

## **Entrepreneurial Orientation, Trust, Job Autonomy and Team Connectivity: Implications for Organizational Innovativeness**

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*Promoting and increasing organizational innovation is the key factor of company's competitiveness in the current turbulent conditions. The aim of the paper is to verify the hypothesis, whether the entrepreneurial orientation of business management is effectively related to the organizational innovation of companies and at the same time, whether this relationship is mediated by team connection, work autonomy and building trust between employees and business management. The research sample was 244 managers of medium and large companies in Slovakia. The tool for data collection was a questionnaire survey and the tool for examining the mechanism of functioning of the presumed relationships is mediation with the use of regression analyses and the Sobel test to determine the significance of the indirect effect of median variables. The established hypothesis was confirmed by the study. Full mediation was identified, where up to 88 % of the total effect is realized by intermediary variables with a significant influence of building trust and job autonomy. Team connectivity has a negative effect in the indirect effect, which further increases the importance of the other two mediation variables in the mediated transmission. From the controlled variables, management practice was a significant variable. The dependence is positive, i.e., the higher practice of the manager is related to the higher values of the dependent variable organizational innovation.*

**Keywords:** *Entrepreneurial Orientation; Organizational Innovativeness; Trust; Job Autonomy; Team Connectivity.*

### **Introduction**

Entrepreneurial orientation (EO) is a concept that cannot be given little attention in the scientific literature. The roots of this concept go back to strategic management and include planning and decision-making processes along with many aspects of vision, mission, corporate culture, and value system. One of the important dimensions of EO is innovation, so there is a certain positive connection with the output variable in the form of Organizational Innovativeness (OI), or innovative performance of companies. Schmitz et al. perceives innovation and entrepreneurship as two complementary processes (Schmitz *et al.*, 2017). Their research aims to point out the combination of entrepreneurship and innovation, as key drivers of survival, growth, competitiveness, success or long-term sustainability of companies in a turbulent business environment (Anning-Dorson, 2017; Doran & Ryan, 2014; Ghosh & Srivastava, 2018; Likar *et al.*, 2014; Tellis *et al.*, 2009). Therefore, it is noteworthy to understand the innovative processes of companies and the mechanisms of their operation. Both concepts are examined, as structure-oriented, process or person-oriented approaches, which, however, are interrelated, while the management of the company plays an important role in their setting and implementation. In process of defining managerial roles, Mintzberg determines the role of a manager as an entrepreneur, which mainly focuses on acquiring and using business opportunities, proactivity and innovative approach in decisions making process (Mintzberg, 1990). However, it is only one of the roles it plays, and which in itself cannot bring sustainable

results to the company. Therefore, we consider it important to examine the effects of other factors entering the relationship between the inputs and outputs of the company.

Existing studies are more focused on the hard factors in these topics. These are the processes, technological and organizational factors, rather than the soft factors associated with leading people within the relationships where innovation occurs. In the perception of both concepts, there is currently a shift in the focus of studies from one-dimensional concept of innovation outcomes to the multidimensional concept of innovativeness (Ghosh & Srivastava, 2018; Wang & Ahmed, 2004) and the search for and identification of key drivers of innovativeness. The study by Kyrgidou & Spyropoulou presents a resource-based model of innovation in which the key drivers are various entrepreneurial, managerial and technical capabilities of companies (Kyrgidou & Spyropoulou, 2013). The innovation climate and the ongoing process of knowledge transfer in innovative business solutions cannot be ensured by classical management methods. Partnership, autonomy, flexibility come to the fore, which requires a significant change in the thinking and professional habits of managers. Due to the inability to make this change, more than half of the innovative solutions have not been successfully completed. The reason is not the entrepreneurial orientation of companies in terms of their efforts for innovation, proactivity and risk taking in the business environment, nor finance or technological process, but the underestimation of the strength of socio-psychological barriers hindering the successful implementation of innovation project results. A creative

work environment requires autonomy, it requires an environment of trust with high manager integrity, openness and transparency.

These tendencies also appear in the literature and reveal a different opinion, which states, that too much focus only on the business orientation of managers may not lead to ultimate success (Hakala, 2011). The reason is the already mentioned neglect of the management process, which is necessary not only to capture the needs and trends of the market, but also for the subsequent implementation of the business idea into a successful commercial innovation. With insufficient manager skills, the whole cycle fails (Boso *et al.*, 2013). An important asset in managing innovation is the role of managers (Eberhard & Craig, 2013). Their knowledge, skills and accumulation of experience are transformed into innovative projects (Amorós *et al.*, 2016)). Although entrepreneurship and management issues are key factors in achieving business goals, it is surprising that these interrelated areas have evolved in research models to a large extent independently of each other. Based on the above facts, a large research gap is created here, which is the basis of the construction of our research model.

The aim is to examine whether EO is related to higher OI in Slovak companies and whether this connection is supported by team connectivity (TC), building trust (BT) and job autonomy (JA). Our aim is, firstly, to examine the relationship between these variables and, secondly, it is our intention to examine the mechanism through which the use of EO is related to higher OI in Slovak companies. Is there a direct relationship between these two variables or is their relationship much more complex? Based on the above, we formulate the main hypothesis: **The dependence between EO and OI in Slovak companies is mediated by TC, BT and JA.**

## Theory and Hypotheses

### Central Study Concept

The central concept of this study is based on a holistic approach to business management, where soft and hard management factors are constantly interacting. Therefore, the study examines the variables, the relationships between them and the mechanism of their interaction in a combination of these two differently functioning directions in management. The EO of a company is understood in terms of a hard tool together with OI, and based on many studies presented in the development of hypotheses, we consider their interaction. JA, BT and TC are important soft management tools and are often presented by researchers as mediators of the relationships of various dependent and independent variables.

