Entrepreneurial Business and Economics Review

2023, Vol. 11, No. 4

10.15678/EBER.2023.110402

The mediating role of competitive and collaborative orientations in boosting entrepreneurial orientation's impact on firm performance

Rafał Kusa

ABSTRACT

Objective: This study aims to assess the role of the relationships between organizations in shaping entrepreneurial performance. In particular, I tested the mediating role of inter-organizational cooperation and competition in the relationship between entrepreneurial orientation and firm performance.

Research Design & Methods: This quantitative study used structural equation modelling (SEM) to test hypotheses reflecting relationships among variables. I present the relationships in the research model. The research sample consisted of 117 one- and two-star hotels operating across Poland.

Findings: The most original finding refers to the mediating role of relationships among organizations. In particular, the study unveiled the mediating role of both competitive and collaborative orientation in the relationship between entrepreneurial orientation (EO) and firm performance. In both cases mediation was partial. Thus, collaborative behaviours may be as important as competitive ones in transforming entrepreneurial approach into performance. Additionally, the findings confirm the positive impact of EO on competitive and collaborative orientation, as well as the positive impact of these three factors on firm performance.

Implications & Recommendations: This study indicates that both entrepreneurs and researchers should consider inter-organizational relationships as a factor that can enhance entrepreneurial efforts. Thus, these relationships can play an important role in managerial practice and they can be a subject of research focused on organizational entrepreneurship. Regarding theory development, I recommend further studies on collaborative behaviours in pursuing and exploiting entrepreneurial opportunities; specifically, future studies can test presented relationships in other contexts (other industries, countries, and organization types). Moreover, I recommend the inclusion of other variables which can affect the tested relationships as they can help to explain the contingencies related to the tested model. Finally, further testing and improvement of used constructs (especially those reflecting cooperation and competition) are recommended.

Contribution & Value Added: This study's findings contribute to the literature on entrepreneurship and inter-organizational relationships. Specifically, this study explains the role of two opposite postures, namely, cooperation and competition, in the context of entrepreneurial orientations. With its findings, the study augments our understanding of entrepreneurial posture and sheds new light on the operationalization of entrepreneurial orientation, which highlights the role of competing behaviours and omits collaborative actions.

Article type:	research article
Keywords:	entrepreneurial orientation; inter-organizational cooperation; competition; performance; hotel; structural equation modelling (SEM)
JEL codes:	D22, L22, L25, L26, L83

Received: 1 April 2023 Revised: 20 July 2023 Accepted: 28 July 2028

Suggested citation:

Kusa, R. (2023). The mediating role of competitive and collaborative orientations in boosting entrepreneurial orientation's impact on firm performance. *Entrepreneurial Business and Economics Review,* 11(4), 25-42. https://doi.org/10.15678/EBER.2023.110402

INTRODUCTION

Along with the increasing role of entrepreneurial activity in the economy (Ribeiro-Soriano, 2017), entrepreneurship theory has been continuously developing. Scholars identify entrepreneurship as pursuing opportunities (Stevenson & Jarillo, 1990). Opportunities are the situations that enable gaining profit (Casson, 1982). In changing market environment, where threats often appear along with opportunities, the abilities to seek and exploit opportunities are pillars of firm strategy (*i.e.* entrepreneurial strategy; Drucker, 1985; Dyduch, 2019) and strategic entrepreneurship (Hitt *et al*., 2001). One of the most commonly accepted conceptualizations of entrepreneurship at the organizational level is the entrepreneurial orientation (EO; Covin & Wales, 2019; Wales *et al*., 2020). Entrepreneurial orientation is a multidimensional construct that includes risk-taking, proactiveness, and innovativeness (Covin & Slevin, 1989). In other concepts, autonomy and competitive aggressiveness also constitute dimensions of EO (Lumpkin & Dess, 1996).

Similarly to the development of entrepreneurship practice and theory, we can observe the increasing role of relationships among organizations. These relationships can include both rivalry (Markin *et al*., 2017) and collaboration (Dwyer *et al*., 1987), as well as simultaneous competing and cooperating (which is labelled as 'coopetition;' Brandenburger & Nalebuff, 1996). Competitive relations are important characteristics of a market and they force entrepreneurs to develop different strategies (Suder *et al*., 2022) that can help them to develop their businesses in competitive, and sometimes hostile, environments (Covin & Slevin, 1989). Collaborative relations can involve numerous actors, resulting in the development of networks. All these situations are the subject of intense research; there is reliable evidence showing that they can affect the firm performance (*e.g.* Baker *et al*., 2016).

