to become aware of issues at work, which often permits them to develop innovative ideas (Li & Hsu, 2016b; Luu, 2019).

Innovative behavior of employees plays a critical role in forming positive customer experiences and improving their satisfaction (Slåtten & Mehmetoglu, 2011), and is a fundamental driver of organizational innovation (Kallmuenzer, 2018). Therefore, determining the aspects that encourage employee innovation behavior is crucial for hospitality and tourism organizations to

improve their business performance to survive and flourish in a fast-changing environment (Eid & Agag, 2020). Among a wide range of external elements, leadership style has been always recognized as a crucial antecedent that influences employees' innovative behavior (Zhou & Velamuri, 2018). Consequently, scholars have called for more studies to investigate other leadership methods that effectively boost employees' innovative behavior, among which is entrepreneurial leadership (Miao et al., 2019; Kimbu et al., 2021; Iqbal et al., 2022).

Entrepreneurial leadership was defined as affecting and controlling the performance of employees toward the accomplishment of organizational goals that include identifying and exploiting entrepreneurial opportunities (Renko et al., 2015). Entrepreneurial leadership may play a crucial role in many situations that require employees' creativity and innovation (Chen 2007). In particular, entrepreneurial leadership significantly stimulates and enhances employee innovation behaviours (Bagheri, 2017). Entrepreneurial leadership has emerged as an influential leadership type that promotes innovation in competitive and uncertain environments, such as new businesses and high-technology organizations (Miao et al., 2019; Bagheri et al., 2022). Utoyo et al. (2020) noted that entrepreneurial leadership is the proper factor to prompt an organization's innovation strategy. In addition, it promotes the organization's agility to be ready to compete in an unpredictable environment. Organizational agility is the ability to do various activities that need to be done to make the organization more effective and efficient in response to change (Tallon & Pinsonneault, 2011). By having this ability, an organization will become more innovative in conducting its activities to become more flexible and adaptive and to accomplish the goals of the organization, employees, and shareholders (Shahrabi, 2012).

Research on entrepreneurial leadership has significantly increased over the last two decades (Leitch & Volery, 2017; Bagheri & Akbari, 2018; Newman et al., 2018); however, the impact of entrepreneurial leadership on employees' innovative behavior has obtained insufficient attention in hospitality and tourism management literature, regardless of an increasing interest in both concepts. Renko et al. (2015) and Renko (2017) noted that entrepreneurial leadership and its relationship with employee innovation is a research area that needs deeper investigation. Many researchers indicated that entrepreneurial leadership as a distinctive leadership style requires further research (e.g., Renko et al., 2015; Leitch & Volery 2017). There is limited understanding of how entrepreneurial leadership stimulates employees' innovative behavior (Newman et al., 2018). While the effect of entrepreneurial leadership on innovative behavior is conceivable, the crucial question of how entrepreneurial leaders affect and guide employees' innovative behavior has not yet been fully addressed (Cai et al., 2019). Therefore, the current study investigated the effect of the entrepreneurial leadership style on employees' innovative behavior in the hospitality and tourism industry. In addition, the study demonstrated the mediating role of organizational agility in the relationship between entrepreneurial leadership on employees' innovative behavior.

Conceptual Framework and Hypothesis Development

Entrepreneurial Leadership and Employees' Innovative Behavior

Employees' capabilities for innovation are the powerful driving force for an organization's survival, competitiveness, and constant growth (Bagheri, 2017). Innovative behavior is the initiation and deliberate introduction of new and useful ideas regarding products, services, and work methods, as well as the group of behaviors required to develop, establish, and execute these ideas (Saeed et al., 2018). Previous studies have noted that leaders play a critical role in boosting and empowering employee innovation and setting an inspiring and supportive atmosphere that

promotes the innovation process in the organization (Khaola & Coldwell, 2018; Akbari et al., 2021; Bagheri et al., 2022). Given the critical role of employees' creativity in organizational survival and competence, scholars have investigated the impact of leaders on creative outcomes in organizations (Behrendt et al., 2017; Gottfredson & Aguinis, 2017). Entrepreneurial leadership is a concept that emerged at the intersection between entrepreneurship and leadership. Entrepreneurial leadership particularly reflects that the development of leadership styles is context-specific. That is, organizational and entrepreneurial success is primarily dependent on leaders who have strong entrepreneurial indications and influence employees to exhibit creative and innovative behaviors (Kuratko, 2007; Surie & Ashley, 2008). Renko et al. (2015) reported that entrepreneurial leaders improve employees' beliefs in their entrepreneurial skills and abilities and ignite passion for innovation and creativity. The goal of entrepreneurial leadership is to affect and motivate employees' creative attitudes and behaviors regarding investigating and exploiting opportunities for their organizations (Renko et al., 2015; Bagheri, 2017).

It was suggested entrepreneurial leadership is the effective leadership practices and principles that prompt and facilitate innovation in the incredibly difficult, rough, and uncertain business environment that hospitality and tourism organizations are currently encountering (Freeman & Siegfried, 2015; Karol, 2015, Eid & Agag, 2020). Employee innovation behavior is highly dependent on how they interact with others in the workplace (Anderson et al., 2014; Zhou & Velamuri, 2018). Therefore, leaders serve as a power source and a critical factor that impacts employee innovation behavior (Bagheri, 2017). Entrepreneurial leaders set a supportive and empowering atmosphere, in which all employees are provoked to view innovation as one of their main tasks and persist in facing inherent issues in innovation efforts (Karol, 2015). Studies have pointed out the significant effect of entrepreneurial leadership on innovative behavior (e.g., Bagheri, 2017; Bagheri & Akbari, 2018; Khaola & Coldwell, 2018; Bagheri et al., 2022). Therefore, the following hypothesis was formulated:

H1: Entrepreneurial leadership is positively correlated with the innovative behaviour of employees.