### Entrepreneurial Orientation and Organisational Innovativeness

Entrepreneurial orientation (EO) means the implementation of methods, practices and decision-making styles of managers to act entrepreneurially, i.e. innovative, proactive and with a certain risk (Covin & Slevin, 1991; Miller, 1983). These are the three basic dimensions of this concept, which were extended by Lumpkin & Dess on

competitive aggressiveness and autonomy as additional components of the EO construct (Lumpkin & Dess, 2015). Due to the high intercorrelation of individual dimensions of EO, most studies combine all the above dimensions into three basic ones, namely innovation, proactivity and risk taking, and in this form, they are also the subject of our research. Nevertheless, we think that autonomy, which refers to independent action undertaken by entrepreneurial leaders or teams, should be examined as a separate item of EO. For this reason, we included it among the factors entering the examined model of our study. The current environment is an environment of constant and rapid change, so companies must benefit from uniqueness, courage, risk-taking and must constantly look for new opportunities. According to many studies, EO is a prerequisite for higher innovative performance of companies, simply because EO itself contains an aspect of innovation. However, there are significant differences in the magnitude of effects between EO and business performance (Rauch *et al.*, 2009). The reason is the different understanding of performance, which can be expressed by various indicators in both the financial and non-financial level. The subject of our study is to examine the relationship between EO and innovative performance, expressed as OI. Some studies also present a non-linear relationship between the two variables with respect to certain resource limits or size or cultural constraints on businesses (Kreiser *et al.*, 2013; Su *et al.*, 2011; Wales *et al.*, 2013). There are also discussions about measuring both variables in terms of multidimensional views, and the focus on the multiplicative or summative construct of the EO variable is not resolved (Seo, 2019). Some studies also address moderation effects in the relationship between EO and business performance, and have identified business size and sector as important moderators (Rauch *et al.*, 2009). The effect of EO on performance is greater in small organizations and businesses in high-tech industries. On the other hand, Koellinger *et al.* and Wan *et al.* report a trap of overconfidence in business practices that threatens the positive association of EO with business performance in the absence of necessary sophisticated and refined organizational structures (Koellinger *et al.*, 2007; Rosenbusch *et al.*, 2011; Wan *et al.*, 2015). Study by Al Issa (2020) revealed a significant relation between the individual entrepreneurial orientation, consistency of interest, and perseverance of effort, with entrepreneurial success. Mediator of the relation between entrepreneurial orientation and success were the dimensions of grit.

In the construction of EO, research is advanced and Sustainable EO (Criado-Gomis *et al.*, 2017) is mentioned, because some authors suggest a focus on entrepreneurship from a sustainability point of view (Kljucnikov *et al.*, 2020; Stal & Bonnedahl, 2016), who consider it to be more complete view. of value creation.

In addition to EO, innovative performance of the company is also considered an important driver of the company's growth and development of its competitive advantage (Lumpkin & Dess, 2015; Real *et al.*, 2014; Seo, 2019). OI is perceived as a comprehensive indicator, composed of several perspectives. On the other hand, Koellinger *et al.* and Wan *et al.* report a trap of overconfidence in business practices that threatens the

positive association of EO with business performance in the absence of necessary sophisticated and refined organizational structures (Koellinger *et al.*, 2007; Rosenbusch *et al.*, 2011; Wan *et al.*, 2015). Many authors examine and measure innovation in terms of one of the perspectives, most often product (Danneels & Kleinschmidt, 2015; Mohnen & Hall, 2013; Sahaym *et al.*, 2012; Sethi *et al.*, 2001), process (Kongmanila & Takahashi, 2009; Tuan *et al.*, 2016) or market innovation (Attia, 2013; Bamfo & Kraa, 2019; Jogaratnam, 2017; Najafi-Tavani *et al.*, 2016). That's why the wave of appeals to the need to examine the overall innovative capacity of enterprises is growing (Damanpour & Aravind, 2012; Makri *et al.*, 2017; North & Smallbone, 2000; Wang & Ahmed, 2004) define OI in terms of new knowledge of management and new processes in business systems. Prange & Pinho add that OI means adapting all companies' internal parameters to the challenges of the global environment (Prange & Pinho, 2017).

*We assume that EO is positively associated with OI - hypothesis H1.*

### **Mediating Role of Job Autonomy**

Regarding the development of OI and EO, it is possible to identify not only structure-oriented approaches, but also person-oriented approaches, in which the sources of innovativeness are primarily the creativity and assertiveness of single members of companies, i.e. employees and their leaders, arising in JA conditions. (Behrends, 2009; Binder *et al.*, 2016). JA represents the degree of freedom and independence of employees in deciding on various aspects of work (Zhou *et al.*, 2019). Many authors point to the connection between the SELF and the willingness of employees to engage in innovation processes, because autonomy gives them time, energy and freedom (Gagné & Deci, 2005; Humphrey *et al.*, 2007). It has even been found that in autonomy, individuals are more effective, more intrinsically motivated, and willing to engage in innovative activities due to their own control over their work (Ryan & Deci, 2000; Zhou *et al.*, 2019, 2019). Yang *et al.* combines person-oriented approaches within EO with entrepreneurial leadership, which through JA supports the ability to adapt in a very uncertain and turbulent environment and helps to achieve set goals including the identification and development of business opportunities (Leitch & Volery, 2017; Renko *et al.*, 2015; Yang *et al.*, 2019).

*We assume that EO is positively associated with JA - hypothesis H2.*

*We assume that JA is positively associated with OI - hypothesis H3.*

### **Mediating Role of Building Trust**

In the innovative orientation of companies, many studies focus their attention on the environment in which these activities are carried out. Within each OI (structure-oriented, person-oriented, or process-oriented) approach, it is necessary to support employees, which arises with the established trust in their management. It is not only possible to build customer trust (Stravinskiene *et al.*,

2020), but it is also necessary to focus on building trust inwards. Spreitzer *et al.* assumed that an environment of trust and respect and the development of relational resources are important enablers of innovative behaviour (Spreitzer *et al.*, 2005). Trust increases psychological security (Edmondson *et al.*, 2004; May *et al.*, 2004), which promotes an innovative environment and proactive behaviour. At the same time, studies combine trust and psychological security with learning processes, which are one of the dimensions of the ability to innovate and behave innovatively. If employees do not trust their employer, they will not tend to use their ideas, thoughts and innovative proposals to develop the business (Gilson & Shalley, 2004). Thus, an environment with little or no confidence prevents openness and generativity and does not produce the cognitive resources needed to learn at and through work (Porath & Erez, 2007). On the other hand, an environment filled with trust can significantly increase positive emotional feelings in terms of efficacy and capability innovative work. The result is not only innovative but also more risk-taking and proactive behaviours.

*We assume that EO is positively associated with BT - hypothesis H4.*

*We assume that BT is positively associated with OI - hypothesis H5.*

### **Mediating Role of Team Connectivity**

Trust is directly related to TC (Nedkovski *et al.*, 2017), which is defined in terms of the relationships of openness and encouragement of generativity (Dutton & Heaphy, 2003; Losada & Heaphy, 2004). It means sharing, learning from each other, which allows individuals to see different influences, look at problems from different points of view and generate new ideas. From the point of view of managers, team connectivity means seeing value in relationships for learning new things, searching for ideas and innovative ideas, in the so-called collective creativity, in a jointly created innovative solution (Bogan & Dedeoglu, 2017). The enemy of creative practices and thought experiments is an environment that does not tolerate mistakes. In it, organized thinking is preferred, which is governed by clear instructions and regulations and does not allow them to be called into question. Compliance is assessed positively, even if it does not lead to successful results. It is the exact opposite of team connectivity.