Previous studies have also explored the role of relationships between organizations in the entrepreneurial context. In this vein, scholars perceive competing as a manifestation of entrepreneurial posture, and, as mentioned above, some propose competitive aggressiveness as a dimension of EO (Lumpkin & Dess, 1996). However, collaborative relationships are also the subject of entrepreneurial studies (*e.g.* Rocha & Miles, 2009) and there are premises to consider inter-organizational collaboration as a dimension of EO (Kusa, 2017). This approach results in the concept of collaborative entrepreneurship which highlights the ability of a company to collaborate outside the organization (Ribeiro-Soriano & Urbano, 2009). The studies focused on small business management also investigate the role of cooperation and networking and provide evidence that they can be profitable for companies (*e.g.* Kusa *et al*., 2023). We may observe a similar positive outcome in studies focused on innovation (Alexiev *et al*., 2016) which is a dimension of EO.

However, the relationships between organizations in the context of entrepreneurial activity are still underexplored. For example, despite massive evidence that competitive and collaborative behaviours can coexist, we have limited knowledge about their interactions and the mechanism leading to the outcome of these interactions in an entrepreneurial context. This study addressed this research gap and aimed to explain the role of relationships among organizations in shaping entrepreneurial performance. In particular, the study examined the mediating role of inter-organizational cooperation and competition in the relationship between EO and firm performance.

To achieve its aim, this study used a research model that reflects direct and mediated relationships among EO, competing, collaborating, and firm performance. The study employed structural equation modelling (SEM) to test the model and hypotheses about these relationships. I tested the model and the hypotheses with a sample consisting of 117 one- and two-star hotels operating throughout Poland. This study intended to contribute to the literature on entrepreneurship and inter-organizational relationships. Specifically, this study strived to augment our understanding of mechanisms of organizational entrepreneurship by explaining the role of two opposite postures, namely, cooperation and competition, in shaping entrepreneurial performance. Furthermore, the study joined the process of improving the operationalization of organizational entrepreneurship by testing the model which includes EO, external cooperation, and inter-organizational competition. Finally, this study aimed to contribute to the literature on tourism management, as it examined the mediating relationships between

the target variables in this industry (as proposed by Czernek-Marszałek, 2019) and focused on a less studied segment of the industry, namely, low-category hotels (as recommended by Perdomo-Verdecia *et al*., 2022); these arguments justify the sample choice.

The structure of the remainder of the article is as follows. Firstly, I will propose research hypotheses and a theoretical model based on the literature review. Secondly, I will describe the research methodology. Thirdly, I will present our results and confront them with the findings of previous studies. Finally, I will conclude with the contributions and limitations of the study as well as recommendations for future research.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

As stated in the Introduction, one of the most common conceptualizations of entrepreneurship is EO. This study focused on the three-dimensional EO construct which includes risk-taking, proactiveness, and innovativeness. The impact of EO on firm performance is a subject of numerous studies in the fields of entrepreneurship and organizational strategy. However, this impact is not clear. Although most studies report a positive impact (*e.g.* Rauch *et al*., 2009; Kraus *et al*., 2012), others report a lack of such impact (*e.g.* Renko *et al*., 2009), and there are also cases of negative impact (*e.g.* D'Souza & Fan, 2022). Moreover, this relationship can be non-linear (Tang *et al*., 2008; Wales *et al*., 2013). This ambiguity suggests that this relationship can be affected by other factors, both internal (*e.g.* hotel category; Hernández-Perlines, 2016) and external (*e.g.* market characteristics; Rosenbusch *et al*., 2013; Wójcik-Karpacz *et al*., 2019). In studies focused on the hospitality industry, scholars also consider EO as a factor positively affecting hotel performance (*e.g.* Tajeddini *et al*., 2020; Singal & Batra, 2021). Based on the above, I submitted a hypothesis about the positive impact of EO on firm performance, but after that, I proposed additional hypotheses related to selected factors that can affect this relationship. Thus, I put forward the following hypothesis which was an axle of our theoretical model:

H1: Entrepreneurial orientation positively affects firm performance.

Entrepreneurial orientation reflects a posture towards a firm environment. This posture can affect different behaviours of entrepreneurs. Regarding an entrepreneur's attitude towards other enterprises, we can distinguish two opposite positions: competitive and collaborative. In the entrepreneurship theory, the former dominates (Markin *et al*., 2017); scholars perceive competing as a manifestation of entrepreneurship (Lumpkin & Dess, 1996). As a result, some EO operationalisations include 'competitive aggressiveness' defined as 'a firm's propensity to directly and intensely challenge its competitors to achieve entry' (Lumpkin & Dess, 1996, p. 148). Consequently, an entrepreneurial firm is expected to take diverse actions to outperform its market rivals (Giachetti, 2016), including direct confrontation (Lumpkin & Dees, 1996). Compared to risk-taking, innovativeness, and proactiveness, competitive aggressiveness less commonly constitutes a dimension of EO in empirical studies (Covin & Lumpkin, 2011); this encouraged me to interpret competitive orientation as a factor separated from EO. However, I propose that it is influenced by EO.

