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Capturing Emerging Business Opportunities through Entrepreneurial Orientation and Innovation Behavior: The Moderating Role of Leader-Member Exchange

Jun-Chul Ha

Department of Electrical System Engineering, Hanbat National University, Daejeon 34158, Korea; hajunchul@hanbat.ac.kr

Abstract: In the changing market environment due to the fourth industrial revolution, entrepreneurial orientation and innovation can accelerate the company's sustainable growth, and performance improvement through the mutual relationship between leaders and members is essential. This study investigated the effect of the innovation behavior of entrepreneurial orientation on job performance by focusing on the conditional indirect effect of leader-member exchange (LMX) in the mediated relationship. To this end, research data were collected from 324 employees from different SMEs in South Korea. Based on the results, entrepreneurial orientation had a positive effect on innovation behavior and job performance. In addition, it was found that innovation behavior had a positive effect on job performance and partially mediated the relationship between entrepreneurial orientation and job performance. LMX showed a conditional indirect effect in the mediated model and moderated the relationship between risk-taking and job performance. The results have significant implications for SMEs pursuing entrepreneurial orientation, which was discussed. This study has significant implications in that high performance can be achieved by realizing the importance of employees' innovation behavior and LMX within the company for sustainable management.

Keywords: entrepreneurial orientation; innovation behavior; job performance; leader-member exchange; sustainable competitive advantage

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1. Introduction

Innovation and change are becoming important sources of competitive advantage for companies in today's rapidly changing market environment. Under this situation, entrepreneurial orientation is of paramount importance for SMEs in improving their corporate performance and securing a sustainable source of growth [1,2].

Companies can secure sustainable competitive advantage and continue to grow in this era of change, by seeking business opportunities through innovative activities, with entrepreneurial orientation to take risks. Therefore, there is a growing theoretical and practical interest in entrepreneurial orientation as a major factor for improving corporate performance and pursuing growth. In addition, the importance of innovation is increasing because it is one of the most important competencies in today's business [3], which can lead companies to grow and improve their performance by securing business opportunities in a rapidly changing environment.

Innovations start with individual innovation behavior, through the recognition of problems and realization of ideas, which can enable companies to achieve outstanding performance [4]. Innovation behavior is important because companies that fail to adequately respond to changes in the dynamic environment caused by the rapid development of new technologies and market crises may be culled and fail.

Therefore, studies on entrepreneurial orientation and innovative activities are necessary since they are core competence to the survival of companies [5,6], as companies must seize opportunities in the changing market and derive new business opportunities

in the rapidly intensifying competitive environment. From a company's point of view, entrepreneurial tendencies and innovation behaviors are challenging tasks that require a lot of input (financial and non-financial) and effort, so it is important to understand the relationship between them and present practical implications.

Furthermore, it would also be meaningful to identify the effect of leader-member exchange (LMX) on the relationship between corporate performance and entrepreneurial orientation, as well as innovation behavior, which is discussed in this study. Leader-member exchange, in which the role of the leader and members is set through the interaction between the leader and members [7,8], has a positive effect on the work performance and performance of members within the organization.

In most studies on entrepreneurial orientation, innovation behavior has been treated as a performance factor. There is a lack of research on the mediation effect of innovation behavior and the effect of LMX on the relationship between leaders and members in organizations with entrepreneurial orientation. Therefore, this study expands the theoretical scope and also clarifies related concepts, by analyzing the effects of innovativeness, proactiveness, and risk-taking of entrepreneurial orientation on job performance, the mediation effect of innovation behavior, and the moderating effect on LMX.

This study conducted a questionnaire collected from small and medium-sized enterprises (SMEs) for empirical analysis. Based on these results, we paid attention to the importance of innovative actions and LMX as a way to respond to changes caused by the fourth industrial revolution. Furthermore, through this research, the results of this study are intended to provide theoretical and practical implications, contribute to the expansion of the scope of research, and provide practical insights into how to manage sustainable companies through entrepreneurial orientation.

This article consists of six sections: introduction, literature review and hypotheses, method, results, discussion, and conclusions.

2. Literature Review and Hypotheses

2.1. Entrepreneurial Orientation

Companies must continuously seek business opportunities to secure sustainable competitive advantage. Entrepreneurial orientation (EO) plays an important role as companies seek to survive in this rapidly changing environment [1,2].

EO has been developed as a very important means for SMEs to secure competitive advantage [9]. Companies with a high degree of EO can aggressively open up new markets and improve business performance because they have the ability to actively respond to uncertain market environments [10]. EO is constantly striving to find new business opportunities in an uncertain and rapidly changing environment, taking risks, and being innovative and proactive. So, it has been treated as a driving force for corporate growth by improving the organizational performance of venture businesses and SMEs and securing competitive advantage through innovation [10–12].

For start-ups to succeed, they must have a differentiated competitive advantage. EO started as a way for start-ups to succeed, and the need for innovative, progressive, and risk-taking entrepreneurial behavior was highlighted [6]. Moreover, it has been developed by Covin and Slevin [13] as an enterprising activity that creates a leap forward by exploring new markets and creating value to capture opportunities in the market as a source of competitive advantage for companies. Subsequently, EO was proposed by Lumpkin and Dess [14] as an innovative, proactiveness, and risk-taking propensity for an enterprise.

The detailed components of EO have been continuously discussed and developed. In many studies, the characteristics of EO are defined in three dimensions, i.e., innovativeness, proactiveness, and risk-taking. There is also the tendency to act independently, become innovative, and risk-taking, as companies with EO challenge competitors and become enterprising about market opportunities [6,11].

After reviewing many previous studies, this study constructed the component of EO in the three most widely used dimensions: innovativeness (IN), proactiveness (PR), and

risk-taking (RT). The first component is IN. Corporate innovation provides companies with resources and new capabilities to generate revenues [15] and is achieved through innovative activities such as new product development and market development [16]. IN is an effort to innovate the company in order to seize new opportunities in a fiercely competitive environment [17]. Such IN can support and encourage team members in the organization to think creatively [18].

The second component is PR. PR entails responding to opportunities and enables effective Strategic decision-making by predicting future market changes [6]. Companies with PR explore new opportunities more aggressively than their competitors and are able to play the role of the "first mover", who first introduces new products or services, rather than the "slow starter", who reacts to changes in the market. In particular, the PR concept has become more important these days, with the shortened product life cycle and very rapidly changing technologies [14].

The third component is RT. RT refers to the behavior of overcoming various risks and seizing opportunities in an uncertain environment. It entails a tendency to actively seek opportunities and create high corporate performance through RT [19]. In other words, it means being challenged to invest resources to secure more opportunities, through risk-taking in an uncertain environment, to achieve high performance, even if the high performance may not be guaranteed at the time [20,21]. Eventually, companies with RT can achieve high performance through new business opportunities, which are created by the management that is challenging enough to take risks.

2.2. Innovation Behavior

Companies seek to improve their organizational performance through goal-oriented and specific changes in their members and organization through innovation [22,23]. Whereas productivity improvement was emphasized in order to increase profits in the traditional business environment of the past, companies facing a dynamic and complex business environment these days emphasize innovative performance to generate customer and market-oriented performance results [24]. Therefore, continuous innovation is a factor in the movement toward the high-performing organization [25] and is necessary to secure a competitive advantage in the new competitive environment, which is constantly changing [26].

Innovation behavior (IB) entails proposing, introducing, and applying new ideas that are helpful in improving work and organizational performance through the voluntary actions of members of the organization related to organizational innovation [27–29]. Ideas generated in this process enable the generation of high organizational performance [30]. Therefore, companies need to make efforts to encourage IB in order to increase organizational effectiveness [4,31].

In addition, companies can achieve high performance through IB, by solving difficult problems faced by companies through idea generation [4], which will give them a competitive advantage in strategic decision-making, and which will enable them to differentiate themselves from their competitors [32]. Moreover, companies can accelerate innovation by encouraging employees to learn new skills, conduct brainstorming on a regular basis, and trust the team and organization [33].

Since innovation is closely related to internal communication and the adaptation of employees, interaction between leaders and employees is critical [34]. This is because innovation is highly likely to fail if it causes the resistance of employees or if it is not familiar to them [35].