*We assume that EO is positively associated with TC - hypothesis H6.*

*We assume that TC is positively associated with OI - hypothesis H7.*

At the end of the section, we want to clearly state the purpose of the study. The purpose of the study is to verify the hypothesis of a positive connection between EO and OI in Slovak companies, which is mediated by TC, BT and JA. The relationships are shown in Figure 1.

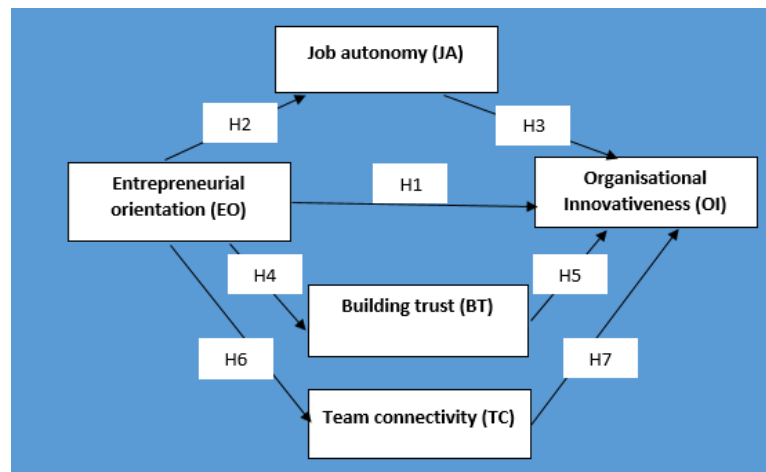


Figure 1. The Mediation Model and the 7 Tested Hypotheses

## Materials and Methods

### Sample and Data Collection Methods

We used a questionnaire survey to collect data. Questionnaires were sent electronically to the managers of selected medium and large companies in Slovakia in the period of November 2020. Brown and Guzman concluded that firms that have more propensity to innovate are the largest, with high technological intensity and market share as performance indicators (Brown & Guzman, 2014). Medium and large enterprises represent 0.6 % of the total number of active business entities in Slovakia (0.5 % medium-sized enterprises and 0.1 % large enterprises). As of 31 December 2019, there are a total of 2,943 medium-sized enterprises and 671 large enterprises in Slovakia in absolute terms. From a database of companies published on the FinStat web portal, we randomly selected 360 companies that were approached with a request to cooperate in the survey. The intention and purpose of the survey was explained to the top managers. Voluntary consent to participate in the study was fulfilled as a fundamental ethical principle and at the same time as an essential part of the process of obtaining consent to participate in the study was to keep the potential participant fully informed about the objectives, course, and risks of the study. The final sample of respondents consisted of 244 business managers, of which 64 % of medium-sized and 36 % of large enterprises within the primary sector 3.3 %, the secondary sector 13.1 % and the tertiary sector 83.6 %. The sample consisted of 89 % men and 11% women; 90% of the sample was in the age group 45-55 years; 86 % of respondents had a university degree; in terms of the number of years of managerial experience up to 5 years 18 %, from 6 to 10 years 21 %, from 11 to 20 years 33 % and over 20 years 28 %.

### Measures

Mediation was used to test the relationships between the variables shown in Figure 1, which considers the mediating role of JA, BT and TC in the relationship between EO and OI. Through mediation, we can examine the interrelationships and the mechanism by which the relationships between individual variables operate.

EO is an independent variable that was created based on managers' responses to the statements concerning the 3 dimensions of EO, namely innovativeness, proactiveness and risk-taking. We started from the Miller / Covin and Slevin EO scale that is widely adopted in research (Rauch *et al.*, 2009; Seo, 2019). Examples of items are for innovativeness ("In general, my company favours a strong emphasis on R&D, technological leadership, and innovations"), for proactiveness ("My company is typically the first to initiate actions against competitors rather than respond."), For risk-taking ("My company encourages commitment to innovative strategies, knowing full well that some will fail"). In total, the EO variable contains 9 items that are scaled using 5-point Likert-type scales (1 - disagree at all, 5 - strongly agree). After reliability analysis, the Cronbach's alpha of the EO was 0.959 (9 items).

OI is a dependent variable and is operationalized as a score given by business managers to five main areas that determine an organization's overall innovativeness, which have been adapted from Wang & Ahmed (2004). They are product innovativeness (e.g., "In new product and service introductions, our company is often first-to-market"), market innovativeness (e.g., "In comparison with our competitors, our company is faster in bringing new products or services into the market. "), process innovativeness (e.g., "We are constantly improving our business processes "), behavioural innovativeness (e.g., "We get a lot of support from managers if we want to try new ways of doing things "), and strategic innovativeness (e.g., "Key executives of the firm are willing to take risks to seize and explore" chancy "growth opportunities"). In total, the OI variable contains 20 items that are scaled using 5-point Likert-type scales (1 - disagree at all, 5 - strongly agree). After reliability analysis, the Cronbach's alpha of the OI was 0.980 (20 items).

JA, BT and TC were identified as mediation variables.

JA is a mediating variable that transfers the effect from the independent variable to the dependent variable. The variable is operationalized as an expression of the agreement / disagreement of managers to items expressing their perception of the job autonomy of their employees (e.g., "An employee has the freedom and freedom to perform his work as he wishes."). Items were scaled using 5-point Likert-type scales (1 = strongly strongly disagree

'and 5 = strongly strongly agree'). We used the Job Diagnostic Survey (JDS) developed by Hackman & Oldham (1974). After reliability analysis, the Cronbach's  $\alpha$  of the JA was 0.948 (3 items).

**BT** was the second mediating variable. We used four items of the scale developed and validated by Robinson (1996). Managers were asked to report how they build a relationship of trust in the relationship between them and employees. A sample item is "I strive for my high integrity." In total, the BT variable contains 4 items that are scaled using 5-point Likert-type scales (1 - disagree at all, 5 - strongly agree). After reliability analysis, the Cronbach's  $\alpha$  of the T was 0.945 (4 items).