Entrepreneurial posture (expressed by the pursuit of opportunities) can lead to inter-organizational cooperation; specifically, entrepreneurs can cooperate to pursue an opportunity. Entrepreneurs can cooperate at the early stages of the entrepreneurial process, which results in starting their business in partnership (Ruef, 2010). However, they collaborate also at later stages within networks, supply chains, or clusters (Blomqvist & Levy, 2006). Cooperation enables overcoming resource limitations (Nason & Wiklund, 2018), which can prevent firms from pursuing opportunities. This refers also to knowledge resources that are necessary to recognize and capture an opportunity; sharing information and knowledge facilitates generating new ideas, innovation, and finally value creation (Gupta & Govindarajan, 2000). Thus, creating cooperative relationships aimed at pursuing opportunities can be interpreted as a manifestation of entrepreneurship (Franco & Haase, 2013; Kusa, 2017). This is similar to creating a new firm, which is an entrepreneurial act (Gartner, 1989). Previous studies showed that inter-organizational cooperation positively correlates with EO (Kusa *et al*., 2019) and entrepreneurial

firms are able to form collaborative relationships (Ribeiro-Soriano & Urbano, 2009) and business networks (Abbas *et al*., 2019). Thus, I hypothesised:

H2: Entrepreneurial orientation positively affects collaborative orientation.

H3: Entrepreneurial orientation positively affects competitive orientation.

Noteworthy, entrepreneurs can simultaneously collaborate and compete with other companies (including their direct competitors; Bouncken *et al*., 2015). This behaviour is called 'coopetition' (Brandenburger & Nalebuff, 1996) and it somehow manifests flexibility (regarding relationships towards other entities) which is a required characteristic in changing environments and can also be perceived as an entrepreneurial trait (Kusa *et al*., 2022). Thus, coopetition can be considered in an entrepreneurial context (Soppe *et al*., 2014; Bouncken *et al*., 2015; Galkina & Lundgren-Henriksson, 2017; Kusa, 2020). Coopetition is also visible in the hospitality industry (Kallmuenzer *et al*., 2021). However, since coopetition is a complex phenomenon (Bengtsson & Kock, 2000; Raza-Ullah *et al*., 2018), it deserves a separate study and I did not include it in mine.

Inter-organizational collaboration is commonly perceived as a facilitator in increasing firm performance. This proposition was developed under resource-based theory. Accordingly, cooperation enables firms, especially small ones, to cope with resource limitations (Welbourne & Pardo, 2009; Staniewski *et al*., 2016; Li *et al*., 2021), which is especially valuable during a crisis (Duda *et al*., 2024); this also refers to small and medium-sized tourism and hospitality enterprises (Pham *et al*., 2021; Tajeddini *et al*., 2023). Moreover, cooperation enables firms to reduce the operational costs of the business (Banchuen *et al*., 2017) and benefit from the investment- and cost-sharing mechanisms (Crick & Crick, 2020). Inter-firm collaboration positively affects creativity, continuous improvement (Fawcett *et al*., 2008), and innovativeness (Alexiev *et al*., 2016). Finally, collaboration enhances firm performance (Yue-Ming, 2005). This was also confirmed in entrepreneurship studies. For example, inter-organizational cooperation accompanied by EO dimensions can lead to firm performance (Kusa *et al*., 2022). Consequently, firms get involved in various types of cooperation with different partners at different levels (Child *et al*., 2005; Della Peruta *et al*., 2018; Li *et al*., 2021). In the tourism context, it is expected to generate 'domino effect' which can be beneficiary for all businesses in the destination (Czernek-Marszałek, 2020a). Owing to this, scholars consider cooperation one of the firm strategies (Nielsen, 1986; Faulkner, 1995) and a foundation for a company's business model (Crick & Crick, 2020). Thus, I hypothesised:

H4: Collaborative orientation positively affects firm performance.