Entrepreneurial Leadership and Organizational Agility

Organizations must have adequate organizational agility to survive unexpected environmental changes and fierce competition (Anca-Ioana, 2019). To build such agility, organizations must own some essential factors such as innovative and strategic thinking and the capacity to sustain change (Harraf et al., 2015). Organizational agility refers to the ability of an organization to effectively manage unexpected challenges and encounter unforeseen threats. This capability allows organizations to take advantage of changes as opportunities for development and improvement in the modern context (Thatsara & Sutha, 2021). The success of creating organizational agility is very much dependent on the leadership. The role of leadership is critical in developing approaches and strategies used by organizations (North & Varvakis, 2016). Effective leadership is considered a key aspect in creating organizational agility (Gagel, 2018). Through proper leadership, the views and actions of leaders can impact and direct the behavior of employees toward executing the desired objectives (Khalid et al., 2020). Several studies have shed light on the importance of leadership in creating organizational agility. The results of previous studies exhibited the positive impact of leadership style on organizational agility (Karimi et al., 2016; Raeisi & Amirnejad, 2017).

To build agility, organizations need leaders who are not only there to manage, but also who become contributors or facilitators. Therefore, entrepreneurial leadership is believed to be the suitable leadership style to help organizations create organizational agility (Syauqiy & Dirgantara, 2022). Entrepreneurial leadership has two main characteristics: future orientation and community building that differentiate it from other styles of leadership. Future orientation refers to the ability of entrepreneurial leaders to develop their vision and direct their team in an uncertain environment while building community refers to the endeavors of entrepreneurial leaders to provoke a supporting set of employees in the creation of strategic value (Dabić et al., 2021). Entrepreneurial leadership improves organizational agility because aspects of entrepreneurial leadership, such as proactiveness, innovation, risk taking, and competitive aggressiveness, positively affect agility (Ibrahim & Rashid, 2019; Dabi et al., 2021). Entrepreneurial leaders are more likely to create personal and team innovative outcomes (Cai et al., 2019). Entrepreneurial leadership has a significant role in organization innovation configuration, guiding organizations to an advantageous position in an unsettling environment by constructing an innovation strategy (Newman et al., 2018; Utoyo et al., 2020). Building on this, the following hypothesis was assumed:

H2: Entrepreneurial Leadership Positively Correlates with Organizational Agility.

Organizational Agility and Employees' Innovative Behavior

It is believed that innovation plays a crucial role in creating organizational agility. Innovative employees with novel ideas can change processes and organizations to work more effectively through appropriate planning that meets the needs of the organization. Therefore, these organizations can increase their agility by paying attention to novel ideas, providing support and employee participation, trusting them, creating a space for collective dialogue and discussion about operations in the organization, modifying business processes, and interacting with the external environment and thus increasing the agility of the organization (Hasoumi et al., 2014). Organizational agility is the capacity to deal with unforeseen changes, overcome threats from the business environment, and gain advantage of those changes (Zhang et al., 2022). Organizational agility is known as the capability of the organization that helps it distinguish innovation opportunities and quickly seize competitive market opportunities using its knowledge, assets and relationships (Wahyuono & Moeljadi, 2023). Darvishmotevali et al. (2020) claimed that organizational agility is a pivotal driver for organizations in fostering innovation and managing complexity in uncertain environments such as hospitality and tourism context. Leaders acknowledge employees' innovative behavior as an intangible asset that yields the best ideas to stay competitive, regardless of the job type or organizational standards (Jo & Hong, 2022). Given the significance of innovation for success in uncertain and competitive environments, organizations must promote the capability to respond to changes proactively. Agile organizations can clear uncertainty, and obstacles, and empower employees' innovative behavior (Darvishmotevali et al., 2020). Employees' innovative behavior requires them to make more agile efforts in learning and investigating knowledge. Employees who have the agility to find novel ideas and attempt to implement them will produce innovative behaviors (Srimulyani, 2023). Therefore, the following hypothesis was formulated:

H3: Organizational Agility is positively correlated with the innovative behaviour of employees.

The Mediating Role of Organizational Agility

Effective leadership affects and leads the employees' behavior toward the improvement of organizational agility (Colquitt et al., 2017). In today's changeable market environment, effective leaders not only have to lead but must also be a contributor and facilitators as an entrepreneur (Zainol et al., 2018). The idea of entrepreneurial leadership is becoming significantly relevant as organizations need to be more entrepreneurial to enhance their efficiency and the ability to adapt (Esmer & Dayi, 2017; Renko, 2017). Entrepreneurial leadership is the most effective leadership style in enhancing innovation and opportunity detection (García-Vidal et al., 2019). Entrepreneurial leadership fosters and allows organizations to adopt processes that strengthen the culture of corporate innovation by recognizing and exploiting opportunities to improve organizational success, handle challenges creatively, and efficiently and successfully utilize the organization's resources (Sawaeen & Ali, 2020). The innovation activities of every employee in the workplace may lead to the discovery and introduction of novel ideas that are profitable for the organization. New ideas created by employees in organizations can help organizations adapt and survive in a competitive environment (Srimulyani, 2023). Adaptation and survival are the core of organizational agility where the organization can respond to any changes in its dynamic environment (Wahyuono & Moeljadi, 2023).

Leadership and innovation are two essential elements in the achievement of organizational agility (Moran, 2015). Many studies have underlined the positive impacts of entrepreneurial leadership on organizational agility (e.g. Gagel, 2018; Jan & Maulida, 2022), the positive effects of entrepreneurial leadership on employees' innovative behavior (e.g. Khaola & Coldwell, 2018; Bagheri et al., 2022), and the positive effects of organizational agility on employees' innovative behavior (e.g. Hasoumi et al., 2014; Darvishmotevali et al., 2020). Accordingly, it can be concluded that leadership has a positive indirect effect on employees' innovative behavior through organizational agility. Hence, the following hypothesis was stated:

H4: Organizational agility mediates the relationship between entrepreneurial leadership and employee innovative behaviour.

The conceptual framework of the study is illustrated in Figure 1 below.