**TC** was another mediating variable, adapted from concept of Losada and Heaphy (2004). This concept indicates relationships reflecting generativity and openness to new ideas and influences (Dutton & Heaphy, 2003). The TC variable is operationalized as a score given by managers to 7 items (e.g., "We support very open relationships"), scaled using 5-point Likert-type scales (1 - disagree at all, 5 - agree completely). After reliability analysis, the Cronbach's  $\alpha$  of the TC was 0.954 (7 items).

Control variables were age (in years), gender (1 = female, 2 = male), education (1 = high school, 2 = university), manager's experience in years, company size,

that were selected as control variables given their theoretical relevance.

**Data Analysis**

All data was analyzed using the SPSS 24.0 software package. Cronbach's Alpha coefficient was used to assess the internal consistency of the scale's reliability. Based on Hofmann's (2002) suggestion, we conducted a hierarchical regression analysis to test the mediating effect. Additionally, we followed Baron and Kenny's (1986) procedure to test the stated mediating effect. The mediation model can be described as a mechanism that seeks to explain the identified relationship between an independent and a dependent variable through the inclusion of three mediating variables. The Sobel test was used to test the mediator effect. A series of regression analyses was used to identify the proposed hypotheses. The ANOVA variance analysis was used to analyze multiple dependencies. We have worked with a 5 % significance level.

**Results**

Relationships between individual variables were determined using a correlation matrix, which also includes control variables (Table 1).

Table 1

**Descriptive Statistics of Variables and Correlation Matrix**

Variable	N	M	SD	EO	TC	BT	JA	OI	Gender	Age	Educatio n	Practice	Company size
EO	244	3,23	0,96	-									
TC	244	3,74	1,05	0.911**	-								
BT	244	3,47	1,21	0.921**	0,946**	-							
JA	244	3,41	1,21	0.903**	0.899**	0.943**	-						
OI	244	3,62	1,09	0.740**	0.735**	0.785**	0.773**	-					
Gender	244	1,81	0,29	0.010	0.023	-0,010	0.003	-0,003	-				
Age	244	48	12,5	0.009	0.028	0.047	0.019	0,149**	-0,307	-			
Education	244	1,82	0,21	0,011	0,472	0,054	0,051	0,078	-0,084	0,531**	-		
Practice	244	15,2	10,6	0,011	0,024	0,045	0,027	0,133**	-0,222**	0,814**	0,378**	-	
Company size	244	1,36	0,49	0,081	0,092	0,114	0,084	0,084	-0,127**	0,063	0,075	-0,094	-
Sector	244	2,80	0,47	-0,054	-0.035	-0,051	-0,037	-0,096	0,135**	-0,107	0,051	-0,068	-0,105

Note: M=Mean, EO=Entrepreneurial orientation, TC= Team connectivity, BT= Building trust, JA= Job autonomy, OI= Organisational Innovativeness, Gender (male=2, female=1), Education (1=high school, 2=university), Company size (1=medium business, 2=large business), Sector (1=primary, 2=secondary, 3= tertiary), \*\*p > .05.

The descriptive statistics of the individual sub-variables did not show significant differences within each of them. At EO, the highest score was obtained by risk-taking (3.31) and within it "the top managers have a strong preference for highly risky projects with potentially high returns". The Innovativeness dimension was rated at a lower average value (3.20) and the "proactiveness" dimension was rated at the lowest average value (3.15) and included "in dealing with competitors, my company is typically unhesitating in competing with rivals to realize opportunities;". The OI variable contained statements on 5 areas, namely product innovativeness, market innovativeness, process innovativeness, behavioural innovativeness, and strategic innovativeness. Average

values ranged from 3.22 to 4.18, with product and market innovativeness gaining the highest ratings. For the mediation variables, the values ranged from 3.55 to 4.01 (at TC), from 3.32 to 3.56 (at BT) and from 3.32 to 3.47 (at JA).

It is clear from the correlation matrix that there are significant positive correlations between all the variables examined, indicating the use of a mediation model. In mediation, we proceeded from the established main hypothesis, which applies when the indirect effect is significant using the Sobel test. We have added the control variables set out above to the modelling of the overall effect. As an intermediate step, the analysis of variance ANOVA was used in the analysis of multiple dependence,

where we found that of the mentioned control variables, only the variable management practice is significant. The dependence is positive, so the higher practice of the manager is related to the higher values of the dependent variable OI.

Subsequently, we proceeded through the calculation of partial regressions, where we verified the individual hypotheses. For clarity, we present them in the procedure of steps A, B, C, examining the following relationships.

C) There is a relationship between OI (variable Y) and EO (variable X).

A) There is a relationship between the mediation variables TC (variable M1), BT (variable M2) and JA (variable M3) and EO (variable X).

B) There is a relationship between OI (variable Y) and all mediation variables in which EO (variable X) does not participate.

The value of C represents the total effect. The product  $A*B$  is a mediated (indirect) effect of X on Y by M (due to the existence of three mediation variables, the mediated effect is expressed in the form  $A1*B1 + A2*B2 + A3*B3$ ). The difference  $C' = C -$  indirect effect is the pure (direct) effect of X on Y without the participation of M. The hypothesis applies when the indirect effect is significant. Using the Sobel test ( $A*B = 0.747$ ;  $z = 1.341$ ;  $Sig. = 0.000$ ), we found that the overall indirect effect is significant in the positive direction.

Table 2

**Regression Results for Main Effects and Mediation Analysis**

Variable	Model 0		Model 1		Model 2		Model 3		Model 4		Model 5	
	OI		OI		TC		BT		JA		OI	
Model Dependent	C	SE	C	SE	C	SE	C	SE	C	SE	C	SE
Constant	0,242	0,332	0,580	0,195	0,477	0,117	-0,292	0,107	-0,206	0,116	1,154	0,180
Main effects												
EO	0,842**	0,049	0,845**	0,049	0,999**	0,029	1,165**	0,032	1,121**	0,034	0,100	0,126
TC											-0,124	0,134
BT											0,502**	0,149
JA											0,255**	0,114
Controls												
Gender	0,052	0,098										
Size of e.	0,051	0,063										
Practice	0,051**	0,043	0,113**	0,038	0,012	0,023						
Education	0,063	0,071										
Age	0,154	0,097										
R2.adj=	0,558		0,560		0,829		0,848		0,814		0,621	

Note: EO = Entrepreneurial Orientation, TC = Team Connectivity, BT= Building Trust, JA= Job Autonomy, OI= Organizational Innovativeness, Gender (male = 2, female = 1), Education (1 = secondary education, 2 = higher education), Size of enterprise (1 = medium enterprise, 2 = big enterprise), Sector (1 = primary, 2 = secondary, 3 = tertiary), R2.adj – adjusted coefficient of determination, C = coefficient, SE – Standard error of the estimate, \*\*p > .05.