A competitive approach towards other market actors is one of the pillars of an organizational strategy aimed at enhancing competitive advantage (Porter, 1985). For example, in the hospitality industry, competition from neighbouring hotels triggers additional online efforts (Xu *et al*., 2022). Numerous studies indicate the relationship between competitive behaviours and firm performance (*e.g.* Ajamieh *et al*., 2016; Schulze *et al.,* 2022), in particular, improving operating performance (Hughes-Morgan *et al*., 2018), financial performance (Vlas *et al*., 2022), market position (Lumpkin & Dess, 1996), profitability, and market share (Giachetti, 2016). Consequently, firms develop their competitive methods to increase performance (Powers & Hahn, 2002). This can be enhanced by some negative consequences of social embeddedness, such as limiting the innovativeness of cooperative activities or lowering adaptive abilities, which are observable in the tourism context (Czernek-Marszałek, 2020b). However, the impact of competitive actions can vary depending on firm size. It is stronger in small firms compared to large ones (Weinzimmer *et al*., 2023). Furthermore, at the embryonic stage of a firm, competitive aggressiveness does not affect firm performance (Hughes & Morgan, 2007). The relationship between competitive aggressiveness and performance can be non-linear (*e.g.* inverted U-shaped; see Andrevski & Ferrier, 2019). Finally, the impact of the competitive approach can be affected by other factors. For example, when accompanied by innovativeness, a competitive approach can lead to firm performance in SMEs (Kusa *et al*., 2022). Previous research shows that a competitive approach to human resource and IT strategies increases hotel performance (Tavitiyaman *et al*., 2011). Based on the above, I hypothesised:

H5: Competitive orientation positively affects firm performance.

Taking into account associations of collaborating and competing with both EO and performance (they impact performance, but at the same time, they are affected by EO), I propose that they can play a mediating role in the relationship between EO and performance. Some premises of such role was previously reported; for example, the competitive tactics mediate pioneering orientation and new product performance (García-Villaverde *et al*., 2017). Additionally, relational capital mediates the impact of green innovation strategic orientation on competitive advantage in the hospitality industry (Dang & Wang, 2022). Thus, I hypothesised:

H6: Collaborative orientation mediates the impact of entrepreneurial orientation on firm performance.

H7: Competitive orientation mediates the impact of entrepreneurial orientation on firm performance.

As stated in the Introduction, organizations can compete and collaborate simultaneously. This encouraged me to propose a theoretical model which includes both collaboration and competition, as well as EO and performance. Figure 1 illustrates the model below.

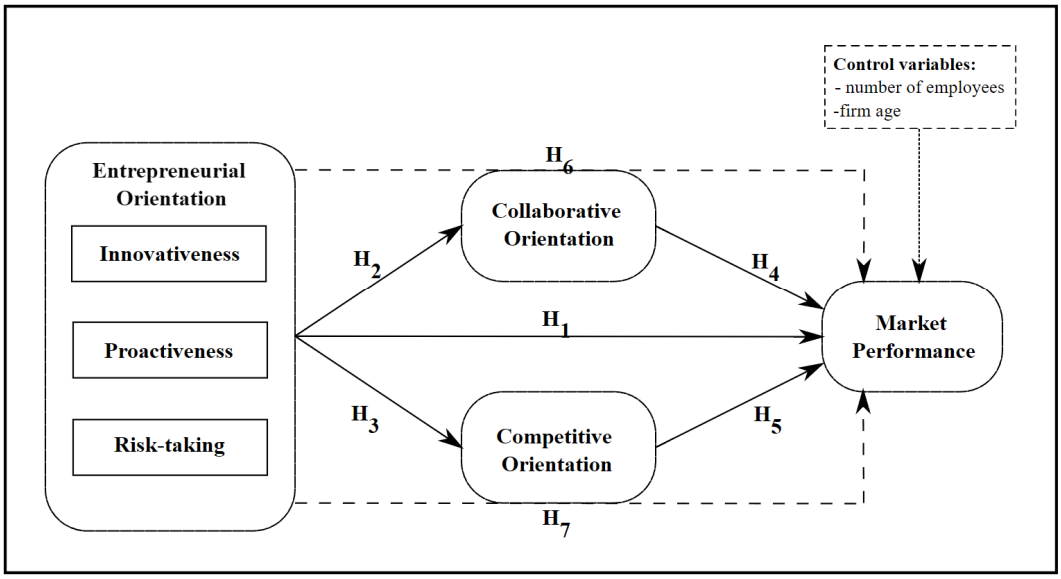

Figure 1. Theoretical model
Source: own elaboration.

RESEARCH METHODOLOGY

Sample and Data Collection

I tested the proposed hypotheses and the theoretical model with one- and two-star hotels operating in Poland. I compiled the list based on the Central List of Hotel Facilities provided by the Ministry of Sport and Tourism of the Republic of Poland (2021); according to the List, there were 680 such entities (November 10, 2021). Representatives of one hundred and seventeen hotels provided their responses to the questionnaire in the November – December 2021 period and they constituted the research sample in my analysis.

Among surveyed entities, 20.8% were one-star and 79.2% – two-star hotels. In total, 57.4% provide 20-50 beds, 20.8% – 51-100 beds, and 21.8% – more than 100 beds. Only 23.7% of surveyed entrepreneurs managed more than one hotel and 16.9% of surveyed hotels were associated with a hotel chain. The majority of hotels in the sample were micro (51.5%) and small (44.6%) enterprises. Only 3.9% were medium ones. Moreover, 7.0% have operated for less than six years, 18.8% between 6-10 years, 31.6% between 11-20, 30.7% between 21-30 years, and 11.9% – over 30 years.