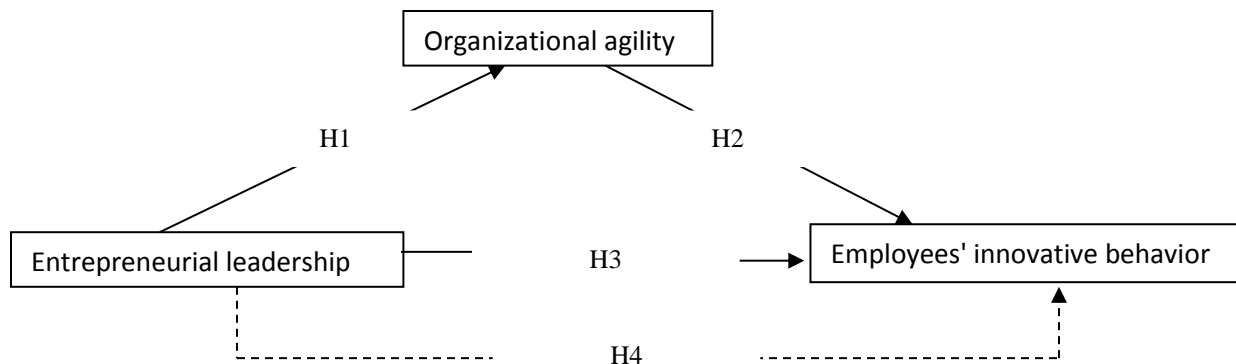


Figure (1): Conceptual framework of the study

Materials and Methods

Measures and Instrument Development

This study used a self-administered questionnaire. The questionnaire was split into two sections. One had 13 elements to examine latent variables "entrepreneurial leadership, employee innovative behavior, and organizational agility" and used a five-point Likert scale ranging from "1= for strongly disagree to 5 = for strongly agree" to measure all latent variables. The other section included the characteristics of the study sample and had five questions 'gender, age, education, experience, and work organization". The questionnaire was created in English, and then translated into Arabic by an expert who is multilingual in English and Arabic, and lastly back into English by a second bilingual professional. The older and later English versions were evaluated to ensure consistency. Because there was a match, the questionnaire was administered in Arabic to ensure that the phrases were clearly understood and to get the best possible response rate.

Entrepreneurial leadership was assessed by a 5-item scale of Renko et al. (2015). For instance, "My leader often comes up with radical improvement ideas for the products/services we are selling" and "My leader often comes up with ideas of completely new products/services that we could sell." In addition, organizational agility was evaluated by a 4-item scale adapted from Melián-Alzola et al. (2020). For example, "The Hotel/Travel agency is an agile organization capable of adapting to changes" and "The Hotel/Travel agency can predict and identify changes". Furthermore, employee innovative behavior was measured using the 4-item scale of Kang and Lee (2017). Sample elements include: 'I generate creative ideas' and 'I promote and champion ideas to others. The complete scale items are outlined in Appendix (A).

Sampling and Data Collection

Data from full-time staff working in five-star hotels and category (A) travel agencies in Egypt during June and July 2023 were used to test the study model. Such two types of enterprises were chosen because they dominate Egypt's hospitality and tourist industries and share comparable characteristics in between "i.e., they both deal with international visitors" (Elgarhy et al., 2023). In 2018, there were 158 5-star hotels and 2222 category (A) travel agencies in Egypt, according to the Egyptian Ministry of Tourism. Because of the huge population and the researchers' limited resources, the convenience sample strategy was used in this study. Seven hundred questionnaires were distributed to the organizations being researched. Only four hundred valid questionnaires were obtained, resulting in a response rate; 271 surveys (67.75%) were obtained from 22 five-star hotels and 129 surveys (32.25%) were obtained from 45 travel agencies. Hair et al. (2010) recommend estimating the suitable sample size depending on the number of variables investigated, with a minimum acceptable ratio of "variable: sample = 1:10". As a result, our sample size of four hundred employees appeared sufficient for the investigation.

Data Analysis

To analyze the study's measurement and structural model, as well as test the research hypotheses, the current study used the PLS-SEM approach with WarpPLS software version 7.0. In tourism and hospitality research, PLS-SEM is a prominent analytical tool (Hair et al., 2020). Multigroup analysis (MGA) was also conducted to assess if there are significant differences among employees' responses to the differences in their workplace, either hotel or travel agency.

Results

Participant profile

Among the four hundred participants in this study, 311 (77.75%) were men and 89 (22.25%) were women. There were 174 (43.5%) respondents under the age of 30 years and 146 (36.5%) respondents between the ages of 30 and 40 years. In addition, the majority (n=297, or 74.25% of them) held a bachelor's degree. Furthermore, 155 employees (38.75%) had less than two years of experience, 184 (46%) had two to five years, and 61 (15.25%) had six to ten years. Moreover, 271 respondents (67.75%) worked in five-star hotels, while 129 (32.25%) worked in travel agencies.

Table 1. Participant profile (N=400).

		Frequency	Percentage
Gender	Male	311	77.75
	Female	89	22.25
Age	< 30 years	174	43.5
	30 : < 40 years	146	36.5
	40 : < 50 years	30	7.5
	> 50 years	50	12.5
Education	High schools	73	18.25
	Bachelor's degree	297	74.25
	Master/PhD	30	7.5
Experience	< 2 years	155	38.75
	2 to 5 years	184	46
	6 to 10 years	61	15.25
Work organization	Hotels	271	67.75
	Travel agency	129	32.25

Reliability and validity

Factor loading was calculated using confirmatory factor analysis (CFA) (see Table 2). The computed item loadings varied from 0.721 to 0.918. Factor loading values greater than 0.5 were deemed acceptable by Hair et al. (2010). Table 2 also shows that Cronbach's alpha and composite reliability values for all variables are more than 0.7. Furthermore, because the AVE values are greater than 0.5, the scales' validity has been proven using the Hair et al. (2020) criterion.

Table 2. Factor loadings, Cronbach's, CR, and AVE.