From the results in Table 2 it is clear that the overall effect (C) is significant, and the dependence is positive (model 1, coef. = 0.845, Sig. = 0.000), which indicates the existence of a relationship between OI in companies and EO. Step A is significant, so there is a relationship between the mediation variable TC and EO (model 2, coef. = 0.999, Sig. = 0.000), there is also a relationship between the mediation variable BT and EO (model 3, coef. = 1.165, Sig. = 0.000) and the mediation variable JA and EO (model 4, coef. = 1.121, Sig. = 0.000). The direct effect (C'), i.e. the effect without the participation of mediating variables, is not significant (model 5, coef. = 0.100, Sig. > 0.05). Step B, expressing the relationship between EO (dependent variable Y) and mediation variables (M2, M3) in the form BT and JA, in which the dependent variable X (EO) does not participate, is significant (model 5, coef. = 0.502, Sig. = 0.000; coef. = 0.255, Sig. = 0.000). It is insignificant for the variable M3 (TC) (model 5, coef. = -0.124, Sig. > 0.05). The total indirect effect of  $A*B$  is 0.747 and is therefore significant in the positive direction. The obtained results show that OI in the surveyed companies is influenced by the independent variable EO in the form of a direct effect, acting in a positive direction, but its effect is very low and is significantly amplified by the influence of two intermediate variables BT and JA. The third mediating

variable TC has no significant effect. The overall indirect effect, despite the negative low effect of TC, is significant. When expressing the size of individual effects as a percentage, based on the determined coefficients, we state that the size of the direct effect is 12% and the size of the indirect effect is 88%. The relationship between EO and OI in the surveyed enterprises is largely mediated through the intermediary variables BT (78% of the total indirect effect) and JA (38% of the total indirect effect). TC has a negative effect and balances the value of the indirect effect BT and JA to 100%. This finding is original because it points to the high influence of two variables in the examined relationship between EO and OI in enterprises.

**Discussion**

The hypothesis about the dependence between entrepreneurial orientation and organizational innovativeness in Slovak companies, which is mediated by job autonomy, building trust and team connectivity, was confirmed by research. Full mediation was identified, where up to 88% of the total effect is realized by intermediary variables with a significant influence of two of them, namely building trust and job autonomy. Team connectivity has a negative effect in the indirect effect,



which further increases the importance of BT and JA in the mediated transmission. This is an important finding, namely that EO acts directly on OI only to a very small extent, and that the effect of EO is transmitted through two variables, the implementation of which in companies by managers is therefore necessary. It's BT and JA. Below we discuss the theoretical and practical implications, limitations, and future directions.

### ***Theoretical Implications***

Our research makes theoretical contributions in three ways. First, our research enriches the literature in the field of organizational innovation by identifying other variables that can significantly affect it. It highlights the multifactor concept of organizational innovation and the possibility of studying it from many different perspectives, which is consistent with the findings of Ghosh and Srivastava (2018).

Second, the finding is that entrepreneurial orientation is not a significant predictor of organizational innovation, which correlates with the findings of other studies (Seo, 2019; Wales *et al.*, 2013). Despite the popularity of entrepreneurial orientation research in the literature, there is evidence of a connection with organizational innovativeness inconsistent, as evidenced by our findings. The expression of entrepreneurial behavior in innovation processes is positive only to a small extent and the intervention of other management methods and tools is needed so that considerable entrepreneurial effort is not wasted.

Third, our research significantly reveals the importance of the so-called soft management tools and points to the need to explore not only structure-oriented but also person-oriented approaches, like the study by Iqbal *et al.* (2021). Not all organizational variables had a mediation effect. Team connectivity has acted in a negative direction, although previous research has revealed its positive effect as facilitators of innovative and creative behaviors at work (Carmeli & Spreitzer, 2009). We assumed and empirically proved the effect of job autonomy on organizational innovativeness and at the same time the mediating effect of job autonomy between entrepreneurial orientation and organizational innovativeness, which suggests that it is important to take into account how much freedom, liberty and flexibility the employee has in job design. Our research extends the relationship between entrepreneurial orientation and organizational innovativeness with a variable that is currently being brought to the forefront of the covid-19 pandemic, namely building trust. Building trust has been the most important mediator of the transmission of the main effect, thus contributing to our understanding of the implications and significance of this phenomenon. By building trust, the employer can build a so-called a psychological contract that increases innovation in businesses. These findings are partially consistent with the findings of a study by Leal-Rodríguez *et al.* who verified the effect of trust in relation to organizational innovativeness but in family firms (Leal-Rodríguez *et al.*, 2017).

### ***Practical Implications***

Our research also offers practical implications for businesses and managers. Our research focused on organizational innovation, which is the key drivers of survival, growth, competitiveness, success, or long-term sustainability of companies in a turbulent business environment and verified its major predictors. Entrepreneurial orientation contributes to the main effect in a certain but low percentage, but the building trust in companies and the incorporation of job autonomy in work design significantly enters into the model. Therefore, from the point of view of noteworthy managers, it is deeper to understand the innovative processes of companies and the mechanisms of their operation. It is not clear that a proactive approach or risk-taking orientation can achieve the desired innovative results. Managers must focus on building trust in their relationships with employees. A high degree of trust nourishes the entrepreneurial orientation of managers and further stimulates innovative employee behavior and overall organizational innovation. Therefore, not only entrepreneurial leadership is important for managers, but especially transformational leadership, all aspects of which lead to increased trust, confidence, employee development and which leads to the building trust in the long run. Transformational leadership is also in line with the job autonomy concept and creates more freedom for innovators, but also recognition. Appropriate leadership style is emphasized as one of the most important individual influences on organizational innovation, because leaders can directly decide to introduce new ideas into the company, set specific goals and support innovation with their leadership style. The findings of Liao *et al.*, Andersen, Bettis-Outland (Andersen, 2015; Bettis-Outland *et al.*, 2012; Liao *et al.*, 2017). The practice of a manager in a managerial position plays a significant role in the examined models, which confirms that more mature managers with longer management experience perceive the importance of building trust from employees and providing job autonomy and do not underestimate these factors compared to their business intentions and attitudes. They perceive organizational innovation not only through their ability to innovate, be proactive and risk-taking (entrepreneurial orientation), but as the overall innovation of a company in which all employees participate, because they trust their management and work in a free, flexible work design.