Variables

In this study, firm performance (PERF) was the dependent variable. Other variables were entrepreneurial orientation (EO), external collaborative orientation (COL), and external competitive orientation (COM). In this study, I considered the latter two factors as both independent and dependent variables, as they are associated in different ways with other factors. Entrepreneurial orientation was an independent variable. Entrepreneurial orientation was considered a second-order construct. It includes three constructs, namely, innovativeness, proactiveness, and risk-taking. Table 5 presents the assessment of the EO construct. All variables were indices and consisted of three or four items. Table 1 shows the results of the reliability and validity assessment of each construct. All constructs were based on previous entrepreneurship studies, in particular, performance, EO, and its dimensions were based on the works of Hughes and Morgan (2007) and Kusa *et al*. (2021), and collaborative and competing orientations were based on the study by Kusa, Suder, Baumane-Vītoliņa (2022). In total, the questionnaire comprised 20 questions related to our variables. I present them in Appendix 1. Each question was assessed on a seven-degree scale, where 1 stands for 'fully disagree' and 7 stands for 'fully agree.'

Moreover, I considered firm age and size as control variables. However, the relevant analysis indicated that they did not significantly affect the relationships examined in the research model. Following the recommendation of Bernerth and Aguinis (2016), they were not included in the final analysis.

Method

Due to the research model (Figure 1), which reflects the impact of EO on COL, COM, and PERF, as well as the mediating effect of COL and COM on the impact of EO on PERF, it was appropriate to use a statistical method that allows for the assessment of causal relationships including the evaluation of predictive capabilities. Structural equation modelling based on the partial least squares method (PLS-SEM) provides such possibilities. Scholars commonly use this method of data analysis in many disciplines concerned with causal relationships for latent variables (Hair *et al*., 2022). In particular, PLS-SEM allows for verifying the significance of both direct and indirect (mediated) relationships (Nitzl *et al*., 2016; Sarstedt *et al*., 2017; Suder *et al*., 2023). I conducted the analysis using SmartPLS software version 4.0.8.7.

I conducted the analysis in three stages. In the first stage, I evaluated the measurement model with a particular focus on verifying the correctness of individual constructs (variables). In the second stage, I built a structural model. Owing to the bootstrapping technique, I could verify the significance of path coefficients (both direct and indirect). In the final stage of the analysis, I estimated the type and strength of the mediating effects for the proposed mediators.

RESULTS AND DISCUSSION

Evaluation of Measurement Model

To assess the correctness of measuring constructs (variables) using the proposed indicators, a measurement model should be evaluated for its reliability and validity (Klarner *et al*., 2013). Tables 1 and 2 present the evaluation results.

To verify the reliability and validity of the constructs, I used Cronbach's alpha and composite reliability; Table 1 shows their values. According to Kock and Lynn (2012), the threshold of acceptability for these measures is 0.7. For four of the six constructs, the values of these measures were above the aforementioned threshold, which indicates that the indicators were adequate for building the constructs. For two variables, namely, proactiveness and risk-taking, Cronbach's alphas were slightly below 0.7. However, according to Hair *et al*. (2011), the acceptable level for Cronbach's alpha is 0.6. Thus, I also considered these two constructs to be internally consistent, especially since their values of composite reliability (which is a measure similar to Cronbach's alpha; Netemeyer *et al*., 2003), were much higher than the recommended threshold of acceptability.

Table 1 also shows the outer loadings of each latent variable and the corresponding average variance extracted (AVE). According to the PLS-SEM methodology, the expected value for loadings is 0.7

while the acceptable value is 0.5 (Hair *et al.*, 2022). Only one outer loading for the proactiveness construct (PR_1) was slightly lower than the threshold of 0.7, which allowed for considering all indicators as significant. The AVE values for all constructs were higher than 0.5, which confirmed that all considered variables were relevant (Fornell & Larcker, 1981; Kock & Lynn, 2012).