	Item loading	P value**	CR	CA	AVE
Entrepreneurial Leadership (EL)					
EL.1	0.746	<0.001	0.900	0.861	0.645
EL.2	0.817	<0.001			
EL.3	0.865	<0.001			
EL.4	0.743	<0.001			
EL.5	0.836	<0.001			

Organisational Agility (OA)					
OA.1	0.817	<0.001	0.894	0.842	0.678
OA.2	0.801	<0.001			
OA.3	0.869	<0.001			
OA.4	0.806	<0.001			
Innovative behaviour of employees (EIB)					
EIB.1	0.918	<0.001	0.916	0.876	0.733
EIB.2	0.876	<0.001			
EIB.3	0.896	<0.001			
EIB.4	0.721	<0.001			
CR: Composite reliability; CA: Cronbach's alpha; AVE: average variance extracted ** P value for item loading					

Furthermore, Franke & Sarstedt (2019) stated that "the correlation between two latent variables must be significantly less than unity to prove discriminant validity, and the AVE value for each variable must be greater than the greatest common value". According to the results in Table 3, the discriminant validity of the study model can be attained.

Table 3. Discriminant validity results

	OA	EL	EIB
Organizational Agility (OA)	0.824	0.389	0.575
Entrepreneurial Leadership (EL)	0.389	0.803	0.398
Employee Innovative Behavior (EIB)	0.575	0.398	0.856

The HTMT for validity was also calculated (see Table 4), and all values were <0.85, showing that it is the best result to confirm validity.

Table 4. HTMM for validity

HTMT ratios	OA	EL	EIB
Organizational Agility (OA)			
Entrepreneurial Leadership (EL)	0.458		
Employee Innovative Behavior (EIB)	0.663	0.464	
P values (one-tailed) for HTMT ratios	OA	EL	EIB
Organizational Agility (OA)			
Entrepreneurial Leadership (EL)	<0.001		
Employee Innovative Behavior (EIB)	<0.001	<0.001	

Model fit and quality metrics for the research model

The current study met all ten of Kock's (2021) model fit and quality index criteria (see Appendix B).

The structural models for hypotheses testing

The findings of the hypothesis testing (see Figure 2 and Table 5) indicated that there is a positive relationship between entrepreneurial leadership with organizational agility ($\beta=0.58, P<0.01$), and employee innovative behavior ($\beta=0.37, P<0.01$). This means that when entrepreneurial leadership increases, organizational agility, and employee innovative behavior tend to be high. Therefore, H1 and H2 are supported. Furthermore, organizational agility positively correlates with employee innovative behavior ($\beta=0.36, P<0.01$). This means that when organizational agility is higher, employee innovative behavior tends to be high. Thus, H3 is supported.

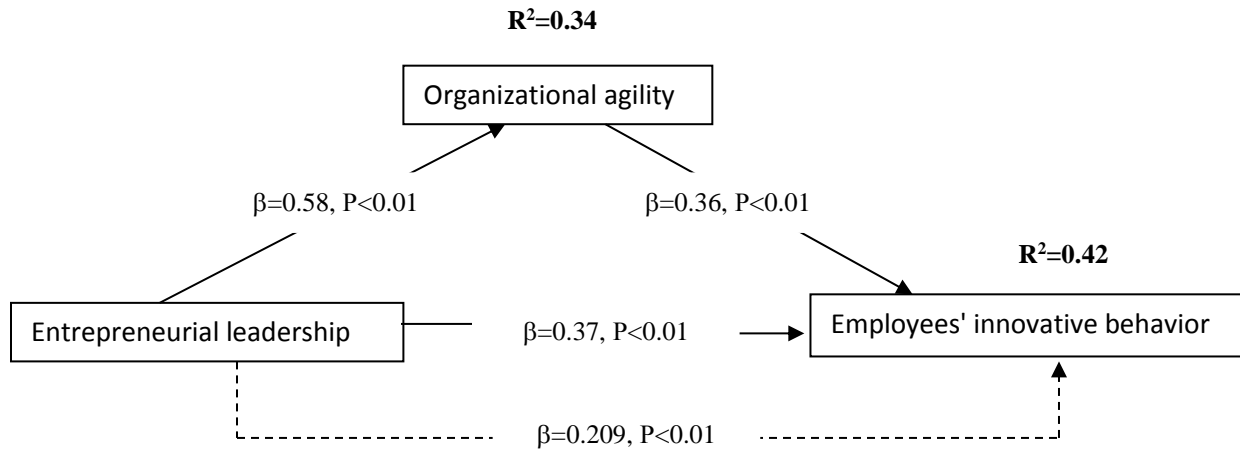


Figure 2: model of the study

Furthermore, Figure 2 shows that the entrepreneurial leadership interpreted 34% of the variance in organizational agility ($R^2=0.34$). Moreover, entrepreneurial leadership and organizational agility interpreted 42% of the variance in employee innovative behavior ($R^2=0.42$).

Table 5. Mediation analysis

	Path a EL-OA	Path b OA-EIB	Indirect Effect	SE	t-value	Bootstrapped Confidence Interval		Decision
						95% LL	95% UL	
H4: Agility as a mediator	0.580	0.360	0.209	0.034	6.141	0.142	0.275	Mediation

In addition, to assess the impact of organizational agility as mediator, the indirect effect was examined using a bootstrapping analysis (see Table 5). According to the bootstrapping analysis, the indirect effect is Std. $\beta=0.209$ (0.580×0.360) was significant, which had a t-value of 6.141. Furthermore, the indirect effect of 0.209, "95% Bootstrapped Confidence Interval": (LL= 0.142, UL= 0.275), does not cross a zero in the center, confirming mediation. Thus, it can be concluded that there is statistically substantial evidence for the mediation impact of organizational agility in the relationship between entrepreneurial leadership and employee innovative behavior. So H4 is supported.

Lastly, a multi-group analysis (MGA) was conducted to assess if there are significant differences among employees' responses by the differences in their workplace. The results in Table (6) indicated that there are no significant differences in all path coefficients between the employees of five-star hotels and those of travel agencies.