### ***Limitations and Future Research Directions***

Our research has several limitations. The first is a sample of respondents. We focused only on medium and large companies due to their more propensity to innovate and in this respect due to the total number of companies in Slovakia in this category, the sample is sufficient. However, we think that it is necessary to examine this issue in other size categories of companies, which represent a high percentage of the total number of active business entities in Slovakia. At the same time, for the intent of the topic, containing managerial issues, the research results may be transferable to other markets within Central and Eastern Europe with very little effort.

In this we also see a potential path for further research. Research may also be limited by subjective, sometimes overestimated views of managers on items in the variables examined, especially in job autonomy and building trust. Given the conditions we had in conducting the research, we excluded the study of endogeneity and based on an analysis of the relationship between the individual variables. Research is the basis for further ongoing research, in which we can then work with time as a missing condition for endogeneity and delve deeper into the study of causal relationships. Finally, although we examined three theoretically relevant mediating variables and tested their mediation effects, other factors could help explain the mechanisms between EO and OI. Future research should provide a comprehensive overview of the various mediators, especially in terms of leadership styles, access to employees and the creation of a corporate culture.

### Conclusions

The ability to innovate in today's turbulent times is becoming a natural part of business life. It is based mainly on business orientation as a set of methods, practices, and decision-making styles of managers to act innovatively, proactively and with a certain risk. Some studies have concluded their findings at this point, pointing out that such

a direct effect contributes to ensuring competitiveness, gaining a competitive advantage, growth, survival, or even long-term sustainability. Further studies have yielded counterproductive views, namely that too much focus on managers' entrepreneurial orientation may not lead to ultimate success in the form of greater organizational innovation for a number of reasons. One of them is the ability of managers to transform business plans into successful commercial innovation. Although entrepreneurship and management issues are key issues in achieving business goals, it is surprising that these interrelated areas have evolved in research models to a large extent independently of each other. Our research has pointed to the need to connect them. The findings clearly confirmed that building trust in companies contributes significantly to the overall effect between entrepreneurial orientation and organizational innovation. The culture of trust in management is becoming a supporting tool for the use of business orientation in companies and at the same time the design of work in the form of job autonomy, reflecting current trends in the work environment, contributes to increasing organizational innovation. Due to the combination of the examined variables, our findings are original and open up new perspectives on the management of companies in the uncertain conditions of the current business environment.

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### References

- Al Issa, H.-E. (2020). When Grit Leads to Success: the Role of Individual Entrepreneurial orientation. *Business: Theory and Practice*, 21(2), 643–653. <https://doi.org/10.3846/btp.2020.12346>
- Amoros, J. E., Basco, R., & Romani, G. (2016). Determinants of early internationalization of new firms: The case of Chile. *International Entrepreneurship and Management Journal*, 12(1), 283–307. <https://doi.org/10.1007/s11365-014-0343-2>
- Andersen, J. A. (2015). Barking up the wrong tree. On the fallacies of the transformational leadership theory. *Leadership & organization development journal*. <https://doi.org/10.1108/LODJ-12-2013-0168>
- Anning-Dorson, T. (2017). Innovation development in service firms: A three-model perspective. *International Journal of Services and Operations Management*, 28(1), 64–80. <https://doi.org/10.1504/IJSOM.2017.10006274>
- Attia, S. T. M. (2013). Market orientation in an emerging economy—Egypt. *Journal of Strategic Marketing*, 21(3), 277–291. <https://doi.org/10.1080/0965254X.2013.768690>
- Bamfo, B. A., & Kraa, J. J. (2019). Market orientation and performance of small and medium enterprises in Ghana: The mediating role of innovation. *Cogent Business & Management*, 6(1), 1605703. <https://doi.org/10.1080/23311975.2019.1605703>
- Baron, R., & Kenny, D. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182. <https://doi.org/10.1037//0022-3514.51.6.1173>
- Behrends, T. (2009). *Corporate entrepreneurship und Organisationskultur*. na.
- Bettis-Outland, H., Gronroos, C., & Helle, P. (2012). Return on relationships: Conceptual understanding and measurement of mutual gains from relational business engagements. *Journal of Business & Industrial Marketing*. <https://doi.org/10.1108/08858621211236025>
- Binder, P., Mair, M., Stummer, K., & Kessler, A. (2016). Organizational innovativeness and its results: A qualitative analysis of SME hotels in Vienna. *Journal of Hospitality & Tourism Research*, 40(3), 339–363. <https://doi.org/10.1177/1096348013496277>