IB can bring about changes in the market and companies, create a new paradigm of competition, and form barriers to entry. Therefore, it is an important factor for the survival and continuous growth of organizations, which will be made possible by securing a competitive advantage in today's uncertain environment [36–38].

2.3. Entrepreneurial Orientation and Innovation Behavior

Companies can achieve high performance through a variety of strategies and efforts through the EO and employees' IB that drive continuous growth in times of change. In particular, EO and IB are of paramount importance for SMEs in overcoming changes, since they are more sensitively affected by changes in the environment [19,39].

The majority of previous studies report that EO plays a very important role in the IB of organizational members and that EO has a positive effect on IB. A study by Amabile and Con-ti [40] reports that when the CEO takes a risk and is proactive, employees are motivated to innovate and adopt more creative behaviors that could improve performance.

In the study of Dorf and Byers [41], it was argued that EO, which utilizes the technology and innovation of an organization, creates high performance. In Zhao's [42] study on the mutual synergy effect between EO and IB, it was argued that EO and IB have a positive relationship with each other and achieve high performance in a changing environment.

In addition, Jiang and Fu [43] found that EO had a positive effect on IB and had a moderating effect on reducing transaction costs, in a study that analyzed the moderating effects of transaction costs and intellectual property protection on the relationship between EO and IB. As a result, we believe it is worthwhile to investigate the influence of EO on IB, and we suggest the following hypothesis:

Hypothesis 1 (H1). *Entrepreneurial orientation positively influences innovation behavior.*

Hypothesis 1a (H1a). *Innovativeness in entrepreneurial orientation positively influences innovation behavior.*

Hypothesis 1b (H1b). *Proactiveness through entrepreneurial orientation positively influences innovation behavior.*

Hypothesis 1c (H1c). *Risk-taking in entrepreneurial orientation positively influences innovation behavior.*

2.4. Job Performance

It is important for an organization to achieve high performance based on the high competency of employees in achieving sustainable competitive advantage [44,45]. Job performance (JP) refers to the desired state that organizational members want to achieve in performing their duties, or the degree to which they can achieve their goals by performing their duties [46,47]. In addition, JP is the degree to which an organization achieves its desired outcome concerning its official work given to its members [48].

JP refers to the degree to which members of the organization recognize that they have reached their goals in performing their duties, and the extent to which they have tried their best to do their duties [49]. Thus, JP is judged by whether the members of the organization have been successful in performing their duties to achieve organizational goals [50]. In addition, JP improves the financial and non-financial performance of the organization through its high proficiency in the work of employees [51].

2.5. Entrepreneurial Orientation and Job Performance

In the relationship between EO and JP, EO improves organizational performance through the discovery of opportunities, [52] and guarantees high performance by securing competitive advantage through EO [53]. Moreover, the higher the EO of the organization, the more the organizational members actively implement innovation and change. Through this, a sense of belonging to the organization can be used to achieve a higher JP [54].

In many prior studies, EO has been treated as a factor in improving JP. Guth and Ginsberg [55] reported that EO has a positive effect on organizational effectiveness. A study by Chavez [56] found that an enterprise's EO characteristics have a significant effect on the performance of a business venture.

In a study of Indonesian companies by Chienwattanasook and his colleagues [57], EO was found to be a factor that improves business performance. Sabahi and Parast's [58] machine learning analysis of the relationship of EO with individual project performance also showed that EO had a positive effect on the attitude on project performance. As such, JP has been studied as a factor that can indicate organizational performance because of the expectation that individuals and organizations can succeed through productivity improvement and the sense of accomplishment and satisfaction in members, as JP strives to improve corporate performance.

The introduction of EO in SMEs is very important because of the significant relationship between EO and JP, as companies seek to develop themselves into sustainable companies, beyond their viability, in an era of change [59]. Through the previous studies discussed above, JP can be seen as an individual's success that precedes the organization's growth and development. In addition, through the measurement of JP, it is possible to predict the possibility of organizational success through personal and organizational growth by achieving individual goals. Considering the prior studies discussed, we hypothesized that EO is positively influenced JP.

Hypothesis 2 (H2). *Entrepreneurial orientation positively influences job performance.*

Hypothesis 2a (H2a). *Innovativeness in entrepreneurial orientation positively influences job performance.*

Hypothesis 2b (H2b). *Proactiveness through entrepreneurial orientation positively influences job performance.*

Hypothesis 2c (H2c). *Risk-taking in entrepreneurial orientation positively influences job performance.*

2.6. Mediation Effect of Innovation Behavior

Innovation is important because it allows organizations to continue to grow as they adapt to a changing environment. Since organizational performance is improved when members of an organization engage in innovation behavior, companies need various methods to induce the innovation behavior of members.

Innovation behavior (IB) can appear as an improvement in organizational performance as members express, introduce, and utilize ideas about their duties [27–30]. The organization may also be able to achieve differentiation and high performance through changes and improvements and thereby secure a competitive advantage [32,36–38]. Thus, organizations may be able to attain high performance by achieving organizational innovation through individual IB [60].

IB has been widely discussed as a key variable for improving organizational performance. For example, Orfila-Sintes and Mattsson [61] verified the innovation behavior model for the hotel industry and found that IB had a positive effect on hotel performance. Long and his colleagues [62] also mentioned the importance of IB as it positively affects economic and environmental performance through innovation in a study on the effect of IB on the economic and environmental performance of Chinese companies.

In Cruz and his colleagues' study [63] on the mediation effect of IB on the relationship between EO and business success, it was revealed that EO had a positive effect on business success through IB. Ndubisi and Iftikhar [64] found that EO and IB had a significant direct relationship with quality performance, and in particular, EO significantly improved IB and quality performance.

In addition, a study of global companies by O'Cass and Weerawaardena [65] found that EO has been shown to achieve high market performance through organizational innovation. Domi and his colleagues [66] proved the significance of indirect effects through the mediating role of innovation behavior in a study on Albanian tourism SMEs.

The study conducted by Aftab and his colleagues [67] on 297 SMEs in Pakistan showed that EO had a positive effect on financial, social, and environmental performance, with IB

as the mediator. They also highlighted the importance of EO in driving IB and corporate performance. Considering the prior research discussed, the hypothesis was set that there were direct and mediated effects of IB in the relationship between EO and JP.

Hypothesis 3 (H3). *Innovation Behavior (IB) positively influences job performance.*

Hypothesis 4 (H4). *IB mediates the relationship between entrepreneurial orientation and job performance.*

Hypothesis 4a (H4a). *IB mediates the relationship between innovativeness in entrepreneurial orientation and job performance.*

Hypothesis 4b (H4b). *IB mediates the relationship between proactiveness through entrepreneurial orientation and job performance.*

Hypothesis 4c (H4c). *IB mediates the relationship between risk-taking through entrepreneurial orientation and job performance.*

2.7. Leader-Member Exchange (LMX)

Leader-member exchange (LMX) is based on leadership that places importance on emotional relationships, based on a social exchange relationship [68]. LMX is an advanced concept of leadership theory and refers to a relationship that seeks support, trust, and respect for the achievement of a common goal between the leader and members [69,70]. LMX is based on the "social exchange theory" and the "role-making theory" and is a theory in which the quality of the relationship is determined by the exchange relationship between the leader and members [71].

LMX entails respect, mutual trust, and a sense of duty between the superior and subordinates. When the quality of LMX is high, it allows for a comfortable interaction through a mutually intimate relationship [68], which increases work efficiency through emotional ties [7]. The key to the LMX theory is that the attitude, behavior, and performance of members are affected following the relationship between the leader and members [70,72].

Members with a high level of LMX frequently exchange opinions with the leader and engage in creative and innovation behavior [28] and can achieve high performance by making efforts to repay the benefits they have received from their superiors [73].

2.8. Moderation Effect of Leader-Member Exchange (LMX)

LMX has been found to have a significant effect on organizational performance in many previous studies. Epitropaki and Martin [74] found that the higher the quality of LMX, the higher the work attitude and the well-being of members. In a study by Janssen [75], it was found that the quality of LMX has a positive effect on in-role job performance, leader-rated innovative job performance, and job satisfaction.