Table 6: Multi-group analysis for differences by organization

Group pair results (Five-Star Hotel=1; Travel Agency=2)						
Constructs/Hypotheses	Path coeff. (Five-Star Hotel)	Path coef. (Travel Agency)	Absolute path coeff. Diff.	p-values	T-statistic	Supported/Not Supported
EL-OA	0.543	0.674	0.131	0.085	1.371	Not Supported
OA-EIB	0.333	0.456	0.123	0.107	1.243	Not Supported
EL-EIB	0.400	0.284	0.116	0.123	1.161	Not Supported

Discussion

This study aimed to examine how entrepreneurial leadership affects employees' innovative behavior in the Hospitality and Tourism industry taking into consideration organizational agility as a mediator. To reach the aim of the study, a quantitative approach was adopted, with a questionnaire distributed to Egyptian travel agencies and five-star hotels. The study's findings support the proposed research paradigm and all its hypotheses.

The findings indicated that there is a positive relationship between entrepreneurial leadership and employee innovative behavior. This result is in line with some previous studies (e.g., Miao et al., 2018; Li et al., 2020; Hoang et al., 2023). Entrepreneurial leaders inspire their subordinates to examine the existing quo, think and act creatively, and take advantage of business-related opportunities (Iqbal et al., 2022). Entrepreneurial leaders also operate as role models by engaging in entrepreneurial activities themselves, promoting vicarious learning, and encouraging their followers to show entrepreneurial, and hence, innovative, behavior. In addition, the findings highlighted a positive relationship between entrepreneurial leadership and organizational agility. This result is consistent with previous studies that showed that entrepreneurial leadership positively affects organizational agility (e.g., Jan and Maulida, 2022; Khalid and Firdaus, 2021). The qualities of entrepreneurial leadership, including innovation, proactivity, competitive aggression, and risk-taking, positively affect agility (Dabi et al., 2021).

The findings also indicated that there is a positive relationship between organizational agility and employees' innovative behavior. This result is in line with the previous study of Darvishmotevali et al. (2020) who claimed that developing and enhancing organizational agility will enable organizations to deal with unpredictability and beat competitors. Agile organizations respond quickly to unexpected developments, new market possibilities, and consumer expectations. Therefore, agile organizations can reduce uncertainty barriers, engage, and empower employees, and hence, improve innovative behavior within the organization.

The findings also indicated that there is a mediation effect of organizational agility in the relationship between entrepreneurial leadership and the innovative behaviour of the employees. This result is interpreted by the findings of Bos-Nehles and Veenendaal (2019) and Mokhber et al. (2018) who argued that employees' willingness to engage in innovative entrepreneurial activities can be positively stimulated by the innovative environment that entrepreneurial leaders have created. They can also be given resources by integrating a variety of tools from various sources to foster systematic thought processes and innovative perspectives. In addition, leaders and subordinates who understand the atmosphere of an innovative organization are demonstrated to be highly empowered, to utilize their intellectual strengths to flourish in a complex and dynamic business environment and to behave innovatively.

Theoretical and practical implications

Based on the findings of the current investigation, this study has made several theoretical contributions. First, by proposing and testing a novel model of entrepreneurial leadership that supports the innovative behavior of employees through organizational agility, this study adds to the literature on entrepreneurial leadership. Current study present added information proving that entrepreneurial leaders inspire people to build organizational agility and foster an innovative work climate. It also reinforces earlier studies by proving that entrepreneurial leadership is an effective mechanism that promotes organizational agility and innovative behavior. Second, to the best of our knowledge, there are no studies examining the impact of entrepreneurial leadership on employee innovation specifically in the tourism and hospitality industry. Leaders continuously shape the culture of the company they work for, including the environment of innovation (Chen & Hou, 2016). As a result, this study expanded the leadership styles that support employee innovation (Karol, 2015) to include entrepreneurial leadership. Lastly, the current study adds to the empirical literature on the causes of employee creative behavior in the tourism and hospitality industries, as well as the processes through which entrepreneurial leadership influences this favorable employee behavior. Therefore, this study sheds light on what leadership behaviors are required to awaken organizational agility and engage employees in the innovation process.

Practitioners, particularly those in the tourism and hospitality industry, may use the study's results to encourage employee innovation through their leadership style and organizational agility. Employing entrepreneurial leadership abilities, tourism, and hospitality professionals can create plans and policies to encourage staff members to adopt innovative behavior. The study may also be useful for recruiting personnel since it allows them to hire individuals with the necessary set of skills for innovation and entrepreneurial leadership. Additionally, employees should be trained so that they are aware that their intellectual agility has a substantial influence on how inventive they are at work. It helps people to continuously improve their ability to recognize and analyze diverse viewpoints, as well as to analyze elements that change over time and generate innovative solutions.

Limitations and further research

This study has some limitations that open the door for further research. First, the paradigm considers solely entrepreneurial leadership as an antecedent. Future studies may compare entrepreneurial leadership to other styles of leadership, such as inclusive leadership and empowering leadership, to see whether they provide different results. Second, the framework

only considers organizational agility as a mediator. Future studies may investigate other mediators "i. e. innovation climate support" to see if they have different results. Third, although we looked at emerging concepts like organizational agility, we strongly urge researchers to investigate the moderating effects of epistemic curiosity and team potency. Doing so may help translate the beneficial effects of entrepreneurial leadership on employees' innovative behavior. Lastly, another substantial issue in the current study is the sample. Because the research sample was limited to five-star hotels and category A travel agencies in Egypt, this study should be replicated in different cultural contexts "i.e., other Eastern or Western countries" as well as in different tourism and hospitality contexts "i.e., restaurants or airline companies" to confirm or dispute its conclusions.