- Bogan, E., & Dedeoglu, B. B. (2017). The effects of perceived behavioral integrity of supervisors on employee outcomes: Moderating effects of tenure. *Journal of Hospitality Marketing & Management*, 26(5), 511–531. <https://doi.org/10.1080/19368623.2017.1269711>
- Boso, N., Story, V. M., & Cadogan, J. W. (2013). Entrepreneurial orientation, market orientation, network ties, and performance: Study of entrepreneurial firms in a developing economy. *Journal of business Venturing*, 28(6), 708–727. <https://doi.org/10.1016/j.jbusvent.2013.04.001>
- Brown, F., & Guzman, A. (2014). Innovation and productivity across Mexican manufacturing firms. *Journal of technology management & innovation*, 9(4), 36–52. <https://doi.org/10.4067/S0718-27242014000400003>
- Carmeli, A., & Spreitzer, G. M. (2009). Trust, Connectivity, and Thriving: Implications for Innovative Behaviors at Work. *The Journal of Creative Behavior*, 43(3), 169–191. <https://doi.org/10.1002/j.2162-6057.2009.tb01313.x>
- Covin, J. G., & Slevin, D. P. (1991). A Conceptual Model of Entrepreneurship as Firm Behavior. *Entrepreneurship Theory and Practice*, 16(1), 7–26. <https://doi.org/10.1177/104225879101600102>
- Criado-Gomis, A., Cervera-Taulet, A., & Iniesta-Bonillo, M.-A. (2017). Sustainable entrepreneurial orientation: A business strategic approach for sustainable development. *Sustainability*, 9(9), 1667. <https://doi.org/10.3390/su9091667>
- Damanpour, F., & Aravind, D. (2012). Managerial Innovation: Conceptions, Processes and Antecedents. *Management and Organization Review*, 8(2), 423–454. <https://doi.org/10.1111/j.1740-8784.2011.00233.x>
- Danneels, E., & Kleinschmidt, E. J. (2015). Product innovativeness from the Firm’s perspective: Its dimensions and their impact on project selection and performance. *Proceedings of the 1999 Academy of Marketing Science (AMS) Annual Conference*, 409–409. [https://doi.org/10.1007/978-3-319-13078-1\\_123](https://doi.org/10.1007/978-3-319-13078-1_123)
- Doran, J., & Ryan, G. (2014). Eco-Innovation—does additional engagement lead to additional rewards? *International Journal of Social Economics*. <https://doi.org/10.1108/IJSE-07-2013-0169>
- Dutton, J. E., & Heaphy, E. D. (2003). The power of high-quality connections. *Positive organizational scholarship: Foundations of a new discipline*, 3, 263–278.
- Eberhard, M., & Craig, J. (2013). The evolving role of organisational and personal networks in international market venturing. *Journal of World Business*, 48(3), 385–397. <https://doi.org/10.1016/j.jwb.2012.07.022>
- Edmondson, A. C., Kramer, R. M., & Cook, K. S. (2004). Psychological safety, trust, and learning in organizations: A group-level lens. *Trust and distrust in organizations: Dilemmas and approaches*, 12, 239–272.
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational behavior*, 26(4), 331–362. <https://doi.org/10.1002/job.322>
- Ghosh, S., & Srivastava, B. K. (2018). Rescaling Organizational Innovativeness: The Indian Context. *Global Business Review*, 19(1), 241–255. <https://doi.org/10.1177/0972150917714112>
- Gilson, L. L., & Shalley, C. E. (2004). A little creativity goes a long way: An examination of teams’ engagement in creative processes. *Journal of management*, 30(4), 453–470. <https://doi.org/10.1016/j.jm.2003.07.001>
- Hakala, H. (2011). Strategic orientations in management literature: Three approaches to understanding the interaction between market, technology, entrepreneurial and learning orientations. *International Journal of Management Reviews*, 13(2), 199–217. <https://doi.org/10.1111/j.1468-2370.2010.00292.x>
- Hofmann, D. A. (2002). Issues in multilevel research: Theory development, measurement, and analysis. V *Handbook of research methods in industrial and organizational psychology* (s. 247–274). Blackwell Publishing. <https://doi.org/10.1002/9780470756669.ch12>
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of applied psychology*, 92(5), 1332. <https://doi.org/10.1037/0021-9010.92.5.1332>
- Iqbal, S., Moleiro Martins, J., Nuno Mata, M., Naz, S., Akhtar, S., & Abreu, A. (2021). Linking Entrepreneurial Orientation with Innovation Performance in SMEs; the Role of Organizational Commitment and Transformational Leadership Using Smart PLS-SEM. *Sustainability*, 13(8), 4361. <https://doi.org/10.3390/su13084361>
- Jogaratham, G. (2017). The effect of market orientation, entrepreneurial orientation and human capital on positional advantage: Evidence from the restaurant industry. *International Journal of Hospitality Management*, 60(1), 104–113. <https://doi.org/10.1016/j.ijhm.2016.10.002>
- Ključnikov, A., Civelek, M., Čera, G., Mezulanik, J., & Maňák, R. (2020). Differences in Entrepreneurial Orientation (EO) of SMEs in the International Context: Evidence from the Czech Republic and Turkey. *Engineering Economics*, 31, 345–357. <https://doi.org/10.5755/j01.ee.31.3.23933>
- Koellinger, P., Minniti, M., & Schade, C. (2007). “I think I can, I think I can”: Overconfidence and entrepreneurial behavior. *Journal of economic psychology*, 28(4), 502–527. <https://doi.org/10.1016/j.joep.2006.11.002>
- Kongmanila, X., & Takahashi, Y. (2009). The impact of innovation on export behavior: An empirical analysis of Lao garment firms. *China-USA Business Review*, 8(6), 30–37.

- Kreiser, P. M., Marino, L. D., Kuratko, D. F., & Weaver, K. M. (2013). Disaggregating entrepreneurial orientation: The non-linear impact of innovativeness, proactiveness and risk-taking on SME performance. *Small Business Economics*, 40(2), 273–291. <https://doi.org/10.1007/s11187-012-9460-x>
- Kyrgidou, L. P., & Spyropoulou, S. (2013). Drivers and performance outcomes of innovativeness: An empirical study. *British Journal of Management*, 24(3), 281–298. <https://doi.org/10.1111/j.1467-8551.2011.00803.x>
- Leal-Rodriguez, A. L., Albort-Morant, G., & Martelo-Landroguez, S. (2017). Links between entrepreneurial culture, innovation, and performance: The moderating role of family firms. *International Entrepreneurship and Management Journal*, 13(3), 819–835. <https://doi.org/10.1007/s11365-016-0426-3>
- Leitch, C. M., & Volery, T. (2017). Entrepreneurial leadership: Insights and directions. *International Small Business Journal*, 35(2), 147–156. <https://doi.org/10.1177/0266242616681397>
- Liao, Y., Deschamps, F., Loures, E. de F. R., & Ramos, L. F. P. (2017). Past, present and future of Industry 4.0—a systematic literature review and research agenda proposal. *International journal of production research*, 55(12), 3609–3629. <https://doi.org/10.1080/00207543.2017.1308576>
- Likar, B., Kopac, J., & Fatur, P. (2014). Innovation investment and economic performance in transition economies: Evidence from Slovenia. *Innovation*, 16(1), 53–66. <https://doi.org/10.5172/impp.2014.16.1.53>
- Losada, M., & Heaphy, E. (2004). The role of positivity and connectivity in the performance of business teams: A nonlinear dynamics model. *American behavioral scientist*, 47(6), 740–765. <https://doi.org/10.1177/0002764203260208>
- Lumpkin, G. T., & Dess, G. G. (2015). Entrepreneurial orientation. *Wiley Encyclopedia of Management*, 1–4. <https://doi.org/10.1002/9781118785317.weom030030>
- Makri, K., Theodosiou, M., & Katsikea, E. (2017). An empirical investigation of the antecedents and performance outcomes of export innovativeness. *International Business Review*, 26(4), 628–639. <https://doi.org/10.1016/j.ibusrev.2016.12.004>
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of occupational and organizational psychology*, 77(1), 11–37. <https://doi.org/10.1348/096317904322915892>
- Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science*, 29(7), 770–791. <https://doi.org/10.1287/mnsc.29.7.770>
- Mintzberg, H. (1990). The design school: Reconsidering the basic premises of strategic management. *Strategic management journal*, 11(3), 171–195. <https://doi.org/10.1002/smj.4250110302>
- Mohnen, P., & Hall, B. H. (2013). Innovation and productivity: An update. *Eurasian Business Review*, 3(1), 47–65. <https://doi.org/10.14208/BF03353817>
- Najafi-Tavani, S., Sharifi, H., & Najafi-Tavani, Z. (2016). Market orientation, marketing capability, and new product performance: The moderating role of absorptive capacity. *Journal of Business Research*, 69(11), 5059–5064. [https://econpapers.repec.org/article/eejbrese/v\\_3a69\\_3ay\\_3a2016\\_3ai\\_3a11\\_3ap\\_3a5059-5064.htm](https://econpapers.repec.org/article/eejbrese/v_3a69_3ay_3a2016_3ai_3a11_3ap_3a5059-5064.htm)  
<https://doi.org/10.1016/j.jbusres.2016.04.080>
- Nedkovski, V., Guerci, M., De Battisti, F., & Siletti, E. (2017). Organizational ethical climates and employee's trust in colleagues, the supervisor, and the organization. *Journal of Business Research*, 71, 19–26. <https://doi.org/10.1016/j.jbusres.2016.11.004>
- North, D., & Smallbone, D. (2000). The innovativeness and growth of rural SMEs during the 1990s. *Regional studies*, 34(2), 145–157. <https://doi.org/10.1080/00343400050006069>
- Porath, C. L., & Erez, A. (2007). Does rudeness really matter? The effects of rudeness on task performance and helpfulness. *Academy of Management Journal*, 50(5), 1181–1197. <https://doi.org/10.5465/amj.2007.20159919>
- Prange, C., & Pinho, J. C. (2017). How personal and organizational drivers impact on SME international performance: The mediating role of organizational innovation. *International Business Review*, 26(6), 1114–1123. <https://doi.org/10.1016/j.ibusrev.2017.04.004>
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship theory and practice*, 33(3), 761–787. <https://doi.org/10.1111/j.1540-6520.2009.00308.x>
- Real, J. C., Roldan, J. L., & Leal, A. (2014). From entrepreneurial orientation and learning orientation to business performance: Analysing the mediating role of organizational learning and the moderating effects of organizational size. *British Journal of Management*, 25(2), 186–208. <https://doi.org/10.1111/j.1467-8551.2012.00848.x>
- Renko, M., El Tarabishy, A., Carsrud, A. L., & Brannback, M. (2015). Understanding and measuring entrepreneurial leadership style. *Journal of small business Management*, 53(1), 54–74. <https://doi.org/10.1111/jsbm.12086>
- Robinson, S. L. (1996). Trust and breach of the psychological contract. *Administrative science quarterly*, 574–599. <https://doi.org/10.2307/2393868>

- Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. *Journal of business Venturing*, 26(4), 441–457. <https://doi.org/10.1016/j.jbusvent.2009.12.002>
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25(1), 54–67. <https://doi.org/10.1006/ceps.1999.1020>
- Sahaym, A., Trevino, L. J., & Steensma, H. K. (2012). The influence of managerial discretion, innovation and uncertainty on export intensity: A real options perspective. *International Business Review*, 21(6), 1131–1147. <https://doi.org/10.1016/j.ibusrev.2012.01.003>
- Seo, R. (2019). Entrepreneurial orientation and innovation performance: Insights from Korean ventures. *European Journal of Innovation Management*. <https://doi.org/10.1108/EJIM-01-2019-0023>
- Sethi, R., Smith, D. C., & Park, C. W. (2001). Cross-functional product development teams, creativity, and the innovativeness of new consumer products. *Journal of marketing research*, 38(1), 73–85. <https://doi.org/10.1509/jmkr.38.1.73.18833>
- Schmitz, A., Urbano, D., Dandolini, G. A., de Souza, J. A., & Guerrero, M. (2017). Innovation and entrepreneurship in the academic setting: A systematic literature review. *International Entrepreneurship and Management Journal*, 13(2), 369–395. <https://doi.org/10.1007/s11365-016-0401-z>
- Spreitzer, G., Sutcliffe, K., Dutton, J., Sonenshein, S., & Grant, A. M. (2005). A socially embedded model of thriving at work. *Organization science*, 16(5), 537–549. <https://doi.org/10.1287/orsc.1050.0153>
- Stal, H. I., & Bonnedahl, K. (2016). Conceptualizing strong sustainable entrepreneurship. *Small Enterprise Research*, 23(1), 73–84. <https://doi.org/10.1080/13215906.2016.1188718>
- Stravinskiene, J., Hopeniene, R., & Levickyte, I. (2020). The Impact of CEO Image on the Consumer Trust in the Organization. *Inzinerine Ekonomika-Engineering Economics*, 31, 243–253. <https://doi.org/10.5755/j01.ee.31.2.24208>
- Su, Z., Xie, E., & Li, Y. (2011). Entrepreneurial orientation and firm performance in new ventures and established firms. *Journal of Small Business Management*, 49(4), 558–577. <https://doi.org/10.1111/j.1540-627X.2011.00336.x>
- Tellis, G. J., Prabhu, J. C., & Chandy, R. K. (2009). Radical innovation across nations: The preeminence of corporate culture. *Journal of marketing*, 73(1), 3–23. <https://doi.org/10.1509/jmkg.73.1.003>
- Tuan, N., Nhan, N., Giang, P., & Ngoc, N. (2016). The effects of innovation on firm performance of supporting industries in Hanoi, Vietnam. *Journal of Industrial Engineering and Management*, 9(2), 413–431. <https://doi.org/10.3926/jiem.1564>
- Wales, W. J., Gupta, V. K., & Mousa, F.-T. (2013). Empirical research on entrepreneurial orientation: An assessment and suggestions for future research. *International Small Business Journal*, 31(4), 357–383. <https://doi.org/10.1177/0266242611418261>
- Wan, F., Williamson, P. J., & Yin, E. (2015). Antecedents and implications of disruptive innovation: Evidence from China. *Technovation*, 39, 94–104. <https://doi.org/10.1016/j.technovation.2014.05.012>
- Wang, C. L., & Ahmed, P. K. (2004). The development and validation of the organisational innovativeness construct using confirmatory factor analysis. *European journal of innovation management*. <https://doi.org/10.1108/14601060410565056>
- Yang, J., Pu, B., & Guan, Z. (2019). Entrepreneurial Leadership and turnover intention in startups: Mediating roles of employees' job embeddedness, job satisfaction and affective commitment. *Sustainability*, 11(4), 1101. <https://doi.org/10.3390/su11041101>
- Zhou, Q., Li, Q., & Gong, S. (2019). How Job Autonomy Promotes Employee's Sustainable Development? A Moderated Mediation Model. *Sustainability*, 11(22), 6445. <https://doi.org/10.3390/su11226445>

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