In a study of R&D workers by Scott and Bruce [28], it was found that role expectations and support of the leader had a positive effect on IB. In a study by Watson and his colleagues [76], it was found that organizations with a higher degree of entrepreneur orientation achieved higher performance when they had effective interpersonal relationship processes, which indicates that the exchange of ideas and opinions through LMX and improvements in communication is very important. Masterson and colleagues [77] found that recognizing interactive definitions had a positive effect on supervisor-related outcomes mediated by LMX. In an empirical study by Altantsetseg and his colleagues [78] on the relationship between entrepreneurial leadership and LMX in Asian companies, it was found that the two factors had a significant influence, and in particular, had a more influence on men.

As such, various existing prior studies have shown that the characteristics associated with LMX have significant effects on EO and IB. It can be expected that organizations with a high quality of LMX can improve organizational performance based on mutual ties, as it

facilitates the communication and relationship between the leader and members. Based on these discussions, we propose the following hypotheses:

Hypothesis 5 (H5). *Leader-member exchange (LMX) moderates the mediation effect of innovation behavior between entrepreneurial orientation and job performance.*

Hypothesis 6 (H6). *LMX moderates the relationship between entrepreneurial orientation and job performance.*

Hypothesis 6a (H6a). *LMX moderates the relationship between innovativeness and job performance.*

Hypothesis 6b (H6b). *LMX moderates the relationship between proactiveness and job performance.*

Hypothesis 6c (H6c). *LMX moderates the relationship between risk-taking and job performance.*

2.9. The Research Model

Figure 1 shows the relationships between the key variables we discussed in previous studies and the hypotheses proposed.

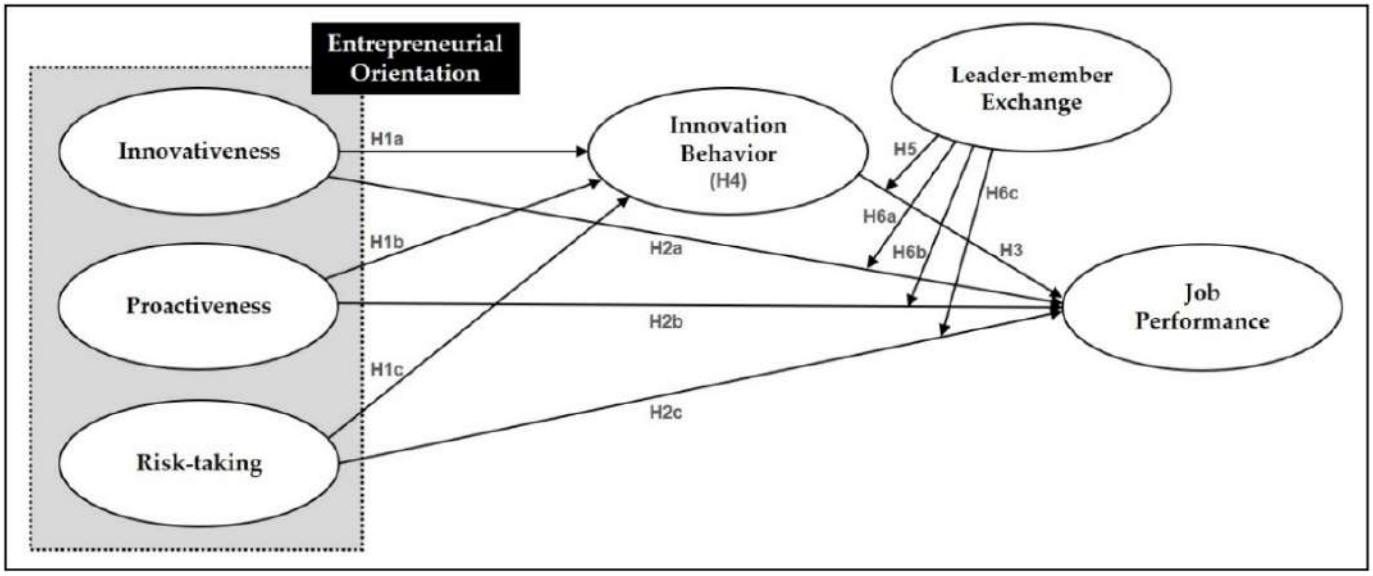


Figure 1. Hypothesized research model.

3. Method

3.1. Sample and Procedures

The data were collected from regular employees SMEs in South Korea for two weeks in June 2021. Originally, the questionnaires were given in paper copy or through email to 370 employees. However, we limited our sample to those who were 25 years old or over, had high school education or over, and worked at least one year at their job. We further deleted 46 cases due to a high rate of no responses to key variables, and thus, the final sample was reduced to 324 employees (87.6%).

The sample age ranged from 25 to 59 years, with a mean of 38.1 years (standard deviation = 8.2), and 38.3% were female. Educational background was high school (9.6%), junior college (15.7%), four-year college (65.7%), and graduate school (9.0%).

By job type, white-collar workers (69.1%), sales (6.8%), R&D (11.1%), production workers (8.3%), and others (4.6%) made up the majority of white-collar workers. In the sample, companies with less than 100 full-time workers accounted for (63.3%), companies with 100–499 full-time workers accounted for (25.0%), and companies with 500 or more employees (11.7%). As for employment period, (10.5%) had less than 3 years of service,

(15.1%) had more than 4 years and less than 6 years, (23.8%) had more than 7 years and less than 10 years, and (50.6%) worked for more than 11 years.

3.2. Measures

All variables were evaluated using scales that had previously been validated in other studies. For all measurement questions, a Likert-type five-point scale was used as the response method. Appendix A shows the measuring instruments of all the constructs.

3.2.1. Entrepreneurial Orientation

To measure entrepreneurial orientation, we applied and modified the Lumpkin and Dess [14] scales and the Covin and Slevin [19] scales. Entrepreneurial orientation consists of three sub-constructs: innovativeness, proactiveness, and risk-taking. Innovativeness was measured by three items (Cronbach's $\alpha = 0.81$). Sample items for innovativeness include the following: "I actively accept new ideas". Proactiveness is a three-item scale (Cronbach's $\alpha = 0.72$). The sample item includes "I am forward-looking and tend to share changes with my colleagues". Risk-taking is a three-item scale (Cronbach's $\alpha = 0.83$), and the sample item is the following: "I tend to take risks to improve the performance of the company". Altogether, entrepreneurial orientation was assessed by nine items.

3.2.2. Innovation Behavior

To measure innovation behavior, we adapted from Jassen's scale [23]. Innovation behavior was assessed by a three-item scale (Cronbach's $\alpha = 0.87$), and the sample item shows the following: "I try to introduce innovative ideas into my work in a systematic way".

3.2.3. Leader-Member Exchange

LMX (Leader-Member Exchange) adopted and modified the scale of Green and Uhl-Bien (1995) [68,69] in consideration of previous research and used three items (Cronbach's $\alpha = 0.86$). The sample item is: "Regardless of the official authority granted to the position, there is a possibility that my supervisor will use his/her authority to help me with work-related problems to resolve grievances related to my work".

3.2.4. Job Performance

Job Performance is a three-item scale (Cronbach's $\alpha = 0.69$), adapted from Stump and Hartman (1984) and modified [49]. The sample question is: "The level of my job performance is higher than required by the organization".

3.3. Statistical Analysis

This study analyzed the mediating effect of innovation behavior and the moderating effect of LMX on the effects of entrepreneurial orientation on job performance. To this end, confirmatory factor analysis and correlation analysis were performed through competitive model analysis. To verify the hypotheses, the mediating and moderating effects of Baron and Kenny [79] were examined, and the indirect effects of the mediating and moderating effects were measured using the bootstrapping tool Process Macro.

4. Results

4.1. Confirmatory Factor Analysis

We used SPSS 25 and Amos 22 to conduct confirmatory factor analysis (CFA) to determine the distinctness of the scales for innovativeness, proactiveness, risk-taking, innovation behavior, LMX, and job performance.