References

- Akbari, M., Bagheri, A., Imani, S., & Asadnezhad, M. (2021). Does entrepreneurial leadership encourage innovation work behavior? The mediating role of creative self-efficacy and support for innovation. *European Journal of Innovation Management*, 24(1), 1-22.
- Anca-Ioana, M. (2019). A review of organizational agility concept and characteristics. *Annals of the University of Oradea, Economic Science Series*, 28(1), 335-341.
- Anderson, N., Potočník, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management*, 40(5), 1297-1333.
- Bagheri, A. (2017). The impact of entrepreneurial leadership on innovation work behavior and opportunity recognition in high-technology SMEs. *The Journal of High Technology Management Research*, 28(2), 159-166.
- Bagheri, A., & Akbari, M. (2018). The impact of entrepreneurial leadership on nurses' innovation behavior. *Journal of Nursing Scholarship*, 50(1), 28-35.
- Bagheri, A., Newman, A., & Eva, N. (2022). Entrepreneurial leadership of CEOs and employees' innovative behavior in high-technology new ventures. *Journal of Small Business Management*, 60(4), 805-827.
- Behrendt, P., Matz, S., & Göritz, A. S. (2017). An integrative model of leadership behavior. *The Leadership Quarterly*, 28(1), 229-244.
- Bos-Nehles, A. C., & Veenendaal, A. A. (2019). Perceptions of HR practices and innovative work behavior: The moderating effect of an innovative climate. *The International Journal of Human Resource Management*, 30(18), 2661-2683.
- Cai, W., Lysova, E. I., Khapova, S. N., & Bossink, B. A. (2019). Does entrepreneurial leadership foster creativity among employees and teams? The mediating role of creative efficacy beliefs. *Journal of Business and Psychology*, 34, 203-217.
- Chen, A. S. Y., & Hou, Y. H. (2016). The effects of ethical leadership, voice behavior and climates for innovation on creativity: A moderated mediation examination. *The Leadership Quarterly*, 27(1), 1-13.
- Chen, M. H. (2007). Entrepreneurial leadership and new ventures: Creativity in entrepreneurial teams. *Creativity and Innovation Management*, 16(3), 239-249.
- Colquitt, J., Lepine, J. A., & Wesson, M. J. (2017). *Organizational behavior: Improving performance and commitment in the workplace (5e)*. New York, USA: McGraw-Hill.

- Dabić, M., Stojčić, N., Simić, M., Potocan, V., Slavković, M., & Nedelko, Z. (2021). Intellectual agility and innovation in micro and small businesses: The mediating role of entrepreneurial leadership. *Journal of Business Research*, 123, 683-695.
- Darvishmotevali, M., Altinay, L., & Köseoglu, M. A. (2020). The link between environmental uncertainty, organizational agility, and organizational creativity in the hotel industry. *International Journal of Hospitality Management*, 87, 102499.
- De Jong, J. P., & Den Hartog, D. N. (2007). How leaders influence employees' innovative behaviour. *European Journal of Innovation Management*, 10(1), 41-64.
- Eid, R., & Agag, G. (2020). Determinants of innovative behaviour in the hotel industry: A cross-cultural study. *International Journal of Hospitality Management*, 91, 102642.
- Elgarhy, S. D., Abdel Rahieem, W. M. A. N., & Abdulmawla, M. (2023). Influences of gamification on repurchase intention and intrinsic motivations in Egyptian hotels and travel agencies: The mediating role of customer engagement. *Journal of Quality Assurance in Hospitality & Tourism*, 1-23.
- Esmer, Y., & Faruk, D. A. Y. I. (2017). Entrepreneurial leadership: A theoretical framework. *Mehmet Akif Ersoy Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 4(2), 112-124.
- Franke, G., & Sarstedt, M. (2019). Heuristics versus statistics in discriminant validity testing: A comparison of four procedures. *Internet Research*, 29(3), 430-447.
- Freeman, D., & Siegfried Jr, R. L. (2015). Entrepreneurial leadership in the context of company start-up and growth. *Journal of Leadership Studies*, 8(4), 35-39.
- Gagel, G. (2018). The effects of leadership behaviors on organization agility: A quantitative study of 126 us-based business units. (Published Doctoral Thesis), Colorado State University, USA.
- García-Vidal, G., Sánchez-Rodríguez, A., Pérez-Campdesunñer, R., & Martínez-Vivar, R. (2019). Entrepreneurial leadership in SMEs: Perceptions of owner–managers vs. employees. *Management and Production Engineering Review*, 10(3), 97-110.
- Gottfredson, R. K., & Aguinis, H. (2017). Leadership behaviors and follower performance: Deductive and inductive examination of theoretical rationales and underlying mechanisms. *Journal of Organizational Behavior*, 38(4), 558-591.
- Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101-110.
- Hair, J. F., Black, W. C., Balin, B. j., & Anderson, R. E. (2010). *Multivariate data analysis*: Maxwell Macmillan International Editions.
- Harraf, A., Wanasika, I., Tate, K., & Talbott, K. (2015). Organizational agility. *Journal of Applied Business Research (JABR)*, 31(2), 675-686.
- Hasoumi, F., Yarmohammadian, M. H., & Fadavi, M. (2014). Relationship innovation with organizational agility among employees: Case study: Islamic Azad University of Khorasgan (Isfahan). *Singaporean Journal of Business, Economics and Management Studies*, 51(1449), 1-11.
- Hoang, G., Luu, T. T., Du, T., & Nguyen, T. T. (2023). Can both entrepreneurial and ethical leadership shape employees' service innovative behavior?. *Journal of Services Marketing*, 37(4), 446-463.