Table 1. The results of the assessment of constructs and measurement model

Construct	Item	Outer loadings	Collinearity statistics (VIF)	Cronbach's alpha	Composite reliability (CR)	Average variance extracted (AVE)
Innovativeness	IN_1	0.784	1.435	0.783	0.874	0.698
	IN_2	0.853	1.904			
	IN_3	0.867	1.798			
Proactiveness	PR_1	0.645	1.431	0.66	0.809	0.589
	PR_2	0.844	1.726			
	PR_3	0.798	1.257			
Risk-taking	RT_1	0.745	1.325	0.683	0.821	0.606
	RT_2	0.748	1.361			
	RT_3	0.839	1.301			
Collaborative orientation	COL_1	0.754	1.704	0.826	0.885	0.658
	COL_2	0.885	2.475			
	COL_3	0.834	2.357			
	COL_4	0.766	1.844			
Competitive orientation	COM_1	0.857	1.554	0.745	0.854	0.661
	COM_2	0.785	1.497			
	COM _3	0.795	1.422			
Market performance	PERF_1	0.827	2.257	0.848	0.897	0.685
	PERF_2	0.863	2.521			
	PERF_3	0.824	2.622			
	PERF_4	0.796	2.386			

Source: own elaboration.

To confirm the absence of collinearity of indicators within each construct, I used the variance inflation factor (VIF). According to Diamantopoulos and Siguaw (2006), the problem of collinearity of indicators does not occur if the VIF values are below 3.30. Data presented in Table 1 shows that all items met this criterion.

An important element in verifying the validity of the model is the assessment of the discriminant (differential) validity of the constructs (Iacobucci, 2010; Kock, 2020). I checked the validity based on the Fornell-Larcker criterion and used the heterotrait-monotrait (HTMT) coefficient. According to Fornell and Larcker (1981) and Kock (2015), discriminant validity requires that the square roots of AVE is greater than its correlations with the other constructs in the model. In contrast, according to Henseler *et al*. (2015), latent variables meet the condition of differential validity if values of HTMT coefficients are below 0.85. Results of the discriminant validity presented in Table 2 show that all examined constructs had differential validity.

I used the standardized root mean squared of residuals (SRMR) as a criterion for fitting the model to the data (Henseler *et al*., 2015). According to Iacobucci (2010) and Kock (2020), the value of SRMR should be below 0.1. Regarding my model, the SRMR was 0.093, which was an acceptable value and confirmed that the model fit the data at a good level.

In my model, I considered EO a second-order construct. Therefore, I followed the recommendations of Diamantopoulos and Winklhofer (2001) and Rasoolimanesh (2022) and determined the collinearity statistics for the outer and inner models. Moreover, I calculated the outer weights for each EO dimension and verified their significance. Table 3 shows the results of this analysis.

The results presented in Table 3 confirm that the EO as a second-order construct is proper in terms of its validity. In particular, for both the outer and inner models, the collinearity statistic had a value

below the recommended threshold (*i.e.* 3.30). Furthermore, the outer weights for each construct were statistically significant ($p < 0.05$) (Ramayah *et al*., 2018).

Table 2. Assessment of discriminant validity of the constructs of the Fornell-Larcker and Henseler (HTMT) criterion

	Fornell-Larcker criterion						Henseler (HTMT) criterion				
Constructs	**IN**	**PR**	**RT**	**COL**	**COM**	**PERF**	**IN**	**PR**	**RT**	**COL**	**COM**
IN	**0.835**										
PR	0.571	**0.767**					0.754				
RT	0.31	0.276	**0.779**				0.386	0.366			
COL	0.518	0.528	0.362	**0.811**			0.639	0.686	0.463		
COM	0.288	0.418	0.372	0.449	**0.813**		0.361	0.539	0.507	0.564	
PERF	0.314	0.465	0.312	0.472	0.407	**0.828**	0.378	0.594	0.397	0.56	0.498

Note: elements in bold on diagonal show square roots of AVE.
Source: own elaboration.

Table 3. Assessment of measurement model of second-order construct

Second-order construct	Construct	Outer weights	p-value	VIF for outer model	VIF for inner model
Entrepreneurial orientation	Innovativeness	0.411	0.000	1.542	1.176
	Proactiveness	0.506	0.000	1.508	
	Risk-taking	0.372	0.000	1.125	

Source: own elaboration.

The above-presented results of the evaluation of the measurement model and construct validity confirmed that the adopted research model was appropriate for the data used in the study.

Testing Hypotheses With Structural Model

The bootstrapping procedure with 5000 iterations enabled me to verify the statistical significance of the estimated path coefficients (I used a two-sided test with an assumed limiting test probability of 0.05). For each endogenous variable, I calculated the coefficient of determination (R^2); following Cohen (1988) and Kock (2014), a value of this measure above 20% indicates that the model is predictively useful. Moreover, I determined an effect size coefficient (f^2) for each direct relationship; it for allows assessing the role of individual exogenous variables in explaining the variance of the endogenous variable (Cohen, 1988). In particular, I considered the effect size large for $f^2 > 0.35$, medium for $f^2 > 0.15$, and small for an effect size above 0.02.