As reported in Table 1, the proposed six-factor model was found to be more suitable than other alternative models (χ^2 (df = 120) = 207.505, $p < 0.001$; Tucker–Lewis Index (TLI) = 0.958; comparative fit index (CFI) = 0.967; root mean square residual (RMR) = 0.028; root mean square error of approximation (RMSEA) = 0.048). These findings corroborate the empirical character of the six-factor model investigated in this study.

Table 1. Confirmatory factor analysis.

Model	Description	χ^2	*df*	χ^2/df	CFI	TLI	RMSEA	RMR	Change from Model 4	
									$\Delta\chi^2$	Δ *df*
1	One-factor model [a]	223.952	129	1.736	0.964	0.956	0.048	0.033	16.447	9
2	Three-factor model [b]	222.440	127	1.751	0.964	0.956	0.048	0.033	14.935	7
3	Four-factor model [c]	221.952	126	1.762	0.964	0.956	0.049	0.033	14.447	6
4	Six-factor model [d]	207.505	120	1.729	0.967	0.958	0.048	0.028	-	-

N = 324. CFI = Comparative fit index; TLI = Tucker–Lewis index; RMSEA = Root mean square error of approximation. RMR = Root mean square residual. [a] All three entrepreneurial orientation items (innovativeness, proactiveness, and risk-taking), innovation behavior, LMX, and job performance combined as one construct. [b] Mediator and moderator combined as one construct with entrepreneurial orientation and job performance as separate constructs. [c] Three entrepreneurial orientation items combined as one construct with innovation behavior, LMX, and job performance as separate constructs. [d] Hypothesized model in which all items are separate constructs.

4.2. Test of Hypotheses

Table 2 shows the study variables' means, standard deviations, and correlations. We used a hierarchical regression analysis to test the suggested hypotheses. Hypothesis 1 predicted that entrepreneurial orientation (consisting of innovativeness, proactiveness, and risk-taking) would positively influence innovation behavior.

Table 2. Mean, standard deviation, correlation, and scale reliability of the variables.

Variables	Mean	SD	1	2	3	4	5	6
1. Innovativeness	3.38	0.66	(0.81)					
2. Proactiveness	3.58	0.59	0.62 **	(0.72)				
3. Risk-taking	3.13	0.72	0.56 **	0.52 **	(0.83)			
4. Innovation behavior	3.41	0.70	0.53 **	0.55 **	0.64 **	(0.87)		
5. Leader-member exchange	3.04	0.82	0.18 **	0.07	0.28 **	0.27 **	(0.86)	
6. Job performance	3.49	0.56	0.38 **	0.38 **	0.36 **	0.40 **	0.17 **	(0.69)

Cronbach's α coefficients appear in parentheses along the main diagonal. ** $p < 0.01$.

In Table 3, Model 1 shows that beta coefficients of all constructs of entrepreneurial orientation are statistically significant, innovativeness ($\beta = 0.13$, $p < 0.05$), proactiveness ($\beta = 0.24$, $p < 0.001$), and risk-taking ($\beta = 0.45$, $p < 0.01$). Therefore, Hypothesis H1a, H1b, and H1c were supported. Since all sub-constructs of entrepreneurial orientation give support to the sub-hypotheses, we found that entrepreneurial orientation, as a superordinate construct, will influence innovation behavior positively.

Table 3. Results of regression analyses for entrepreneurial orientation, innovation behavior, and job performance.

Model	Regression Path	B	S.E.	β	t	R^2	Overall F
Model 1 (H1)	IN→IB	0.14	0.06	0.13 *	2.42	0.49	101.48 ***
	PR→IB	0.28	0.06	0.24 ***	4.51		
	RT→IB	0.44	0.05	0.45 ***	8.88		
Model 2 (H3)	IB→JP	0.32	0.04	0.40 ***	7.86	0.16	61.77 ***

IN: Innovativeness, PR: Proactiveness, RT: Risk-taking, IB: Innovation behavior, JP: Job performance. * $p < 0.05$, *** $p < 0.001$.

Hypothesis 2 predicted that entrepreneurial orientation had a positive effect on job performance. In Model 1 in Table 3, all three entrepreneur-oriented variables had a statistically significant effect on job performance ($\beta = 0.17$, $p < 0.05$; $\beta = 0.18$, $p < 0.01$; and $\beta = 0.17$, $p < 0.01$). Thus, Hypothesis 2 and its sub-hypotheses H2a, H2b, and H2c were supported. Hypothesis 3 suggested that innovation behavior has a positive impact on job performance. In Model 2 of Table 3, exhibits that innovation behavior positively affects job performance ($\beta = 0.40$, $p < 0.001$). Thus, Hypothesis 3 was also supported.

To test Hypotheses 4 and 5, the hierarchical regression analysis by Baron and Kenny [79] was performed. Hypothesis 4 (H4a~H4c) proposed that innovation behavior mediates the relationship between entrepreneurial orientation (and sub-constructs) and job performance. Model 2 in Table 4, investigated how effective innovation behavior was in mediating the relationship between entrepreneurial orientation and job performance showed that innovativeness (β = 0.15, $p < 0.05$), proactiveness (β = 0.13, $p < 0.05$) in entrepreneurial orientation were involved in partial mediation. However, risk-taking did not have a mediation effect (β = 0.08, p = n.s.) on the relationship between entrepreneurial orientation and job performance. The Sobel test was conducted to further support our test results.

Table 4. Results of regression analyses for job performance with innovation behavior as a mediator and Leader-member exchange (LMX) as a moderator.

Variables	Model 1		Model 2		Model 3		Model 4	
	β	t	β	t	β	t	β	t
Independent variables								
Innovativeness	0.17 *	2.54	0.15 *	2.16	0.14 *	2.09	0.14 *	1.98
Proactiveness	0.18 **	2.73	0.13 *	1.98	0.15 *	2.13	0.12	1.78
Risk-taking	0.17 **	2.66	0.08	1.13	0.07	0.93	0.06	0.84
Mediator								
Innovation behavior (IB)			0.20 ***	2.86	0.19 **	2.67	0.23 **	3.15
Moderator								
Leader-member exchange (LMX)					0.06	1.17	0.03	0.54
Interaction								
IB × LMX							0.11 *	2.03
R^2	0.19		0.21		0.22		0.23	
Δ R^2			0.01		0.01		0.01	
Overall F	24.59 ***		21.75 ***		17.69 ***		15.58 ***	

Dependent variable: Job performance. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Sobel test value of innovation behavior's mediation effect in measuring the impact of innovativeness on job performance was 2.32 ($p < 0.05$), and that in measuring the impact of proactiveness on job performance was 3.91 ($p < 0.001$). As the Sobel values were greater than the critical value of 1.96, the significance of the mediation effect was reconfirmed. Overall, Hypothesis 4 was partially supported.

Table 5 shows the results of using bootstrapping of Process Macro [80] to verify the indirect effect of Hypothesis 4 (H4a, H4b). As a result of bootstrapping analysis, both hypotheses H4a (B = 0.13, CI = 0.07~0.19) and H4b (B = 0.15, CI = 0.08~0.22) showed significant indirect effects.

Table 5. The bootstrapping result of the mediation effect of innovation behavior.

Hypothesis	Variables Path	Indirect Effect (B)	S.E.	LLCI	ULCI
H4a	IN→IB→JP	0.13	0.03	0.07	0.19
H4b	PR→IB→JP	0.15	0.04	0.08	0.22

IN: Innovativeness, PR: Proactiveness, IB: Innovation behavior, JP: Job performance; Bootstrapping based on N = 10,000 subsamples; Bias corrected bootstrap 95% confidence interval.

Hypothesis 5 predicted that in the proposed research model, LMX would act as a moderating effect in the relationship between innovation behavior and job performance. The interaction effect of innovative behavior and LMX on job performance is significant (β = 0.11, $p < 0.05$), as shown in Model 4 in Table 4. Hypothesis 5 was thus supported.