- Ibrahim, A., & Rashid, W. N. (2019). The role of entrepreneurial leadership in enhance organizational agility in telecommunication sector. *The Scientific Journal of Cihan University– Sulaimanyia*, 3(1), 182-196.
- Iqbal, A., Nazir, T., & Ahmad, M. S. (2022). Entrepreneurial leadership and employee innovative behavior: An examination through multiple theoretical lenses. *European Journal of Innovation Management*, 25(1), 173-190.
- Jan, B. K., & Maulida, M. (2022). The role of leaders' motivation, entrepreneurial leadership, and organisational agility in social enterprise sustainability. *The South East Asian Journal of Management*, 16(2), 97-118.
- Jo, Y., & Hong, A. J. (2022). Impact of agile learning on innovative behavior: A moderated mediation model of employee engagement and perceived organizational support. *Frontiers in Psychology*, 13, 900830.
- Kallmuenzer, A. (2018). Exploring drivers of innovation in hospitality family firms. *International Journal of Contemporary Hospitality Management*, 30(3), 1978-1995.
- Kang, M., & Lee, M. J. (2017). Absorptive capacity, knowledge sharing, and innovative behaviour of R&D employees. *Technology Analysis & Strategic Management*, 29(2), 219-232.
- Karimi, O., Daraei, M., & Sepehr, M. (2016). The effect of transformational leadership style on components of organizational agility in Isfahan University of technology. *International Research Journal of Management Sciences*, 4(2), 149-155.
- Karol, R. A. (2015). Leadership in the context of corporate entrepreneurship. *Journal of Leadership Studies*, 8(4), 30-34.
- Khalid, Z., Madhakomala, R., & Purwana, D. (2020). How leadership and organizational culture shape organizational agility in Indonesian SMEs?. *International Journal of Human Capital Management*, 4(2), 49-63.
- Khaola, P., & Coldwell, D. (2018). Explaining how leadership and justice influence employee innovative behaviours. *European Journal of Innovation Management*, 22(1), 193-212.
- Kimbu, A. N., de Jong, A., Adam, I., Ribeiro, M. A., Afenyo-Agbe, E., Adeola, O., & Figueroa-Domecq, C. (2021). Recontextualising gender in entrepreneurial leadership. *Annals of Tourism Research*, 88, 103176.
- Kock, N. (2021). WarpPLS User Manual: Version 7.0. Laredo, TX: ScriptWarp Systems.
- Kuratko, D. F. (2007). Entrepreneurial leadership in the 21st century: Guest editor's perspective. *Journal of Leadership & Organizational Studies*, 13(4), 1-11.
- Leitch, C. M., & Volery, T. (2017). Entrepreneurial leadership: Insights and directions. *International Small Business Journal*, 35(2), 147-156.
- Li, C., Makhdoom, H. U. R., & Asim, S. (2020). Impact of entrepreneurial leadership on innovative work behavior: Examining mediation and moderation mechanisms. *Psychology Research and Behavior Management*, 13, 105-118.
- Li, M., & Hsu, C. H. (2016a). Linking customer-employee exchange and employee innovative behavior. *International Journal of Hospitality Management*, 56, 87-97.
- Li, M., & Hsu, C. H. (2016b). A review of employee innovative behavior in services. *International Journal of Contemporary Hospitality Management*, 28(12), 2820-2841.

- Luu, T. T. (2019). Can diversity climate shape service innovative behavior in Vietnamese and Brazilian tour companies? The role of work passion. *Tourism Management*, 72, 326-339.
- Melián-Alzola, L., Domínguez-Falcón, C., & Martín-Santana, J. D. (2020). The role of the human dimension in organizational agility: An empirical study in intensive care units. *Personnel Review*, 49(9), 1945-1964.
- Miao, Q., Eva, N., Newman, A., & Cooper, B. (2019). CEO entrepreneurial leadership and performance outcomes of top management teams in entrepreneurial ventures: The mediating effects of psychological safety. *Journal of Small Business Management*, 57(3), 1119-1135.
- Miao, Q., Newman, A., Schwarz, G., & Cooper, B. (2018). How leadership and public service motivation enhance innovative behavior. *Public Administration Review*, 78(1), 71-81.
- Mokhber, M., Khairuzzaman, W., & Vakilbashi, A. (2018). Leadership and innovation: The moderator role of organization support for innovative behaviors. *Journal of Management & Organization*, 24(1), 108-128.
- Moran, A. (2015). *Managing agile: Strategy, implementation, organisation and people*. Springer Cham Heidelberg, Germany.
- Newman, A., Neesham, C., Manville, G., & Tse, H. H. (2018). Examining the influence of servant and entrepreneurial leadership on the work outcomes of employees in social enterprises. *The International Journal of Human Resource Management*, 29(20), 2905-2926.
- North, K., & Varvakis, G. (2016). The dynamic SME-how to develop agility and resilience to cope with turbulent environments. In *ICSB World Conference Proceedings* (pp. 1-8). International Council for Small Business (ICSB).
- Raeisi, N., & Amirnejad, Q. (2017). Investigating the effect of organizational leadership on organizational agility: Mediating role of organizational commitment. *International Journal of Economic Perspectives*, 11(1), 1154-1168.
- Renko, M. (2017). Entrepreneurial leadership. *Forthcoming in "Nature of Leadership"*, 3rd edition. Edited by David V. Day and John Antonakis. SAGE Publications.
- Renko, M., El Tarabishy, A., Carsrud, A. L., & Brännback, M. (2015). Understanding and measuring entrepreneurial leadership style. *Journal of Small Business Management*, 53(1), 54-74.
- Saeed, B. B., Afsar, B., Cheema, S., & Javed, F. (2019). Leader-member exchange and innovative work behavior: The role of creative process engagement, core self-evaluation, and domain knowledge. *European Journal of Innovation Management*, 22(1), 105-124.
- Sawaeen, F., & Ali, K. (2020). The impact of entrepreneurial leadership and learning orientation on organizational performance of SMEs: The mediating role of innovation capacity. *Management Science Letters*, 10(2), 369-380.
- Shahrabi, B. (2012). The role of organizational learning and agility in change management in state enterprises: A customer-oriented approach. *International Research Journal of Applied and Basic Sciences*, 3(12), 2540-2547.
- Slåtten, T., & Mehmetoglu, M. (2011). What are the drivers for innovative behavior in frontline jobs? A study of the hospitality industry in Norway. *Journal of Human Resources in Hospitality & Tourism*, 10(3), 254-272.