Figure 2 and Tables 4 and 5 provide the results of the analysis for the structural model. Specifically, Figure 2 presents the path coefficients for each relationship (both direct and indirect) with an indication of their significance. Furthermore, Figure 2 presents the coefficients of determination for each endogenous variable. Table 4 provides complete results for direct relationships analysis and Table 5 provides a summary of results for indirect relationships.

All path coefficients had a positive value, which indicates the presence of a positive influence in the investigated relationships. Moreover, all β-coefficients were statistically significant. In particular, the obtained results indicate that EO was a significant determinant of the PERF, COL, and COM in the examined sample. Thus, hypotheses H1, H2, and H3 were confirmed. In the proposed model, EO had the strongest direct effect on COL ($\beta_2 = 0.615$, $p < 0.05$) with a large effect size ($f^2 = 0.607$). Based on the R^2 value, EO explains 37.8% of the COL variance. Moreover, EO is also a significant trigger for entrepreneurs' willingness to compete (for COM $\beta_3 = 0.468$, $p < 0.05$) with a medium effect size ($f^2 = 0.237$). The variability of the COM was nearly 22% explained by EO. The value of the path coefficient for the EO-PERF relationship ($\beta_1 = 0.248$, $p < 0.05$) indicates that more entrepreneurial behaviour (higher level of EO) leads to higher market performance (PERF). However, the effect size was relatively low ($f^2 = 0.051$). The results of this part of the examination are in line with previous studies indicating the role of EO in shaping firm performance (*e.g.* Rauch *et al*., 2009; Kraus *et al*., 2012). These results

confirm also previous propositions regarding the impact of EO on both collaboration (*e.g.* Ribeiro-Soriano & Urbano, 2009; Franco & Haase, 2013) and competition (*e.g.* Lumpkin & Dess, 1996) on the level of inter-organizational relationships.

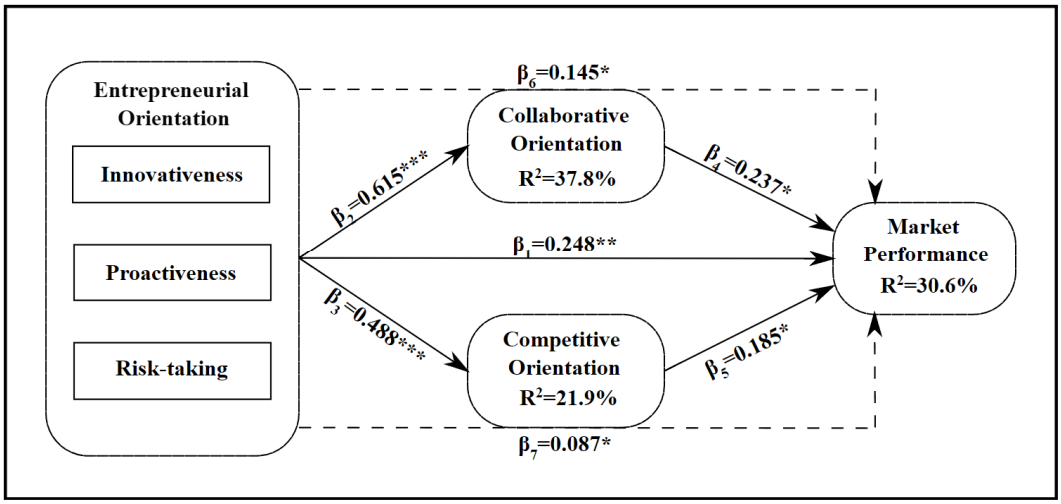

Figure 2. Structural model
Notes: *** p-value < 0.001; ** p-value < 0.01; * p-value < 0.05.
Source: own elaboration based on survey results.

Table 4. Results for direct effect evaluation

Hypothesis	Path	Original sample (O)	Bootstrapping				f^2	Hypothesis testing
			Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P value		
H1	EO→PERF	0.248	0.257	0.089	2.806	0.005	0.051	Confirmed
H2	EO→COL	0.615	0.615	0.055	11.087	0.000	0.607	Confirmed
H3	EO→COM	0.468	0.469	0.071	6.571	0.000	0.281	Confirmed
H4	COL→PERF	0.237	0.23	0.106	2.241	0.025	0.048	Confirmed
H5	COM→PERF	0.185	0.182	0.084	2.211	0.027	0.036	Confirmed

Source: own elaboration.