Hypothesis 6 and its sub-hypotheses H6a, H6b, and H6c state that LMX moderates between entrepreneurial orientation (innovativeness, proactiveness, and risk-taking) and job performance. Model 3 of Table 6 show that the interactive effect of risk-taking and LMX on job performance was significant (β = 0.16, $p < 0.05$), but the other interactive effects were not significant (β = −0.06, −0.07, p = n.s.). As a result, LMX only moderated the relationship

between risk-taking and job performance, which supported only hypothesis H6c and rejected hypotheses H6a and H6b. Therefore, Hypothesis 6 received partial support.

Table 6. Results of regression analyses for job performance with Leader-member exchange (LMX) as a moderator.

Variables	Model 1		Model 2		Model 3	
	β	t	β	t	β	t
Independent variables						
Innovativeness (IN)	0.17 *	2.54	0.17 *	2.42	0.16 *	2.33
Proactiveness (PR)	0.18 **	2.73	0.19 **	2.90	0.14 *	2.04
Risk-taking (RT)	0.17 **	2.66	0.14 *	2.21	0.19 **	2.84
Moderator						
Leader-member exchange (LMX)			0.08	1.55	0.09	1.57
Interaction						
IN × LMX					−0.06	−0.88
PR × LMX					−0.07	−1.01
RT × LMX					0.16 *	2.45
R^2	0.19		0.20		0.22	
Δ R^2			0.01		0.02	
Overall F	25.69 ***		19.95 ***		12.40 ***	

Dependent variable: Job performance; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 7 shows the results of bootstrapping to analyze the effect of the modulating effect of LMX of hypotheses 5 and 6 adopted in Table 6. As the interaction was significant, a specific value selection method was used to explore the moderating effect of LMX.

Table 7. The bootstrapping result of the moderation effect of leader-member exchange (LMX).

Model	Variables Path	Moderator: LMX		S.E.	LLCI	ULCI
Model 1 (H5)	IN→IB→JP	Low	0.17	0.05	0.05	0.26
		Mid	0.24	0.05	0.13	0.33
		High	0.30	0.06	0.17	0.44
	PR→IB→JP	Low	0.16	0.05	0.05	0.26
		Mid	0.23	0.05	0.13	0.33
		High	0.31	0.07	0.17	0.44
Model 2 (H6c)	RT→JP	Low	0.17	0.05	0.07	0.27
		Mid	0.26	0.04	0.18	0.35
		High	0.36	0.05	0.25	0.46

IN: Innovativeness, PR: Proactiveness, RT: Risk-taking IB: Innovation behavior, JP: Job performance; Bootstrapping based on N = 10,000 subsamples; Bias corrected bootstrap 95% confidence interval.

In the analysis of the mediated moderation effects of LMX in the mediation effects of innovative behavior of Model 1 (H5) in Table 7, the mediated moderation effects by LMX was that innovation behavior (innovativeness and proactiveness of entrepreneurial orientation) increased (innovativeness: low = 0.17, mid = 0.24, high = 0.30; proactiveness: low = 0.16, mid = 0.23, high = 0.31; all CI values are significant) as LMX increased.

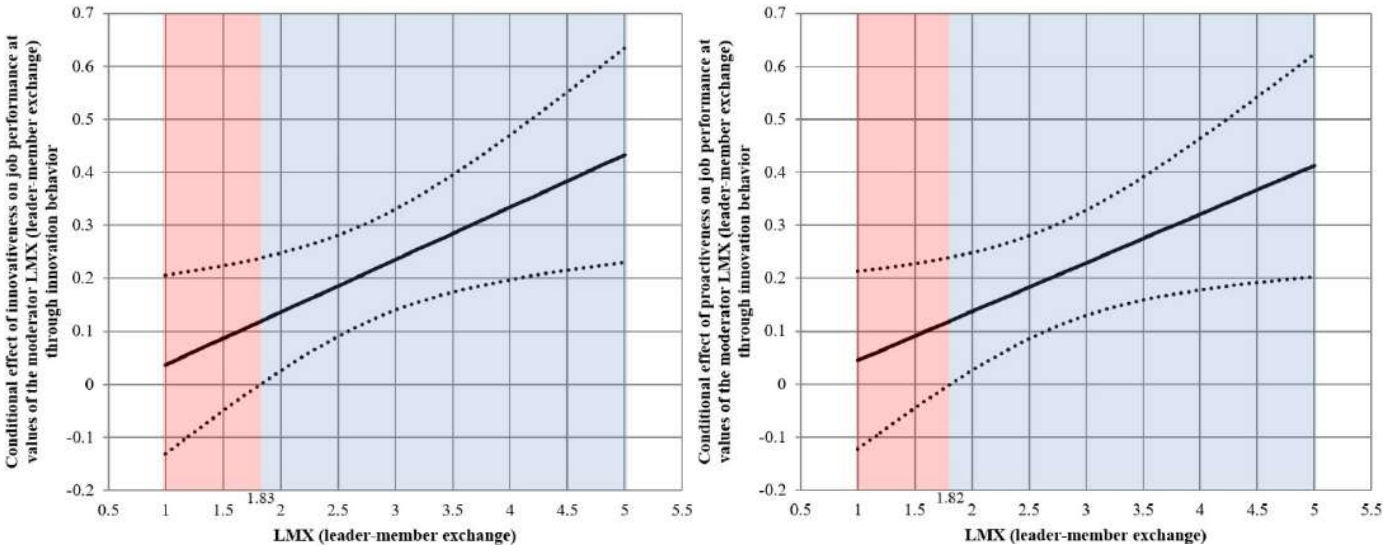
Model 2 (H6c) in Table 7 is the bootstrapping result for the moderating effect of LMX on the effect of risk-taking on job performance. As a result of the analysis, the higher the LMX, the more significant (low = 0.17, CI = 0.07~0.27; mid = 0.26, CI = 0.18~0.35; high = 0.36, CI = 0.25~0.46) the improvement in job performance according to risk-taking.

Overall, all the accepted hypotheses (H5, H6c) showed that job performance increased as the LMX moderating effect increased.

Furthermore, we analyzed the significant area of the moderation effect we had tested, using Johnson-Neyman's illumination analysis. This allowed us to determine the important area in the moderation effect.

Figure 2 shows the conditional effect of entrepreneurial orientation on job performance at specific values of the moderator LMX through innovation behavior. In (a) of Figure 2, if

innovativeness (lower dimension) is above 1.83, and in (b) of Figure 1, if proactiveness is above 1.82, they were statistically significant. Based on these changes, it was found that if the entrepreneurial orientation of employees is low (>1.83), the moderation effect is not significant, and if entrepreneurial orientation is higher in significant areas, the moderation effect of LMX increases.



(**a**) (**b**)

Figure 2. Conditional effect of entrepreneur orientation on job performance at values of the moderator LMX through innovation behavior: (**a**) Conditional effect of innovativeness on job performance at values of the moderator LMX through innovation behavior; (**b**) Conditional effect of proactiveness on job performance at values of the moderator LMX through innovation behavior; ··· 95% CI Upper and lower limit; — Point estimate.

Additionally, the moderation effect of LMX was statistically significant concerning the impact of risk-taking on job performance, illustrated in Figure 3. The value of risk-taking being above 1.98 was statistically significant. As for changes, the larger risk-taking value in significant areas (>1.98) led to a greater moderation effect of LMX.

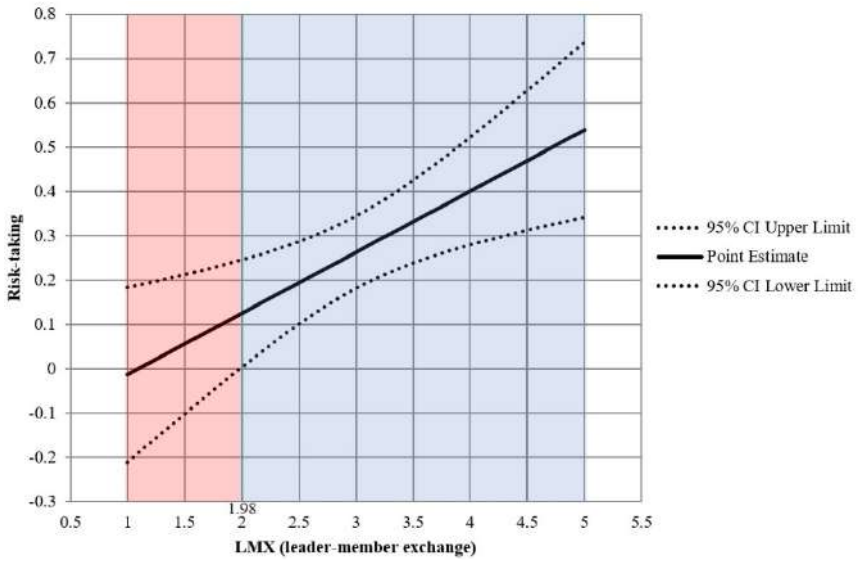


Figure 3. Conditional effect of risk-taking on job performance at values of the moderator LMX.