- Srimulyani, V. A. (2023). Job involvement and innovative work behaviour: The role of learning agility as mediation. *Jurnal Manajemen Universitas Bung Hatta*, 18(2), 218-230.
- Surie, G., & Ashley, A. (2008). Integrating pragmatism and ethics in entrepreneurial leadership for sustainable value creation. *Journal of Business Ethics*, 81(1), 235-246.
- Syauqiy, A. F., & Dirgantara, I. M. B. (2022). The role of strategy flexibility, competitive intelligence, organizational innovation, and entrepreneurship leadership in increasing agility of MSME Troso woven fabric. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 5(4), 29247-29254.
- Tajeddini, K., Martin, E., & Ali, A. (2020). Enhancing hospitality business performance: The role of entrepreneurial orientation and networking ties in a dynamic environment. *International Journal of Hospitality Management*, 90, 102605.
- Tallon, P. P., & Pinsonneault, A. (2011). Competing perspectives on the link between strategic information technology alignment and organizational agility: Insights from a mediation model. *MIS Quarterly*, 463-486.
- Thathsara, A. D. S., & Sutha, J. (2021). Investigating the influence of e-hrm practices on organizational performance: The mediating role of organizational agility (with special reference to financial institution). *International Journal of Engineering and Management Research (IJEMR)*, 11(1), 1-8.
- Utoyo, I., Fontana, A., & Satrya, A. (2020). The role of entrepreneurial leadership and configuring core innovation capabilities to enhance innovation performance in a disruptive environment. *International Journal of Innovation Management*, 24(06), 2050060.
- Wahyuono, H., & Moeljadi, M. R. (2023). The role of entrepreneurial orientation, information technology and dynamic capabilities on organizational agility with government policies as a moderation in hospital management view. *Journal of Survey in Fisheries Sciences*, 10(1), 2035-2057.
- Zainol, F. A., Daud, W. N. W., Shamsu, L., Abubakar, H. S., & Halim, H. A. (2018). A linkage between entrepreneurial leadership and SMEs performance: An integrated review. *International Journal of Academic Research in Business and Social Sciences*, 8(4), 104-118.
- Zhang, M., Liu, H., Chen, M., & Tang, X. (2022). Managerial ties: How much do they matter for organizational agility?. *Industrial Marketing Management*, 103, 215-226.
- Zhou, W., & Velamuri, V. K. (2018). Key contextual success factors for employee innovative behavior: A study in a foreign manufacturing subsidiary in China. *Cogent Business & Management*, 5(1), 1471770.

Appendix (A).	
Entrepreneurial Leadership	Renko et al. (2015)
EL.1. My leader often comes up with radical improvement ideas for the products/services we are selling.	
EL.2. My leader often comes up with ideas for completely new products/services that we could sell.	
EL.3. My leader takes risks.	
EL.4. My leader has creative solutions to problems.	
EL.5. My leader demonstrates a passion for his/her work	
Organizational agility	Melián-Alzola et al. (2020)
OA.1. The Hotel/Travel agency is an agile organization capable of adapting to changes	
OA.2. The Hotel/Travel agency can predict and identify changes	
OA.3. The Hotel/Travel agency can respond quickly to changes	
OA.4. The Hotel/Travel agency can respond flexibly to new demands for services that arise, adapting them to the resources and means available.	
Employee Innovative Behavior	Kang and Lee (2017)
EIB.1. I generate creative ideas.	
EIB.2. I promote and champion ideas to others.	
EIB.3. I investigate and secure funds needed to implement new ideas.	
EIB.4. I develop adequate plans and schedules for the implementation of new ideas.	

Appendix (B) Model fit and quality indices

	Assessment	Criterion	Supported/Rejected
Average path coefficient (APC)	0.436, P<0.001	P<0.05	Supported
Average R-squared (ARS)	0.379, P<0.001	P<0.05	Supported
Average adjusted R-squared (AARS)	0.377, P<0.001	P<0.05	Supported
Average block VIF (AVIF)	1.529	acceptable if ≤ 5 , ideally ≤ 3.3	Supported
Average full collinearity VIF (AFVIF)	1.463	acceptable if ≤ 5 , ideally ≤ 3.3	Supported
Tenenhaus GoF (GoF)	0.510	small ≥ 0.1 , medium ≥ 0.25 , large ≥ 0.36	Supported
Sympson's paradox ratio (SPR)	1.000	acceptable if ≥ 0.7 , ideally = 1	Supported
R-squared contribution ratio (RSCR)	1.000	acceptable if ≥ 0.9 , ideally = 1	Supported
Statistical suppression ratio (SSR)	1.000	acceptable if ≥ 0.7	Supported
Nonlinear bivariate causality direction ratio (NLBCDR)	1.000	acceptable if ≥ 0.7	Supported

العلاقة بين القيادة الريادية والسلوك الإبداعي للموظفين في قطاعي الضيافة والسياحة: دور الرشاقة التنظيمية

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تبحث هذه الدراسة في كيفية تأثير القيادة الريادية على السلوك الإبداعي للموظفين في قطاع الضيافة والسياحة من خلال فحص الدور الوسيط للرشاقة التنظيمية. تم استخدام PLS-SEM لتحليل 400 إجابة صحيحة تم جمعها من الموظفين بدوام كامل في فنادق الخمس نجوم ووكالات السفر من الفئة (أ) العاملة في مصر. تم إجراء تحليل البيانات باستخدام برنامج WarpPLS 7.0. أشارت النتائج إلى أن القيادة الريادية ترتبط ارتباطاً إيجابياً بالرشاقة التنظيمية والسلوك الإبداعي للموظفين. كما أشارت النتائج إلى أن الرشاقة التنظيمية ترتبط بشكل إيجابي بالسلوك الإبداعي للموظفين. علاوة على ذلك، تعمل الرشاقة التنظيمية كوسيط في العلاقة بين القيادة الريادية والسلوك الإبداعي للموظفين. تعمل الدراسة على تطوير الفهم النظري للقيادة الريادية، الرشاقة التنظيمية، والسلوك الإبداعي للموظفين في سياق صناعة السياحة والضيافة في مصر. ومن الناحية العملية، تزود الدراسة مؤسسات السياحة والضيافة بتوصيات لتعزيز فوائد القيادة الريادية من حيث المرونة التنظيمية والسلوك الإبداعي للموظفين.

الكلمات المفتاحية: القيادة الريادية، الرشاقة التنظيمية، السلوك الإبداعي للموظفين، الفنادق، وكالات السفر، مصر.