5. Discussion

This study analyzed the impact of entrepreneurial orientation of small and medium enterprises on job performance. Additionally, it examined the mediation effect of innovation behavior and the moderation effect of LMX regarding the relationship between between entrepreneurial orientation and job performance. We collected data of 324 employees working in Korea.

To verify this, we used confirmatory factor analysis, hierarchical regression analysis, and PROCESS macro to measure indirect effects. We also made Johnson-Neyman's illumination analysis to analyze the significant area of the moderation effect. Research results and implications are as follows.

5.1. Theoretical Implications

This research provided a comprehensive review of entrepreneurial orientation and its boundary conditions by exploring the relationship mechanism between entrepreneurial orientation, innovation behavior, LMX, and job performance which has been mostly neglected in the literature.

Innovation through entrepreneurial orientation plays a very important role in securing a competitive advantage in the rapidly changing market environment. Moreover, innovation through entrepreneurial orientation can help companies achieve high corporate performance [3]. From this point of view, this study empirically verified and confirmed the inference that the entrepreneurial orientation of SMEs can create innovative behavior, improve organizational performance, and can help SMEs secure competitive advantage [19,27–30,40–43,55–58]. In addition, our proposed mediating role of innovative behavior in the relationship between entrepreneurial orientation (i.e., innovativeness and proactiveness) and job performance is consistent with previous studies [32,36–38,61–66].

This implies that SMEs with entrepreneurial orientation can improve corporate performance (both financial and non-financial) by inducing innovative behavior in their members. We have provided the basis for sustainable management of SMEs through this study, and verified the effects, by focusing on innovative behavior among various situational factors, as entrepreneurial orientation affects job performance. In this vein, we verified the fact that LMX has a positive moderating effect on the relationship between entrepreneurial orientation and innovative behavior. When organizations seek entrepreneurial orientation (specifically, risk-taking), LMX has been shown to improve organizational performance. This implies that when SMEs pursue entrepreneurial orientation by risk-taking, employees will show a high level of job performance if they have high-quality LMX, and it can improve organizational performance.

Lastly, this study enriched the existing literature by providing a new perspective on entrepreneurial orientation, innovative behavior, and LMX by emphasizing the moderating effect of LMX, which had not been studied in previous literature. This study is expected to help SMEs that are easily affected by external changes in making strategic management decisions to achieve high performance.

5.2. Managerial Implications

This study found that SMEs' entrepreneurial orientation generates job performance in their work through innovation behavior and that LMX has an impact on their connection. It broadened the scope of the study by looking at the links between entrepreneurial orientation and job performance, innovative behavior, and LMX as organizational processes and outcomes. These findings may have practical consequences for SMEs looking for solutions to cope with a more competitive climate or planning to make strategic decisions to improve organizational effectiveness. In this regard, the study proposes that SMEs should make an effort to hire personnel who have a high level of innovative behavior and that leader-member exchanges should be strengthened.

As a result, it was suggested that the mutual relationship between superiors and subordinates is of importance for SMEs pursuing innovation. We discovered that LMX

moderates the association between job performance and risk-taking, not innovativeness or proactiveness, in the outcomes of our research. When the LMX is of high quality, taking risks can lead to high job performance. Risk-taking behavior is important for forming leader-member relationships [7,28,68,73,76,78].

Through this study, it was confirmed that innovative management is important in SMEs in the era of change towards the fourth industrial revolution. Based on the results of this study, the foundation for sustainable corporate management was provided by capturing emerging business opportunities through entrepreneurial orientation and innovation behavior.

5.3. Limitations and Future Research Directions

The results of this study should be considered in light of some limitations, which could be addressed in future research. First, this is a cross-sectional study and has the "common method bias" issue due to measurement from a single respondent. Therefore, it would be necessary to supplement this weakness in future studies.

Second, the samples of this study are mostly office workers. Therefore, follow-up research will need to include various industries and occupations for more generalized results. This is because entrepreneurial orientation and innovation can be different depending on the job and be influenced by demographic characteristics such as occupation, work period, and experience [81]. Accordingly, follow-up research is expected to overcome such limitations by comparing different industries and occupations.

Third, this study verified how effective innovative behavior and LMX are in the relationship between entrepreneurial orientation and subjective job performance. In future studies, it would be necessary to further refine the research model by incorporating various concepts other than job performance to measure corporate performance.

Fourth, this study performed statistical analysis by using multiple regression analysis and bootstrapping of PROCESS macro. We suggest that future research measure the indirect effect of various variables using other additional statistical methods such as structural equation modeling (SEM).

Fifth, the results of this study need to be interpreted with caution since this study was based on data obtained in a global crisis in the course of the COVID-19 pandemic. Therefore, it would be necessary to observe through time-series studies before and after to overcome this limitation.

6. Conclusions

In a changing market environment, entrepreneurial orientation and innovation can accelerate a company's sustainable growth and improving performance through interrelationships between leaders and members is essential. In this vein, the importance of entrepreneurial orientation, innovation behavior, and LMX have been emphasized.

This study has made an important contribution to the field for pointing out that it is essential to provide a viewpoint that innovative behavior and LMX in improving the performance of SMEs with entrepreneurial orientation. In particular, this study focused on the fact that corporate performance can be enhanced through entrepreneurship and innovation, which are essential competencies for SMEs.

To that purpose, the research model included innovation behavior as a mediator and LMX as a moderator. The results of our study provided evidence for the proposed hypothesis. However, some hypotheses were not supported. Overall, entrepreneurial orientation was found to be an essential variable in improving job performance. Furthermore, entrepreneurial orientation had a positive effect on innovation behavior. Entrepreneurial orientation partially affected job performance via innovation behavior. The mediating role of innovation behavior was found to be statistically significant in the relationship between innovativeness, proactiveness and job performance, but not for risk-taking.

Especially, we found that LMX moderating role the relationship between entrepreneurial orientation and job performance, but only in a limited way. A moderate role of LMX

was found to be statistically significant in the relationship between risk-taking and job performance, but not for other subcomponents of entrepreneurial orientation, such as innovativeness and proactiveness. Finally, the effect of LMX moderated mediation effect on the connection between innovation behavior and job performance was discovered to be considerable.

One important point is that sustainable high performance can be achieved through the innovative actions of employees and LMX. As LMX and the mutual relationship between employees are critical, especially for companies dealing with innovative and risk-taking projects, the importance of the mutual relationship between corporate members can appeal to the management of SMEs. In conclusion, entrepreneurial orientation, innovation and LMX are pivotal for the sustainability of SMEs that are heavily affected by the rapidly changing environment, such as the recent emergence of new technologies and COVID-19.

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Not applicable.

Conflicts of Interest: The author declares no conflict of interest.

Appendix A

Innovativeness

1. I like new challenges.
2. I try to work in new ways.
3. I actively accept new ideas.

Proactiveness

1. I think our company needs to change itself in order to grow.
2. I have the will to pursue changes in the rapidly changing future environment.
3. I am forward-looking and tend to share changes with my colleagues.

Risk-taking

1. I tend to prefer adventurous projects to give my company a competitive advantage.
2. I tend to undertake challenging activities to achieve the company's goals.
3. I tend to take risks to improve the performance of the company.

Innovation behavior

1. I often share innovative ideas with my colleagues or supervisor and try to win support.
2. I try to elicit empathy from others for innovative ideas.
3. I try to introduce innovative ideas into my work in a systematic way.

Leader-member exchange (LMX)

1. Regardless of the official authority granted to the position, there is a possibility that my supervisor will use his/her authority to help me with work-related problems to resolve grievances related to my work.
2. My supervisor is generally aware of how satisfied I am with my job.
3. My supervisor will be willing to help me if I get in trouble, even at their own sacrifice.

Job Performance

1. The level of my job performance is higher than required by the organization.
2. My job performance is the result of my best efforts given my ability.
3. I think that my job performance is better than others.

References

1. Bailetti, T. Technology entrepreneurship: Overview, definition, and distinctive aspects. *Technol. Innov. Manag. Rev.* **2012**, *2*, 5–12. [CrossRef]
2. Tomšič, N.; Bojnec, Š.; Simčič, B. Corporate sustainability and economic performance in small and medium sized enterprises. *J. Clean. Prod.* **2015**, *108*, 603–612. [CrossRef]
3. Gundry, L.K.; Ofstein, L.F.; Kickul, J.R. Seeing around corners: How creativity skills in entrepreneurship education influence innovation in business. *Int. J. Manag. Educ.* **2014**, *12*, 529–538. [CrossRef]
4. Kanter, R.M. When a thousand flowers bloom: Structural, collective and social conditions for innovation in organizations. *Res. Organ. Behav.* **1988**, *10*, 169–211.
5. Dollinger, M.J. Use of Budner's intolerance of ambiguity measure for entrepreneurial research. *Psychol. Rep.* **1983**, *53*, 1019–1021. [CrossRef]
6. Miller, D. The correlates of entrepreneurship in three types of firms. *Manag. Sci.* **1983**, *29*, 757–868. [CrossRef]
7. Dienesch, R.M.; Liden, R.C. Leader-member exchange model of leadership: A critique and further development. *Acad. Manag. Rev.* **1986**, *11*, 618–634. [CrossRef]
8. Liden, R.C.; Maslyn, J.M. Multidimensionality of leader-member exchange: An empirical assessment through scale development. *J. Manag.* **1998**, *24*, 43–72. [CrossRef]
9. Wang, C.L. Entrepreneurial orientation, learning orientation, and firm performance. *Entrep. Theory Pract.* **2008**, *32*, 635–657. [CrossRef]
10. Shane, S.; Venkataraman, S. The promise of entrepreneurship as a field of research. *Acad. Manag. Rev.* **2000**, *25*, 217–226. [CrossRef]
11. Lumpkin, G.T.; Dess, G.G. Clarifying the Entrepreneurial Orientation Construct and Linking it to Performance. *Acad. Manag. Rev.* **1996**, *21*, 135–172. [CrossRef]
12. Davidsson, P. *Looking Back at 20 Years of Entrepreneurship Research: What Did We Learn*; Edward Elgar: Cheltenham, UK, 2008.
13. Covin, J.G.; Slevin, D.P. Strategic management of small firms in hostile and benign environments. *Strateg. Manag. J.* **1989**, *10*, 75–87. [CrossRef]
14. Lumpkin, G.T.; Dess, G.G. Enriching the entrepreneurial orientation construct-A reply to "Entrepreneurial orientation or pioneer advantage". *Acad. Manag. Rev.* **1996**, *21*, 605–607.
15. Currie, G.; Humphreys, M.; Ucbasaran, D.; McManus, S. Entrepreneurial leadership in the English public sector: Paradox or possibility? *Public Adm.* **2008**, *86*, 987–1008. [CrossRef]
16. Burgelman, R.A. A process model of internal corporate venturing in the diversified major firm. *Adm. Sci. Q.* **1983**, *28*, 39–55. [CrossRef]
17. Schumpeter, J.A. *The Theory of Economic Development*; Harvard University Press: Cambridge, MA, USA, 1934.
18. Chen, M.H. Entrepreneurial leadership and new ventures: Creativity in entrepreneurial teams. *Creat. Innov. Manag.* **2007**, *16*, 239–249. [CrossRef]
19. Covin, J.G.; Slevin, D.P. A conceptual model of entrepreneurship as firm behavior. *Entrep. Theory Pract.* **1991**, *16*, 7–26. [CrossRef]
20. Lumpkin, G.T.; Dess, G.G. Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *J. Bus. Ventur.* **2001**, *16*, 429–451. [CrossRef]
21. Rauch, A.; Wiklund, J.; Lumkin, G.T.; Frese, M. Entreprenurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrep. Theory Prac.* **2009**, *33*, 761–787. [CrossRef]
22. Drucker, P.F. The discipline of innovation. *Harv. Bus. Rev.* **1998**, *76*, 149–157. [CrossRef]
23. Janssen, O. Job demands, perceptions of effor-reward fairness, and innovative work behavior. *J. Organ. Behav.* **2000**, *73*, 287–302.
24. Yuan, F.; Woodman, R.W. Innovative behavior in the workplace: The role of performance and image outcome expectations. *Acad. Manag. J.* **2010**, *53*, 323–342. [CrossRef]
25. Pearson, A.E. Tough-minded ways to get innovative. *Harv. Bus. Rev.* **2002**, *80*, 117–124.
26. Porter, M.E. Technology and competitive advantage. *J. Bus. Strategy* **1985**, *5*, 60–78. [CrossRef]
27. Van de Ven, A.H. Central problems in the management of innovation. *Manag. Sci.* **1986**, *32*, 590–607. [CrossRef]
28. Scott, S.G.; Bruce, R.A. Determinants of innovative behavior: A path model of individual innovation in the workplace. *Acad. Manag. J.* **1994**, *37*, 580–607.
29. Maria Stock, R.; Jong, A.D.; Zacharias, N.A. Frontline employees' innovative service behavior as key to customer loyalty: Insights into FLEs' resource gain spiral. *J. Prod. Innov. Manag.* **2017**, *34*, 223–245. [CrossRef]
30. Rosenfeld, R. *Facilitating Innovations in Large Organizations*; Wiley Publications: Chichester, UK, 1990.
31. Woodman, R.W.; Sawyer, J.E.; Griffin, R.W. Toward a theory of organizational creativity. *Acad. Manag. Rev.* **1993**, *18*, 293–321. [CrossRef]
32. Yeoh, K.K.; Mahmood, R. The relationship between pro-innovation organizational climate and innovative work behavior: A study among the knowledge workers of the knowledge intensive business services in Malaysia. *J. Technol. Oper. Manag.* **2012**, *7*, 13–37.
33. Ober, J. Innovation Adoption: Empirical Analysis on the Example of Selected Factors of Organizational Culture in the IT Industry in Poland. *Sustainability* **2020**, *12*, 8630. [CrossRef]
34. Ober, J.; Kochmańska, A. Adaptation of Innovations in the IT Industry in Poland: The Impact of Selected Internal Communication Factors. *Sustainability* **2022**, *14*, 140. [CrossRef]

35. Wisdom, J.P.; Chor, K.H.B.; Hoagwood, K.E.; Horwitz, S.M. Innovation Adoption: A Review of Theories and Constructs. *Adm. Policy Ment. Health* **2014**, *41*, 480–502. [CrossRef] [PubMed]
36. Engle, D.E.; Mah, J.J.; Sadri, G. An empirical comparison of entrepreneurs and employees: Implications for innovation. *Creat. Res. J.* **1997**, *10*, 45–49. [CrossRef]
37. Daellenbach, U.S.; McCarthy, A.M.; Schoenecker, T.S. Commitment to innovation: The impact of top management team characteristics. *R D Manag.* **1999**, *29*, 199–208. [CrossRef]
38. Anderson, N.; Potočnik, K.; Zhou, J. Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *J. Manag.* **2014**, *40*, 1297–1333. [CrossRef]
39. Starbuck, W.H. Organizational growth and development. *Handb. Organ.* **1965**, *111*, 451–533.
40. Amabile, T.M.; Conti, R. Changes in the work environment for creativity during downsizing. *Acad. Manag. J.* **1999**, *42*, 630–640.
41. Dorf, R.C.; Byers, T.H. *Technology Ventures*; McGraw Hill: New York, NY, USA, 2005.
42. Zhao, F. Exploring the synergy between entrepreneurship and innovation. *Int. J. Entrep. Behav. Res.* **2005**, *11*, 25–41. [CrossRef]
43. Jiang, X.; Fu, L. Effect entrepreneurship on innovation behavior and institutional environment: Based on a comparative analysis. *Food Sci. Technol.* **2021**, *42*, 1–9. [CrossRef]
44. Mincer, J. *Schooling, Experience, and Earnings*; National Bureau of Economic Research: New York, NY, USA, 1974.
45. DeOrtentiis, P.S.; Van Iddekinge, C.H.; Ployhart, R.E.; Heetderks, T.D. Build or buy? The individual and unit-level performance of internally versus externally selected managers over time. *J. Appl. Psychol.* **2018**, *103*, 916–928. [CrossRef]
46. Price, J.L. *The Study of Turnover*; University of Iowa Press: Iowa, IA, USA, 1977.
47. Tett, R.P.; Meyer, J.P. Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Pers. Psychol.* **1993**, *46*, 259–293. [CrossRef]
48. Kraimer, M.L.; Wayne, S.J.; Jaworski, R.A.A. Sources of support and expatriate performance: The mediating role of expatriate adjustment. *Pers. Psychol.* **2001**, *54*, 71–99. [CrossRef]
49. Stumpf, S.A.; Hartman, K. Individual exploration to organizational commitment or withdrawal. *Acad. Manag. J.* **1984**, *27*, 308–329.
50. Judge, T.A.; Bono, J.E. Relationship of core self-evaluations traits—Self-esteem, generalized self-efficacy, locus of control, and emotional stability—With job satisfaction and job performance: A meta-analysis. *J. Appl. Psychol.* **2001**, *86*, 80–92. [CrossRef] [PubMed]
51. Borman, W.C.; Motowidlo, S.J. Task performance and contextual performance: The meaning for personnel selection research. *Hum. Perform.* **1997**, *10*, 99–109. [CrossRef]
52. Peterson, R.A.; Berger, D.G. Entrepreneurship in organizations: Evidence from the popular music industry. *Adm. Sci. Q.* **1971**, *16*, 97–106. [CrossRef]
53. Schollhammer, H. *Internal Corporate Entrepreneurship*, 1st ed.; Kent, D., Sexton, L., Vesper, K.H., Eds.; Prentice Hall: Englewood Cliffs, NJ, USA, 1982.
54. Morris, M.H.; Kuratko, D.F.; Covin, J.G. *Corporate Entrepreneurship & Innovation*; Cengage Learning: Boston, MA, USA, 2008.
55. Guth, W.D.; Ginsberg, A. Guest editors' introduction: Corporate entrepreneurship. *Strateg. Manag. J.* **1990**, *11*, 5–15.
56. Chavez, J. *The Personality Characteristics of an Entrepreneur and Their Effects on the Performance of a New Business Venture*; Metropolia University of Applied Sciences: Helsinki, Finland, 2016.
57. Chienwattanasook, K.; Jermsittiparsert, K. Impact of entrepreneur education on entrepreneurial self-employment: A study from Thailand. *Pol. J. Manag. Stud.* **2019**, *19*, 106–116. [CrossRef]
58. Sabahi, S.; Parast, M.M. Firm innovation and supply chain resilience: A dynamic capability perspective. *Int. J. Logist. Res. Appl.* **2020**, *23*, 254–269. [CrossRef]
59. Duval-Couetil, N. Assessing the impact of entrepreneurship education programs: Challenges and approaches. *J. Small Bus. Manag.* **2013**, *51*, 394–409. [CrossRef]
60. Calantone, R.J.; Cavusgil, S.T.; Zhao, Y. Learning organization, firm innovation capability, and firm performance. *Ind. Mark. Manag.* **2002**, *31*, 515–524. [CrossRef]
61. Orfila-Sintes, F.; Mattsson, J. Innovation behavior in the hotel industry. *Omega* **2009**, *37*, 380–394. [CrossRef]
62. Long, X.; Chen, Y.; Du, J.; Oh, K.; Han, I.; Yan, J. The effect of environmental innovation behavior on economic and environmental performance of 182 Chinese firms. *J. Clean. Prod.* **2017**, *166*, 1274–1282. [CrossRef]
63. Cruz, N.M.; Escudero, A.I.R.; Barahona, J.H.; Leitao, F.S. The effect of entrepreneurship education programmes on satisfaction with innovation behaviour and performance. *J. Eur. Ind. Train.* **2009**, *33*, 198–214. [CrossRef]
64. Ndubisi, N.O.; Iftikhar, K. Relationship between entrepreneurship, innovation and performance: Comparing small and medium-size enterprises. *J. Res. Mark. Entrep.* **2012**, *14*, 214–236. [CrossRef]
65. O'Cass, A.; Weerawardena, J. Examining the role of international entrepreneurship, innovation and international market performance in SME internationalisation. *Eur. J. Mark.* **2009**, *43*, 1325–1348. [CrossRef]
66. Domi, S.; Keco, R.; Capelleras, J.L.; Mehmeti, G. Effects of innovativeness and innovation behavior on tourism SMEs performance: The case of Albania. *Econ. Sociol.* **2019**, *12*, 67–85. [CrossRef]
67. Aftab, J.; Veneziani, M.; Sarwar, H.; Ishaq, M.I. Entrepreneurial orientation, entrepreneurial competencies, innovation, and performances in SMEs of Pakistan: Moderating role of social ties. *Bus. Ethics Environ. Responsib.* **2022**, *31*, 419–437. [CrossRef]
68. Graen, G.B.; Uhl-Bien, M. Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *Leadersh. Q.* **1995**, *6*, 219–247. [CrossRef]

69. Graen, G.B.; Uhl-Bien, M. The transformation of professionals into self-managing and partially self-designing contributors: Toward a theory of leadership-making. *J. Manag. Syst.* **1991**, *3*, 25–39.
70. Graen, G.B.; Scandura, R.A. Toward a psychology of dyadic organizing. *Res. Organ. Behav.* **1987**, *9*, 175–208.
71. Dansereau, F., Jr.; Graen, G.; Haga, W.J. A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organ. Behav. Hum. Perform.* **1975**, *13*, 46–78. [CrossRef]
72. Liden, R.C.; Sparrowe, R.T.; Wayne, S.J. Leader-member exchange theory: The past and potential for the future. *Res. Pers. Hum. Resour. Manag.* **1997**, *15*, 47–120.
73. Lee, J. Effects of leadership and leader member exchange on commitment. *Leadersh. Organ. Dev. J.* **2004**, *26*, 655–672. [CrossRef]
74. Epitropaki, O.; Martin, R. The impact of relational demography on the quality of leader-member exchanges and employees' work attitudes and well-being. *J. Occup. Organ. Psychol.* **1999**, *72*, 237–240. [CrossRef]
75. Janssen, O.; Van Yperen, N.W. Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Acad. Manag. J.* **2004**, *47*, 368–384.
76. Watson, W.E.; Ponthieu, L.D.; Critelli, J.W. Team interpersonal process effectiveness in venture partnerships and its connection to perceived success. *J. Bus. Ventur.* **1995**, *10*, 393–411. [CrossRef]
77. Masterson, S.S.; Lewis, K.; Goldman, B.M.; Taylor, M.S. Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Acad. Manag. J.* **2000**, *43*, 738–748.
78. Altantsetseg, P.; Chen, K.C.; Chang, M.L. Male and female leaders' entrepreneurial leadership: A comparative study of Mongolia, Taiwan and Thailand on leader-member exchange. *J. Adm. Bus. Stud.* **2017**, *3*, 145–153.
79. Baron, R.M.; Kenny, D.A. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *J. Pers. Soc. Psychol.* **1986**, *51*, 1173–1182. [CrossRef]
80. Preacher, K.J.; Hayes, A.F. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behav. Res. Methods* **2008**, *40*, 879–891. [CrossRef] [PubMed]
81. Frambach, R.T.; Schillewaert, N. Organizational innovation adoption: A multi-level framework of determinants and opportunities for future research. *J. Bus. Res.* **2002**, *55*, 163–176. [CrossRef]