The results indicate that firm performance is significantly influenced not only by EO but also cooperation and competition. Accordingly, hypotheses H4 and H5 were confirmed. Although COL had a greater impact on PERF than COM ($\beta_4 = 0.237$, $p < 0.05$ and $\beta_5 = 0.185$, $p < 0.05$, respectively), for both variables, the effect size was obtained at a low level. The three variables, namely EO, COL and COM, jointly explain slightly more than 30% of the variance of PERF. These results confirm previous observations regarding the positive impact of both collaboration (*e.g.* Yue-Ming, 2005; Welbourne & Pardo, 2009; Kusa *et al*., 2022) and competitive orientation (*e.g.* Powers & Hahn, 2002; Hughes-Morgan *et al*., 2018; Kusa *et al*., 2022) on firm performance. Noteworthy, the results confirm the relevance of tested relationships in the hospitality industry, which corresponds with studies on EO (*e.g.* Hernández-Perlines, 2016; Tajeddini *et al*., 2020; Singal & Batra, 2021) and inter-organizational relationships in this industry (*e.g.* Kallmuenzer *et al*., 2021; Pham *et al*., 2021; Tajeddini *et al*., 2023). As hotels are an important element of each destination, their collaborative behaviours can affect other local players. They can enhance the 'domino effects' observed at the local level (Czernek-Marszałek, 2020a). The results can help explain the role of competition in improving performance (as shown by Xu *et al*., 2022). In the case of hotels, this mechanism can be complex and associated with entrepreneurial behaviours.

Evaluation of Indirect and Mediating Effects

In addition to direct relationships, this study examined indirect relationships, which enabled me to assess the mediating effect of collaborative and competitive orientation on the relationship between EO and

market performance (Nitzl *et al*., 2016; Hair *et al*., 2022). The mediating effect occurs if the significance of the coefficient for the indirect relationship is confirmed (Zhao *et al*., 2010). In such cases, it is additionally possible to check the type (full or partial) of mediation (MacKinnon *et al*., 2007). To determine the type of mediation and compare mediation strength (if there are several mediators), I used the VAF (Variance Accounted For) measure (Hair *et al*., 2017), which is defined as follows: VAF = (a×b)/(a×b+c')×100%, in which a×b reflects the indirect effect and c' reflects the direct effect. VAF takes values between 0 and 100%; the higher value it takes, the greater role of the mediator in the relation (above 80% – full mediation, between 20% and 80% – partial mediation, below 20% – no mediation effect; Helm *et al*., 2010). The results of the mediation effect evaluation are presented in Table 5.

Table 5. Results for mediating effect evaluation

Hypothesis	Path	Original sample (O)	Bootstrapping				VAF	Hypothesis testing
			Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P value		
H6	EO→COL→PERF	0.145	0.142	0.07	2.081	0.037	36.4%	Confirmed (partial mediation)
H7	EO→COM→PERF	0.087	0.085	0.042	2.079	0.038	25.5%	Confirmed (partial mediation)

Source: own elaboration.

The results presented in Table 5 indicate that both COL and COM are mediators for the EO-PERF relationship. The path coefficients for both mediated relationships were statistically significant, in particular $\beta_6 = 0.145$ ($p < 0.05$) for COL and $\beta_7 = 0.087$ ($p < 0.05$) for COM. As the direct relationship (EO-PERF) was also statistically significant, this mediation was partial. Additionally, VAF values confirm the mediating effect; VAF fell within the range of 20-80% for both mediators. Thus, hypotheses H6 and H7 were confirmed. Furthermore, the comparison of the VAF values for COL and COM indicates that the mediating strength of cooperation is greater than that of competition. This finding is contrary to a general understanding that competition is more entrepreneurial than cooperation (*e.g.* Lumpkin & Dess, 1996; Markin *et al*., 2017). However, this also shows that the role of both behaviours can be complex (as indicated previously by García-Villaverde *et al*., 2017 and Dang & Wang, 2022). This is also somehow in line with studies that suggest that entrepreneurial studies can benefit from the inclusion perspective of coopetition (Soppe *et al*., 2014; Bouncken *et al*., 2015; Galkina & Lundgren-Henriksson, 2017; Kusa, 2020). Similarly, the findings correspond with previous studies on tourism management (Czernek-Marszałek, 2019), indicating the mediating role of cooperation in low-category hotels. Finally, this finding confirms that the impact of EO on firm performance can be indirect and can be affected by other factors (in this case, mediated by the type of relationship with other entities). With this finding, the study joins a research stream that focuses on the determinants of this relationship and intends to clarify the ambiguity regarding the relationship between EO and performance (*e.g.* Rosenbusch *et al*., 2013; Hernández-Perlines, 2016; Wójcik-Karpacz *et al*., 2019).

CONCLUSIONS

The study aimed to determine the relationship between EO, collaboration, competition, and firm performance, with a special focus on the mediating role of inter-organizational cooperation and competition in the relationship between EO and firm performance. The most original finding unveiled the mediating role of both competitive and collaborative orientation in the relationship between EO and firm performance. In both cases, mediation was partial. This allows me to posit that collaborative behaviours can be as important as cooperative ones in transforming entrepreneurial approach into performance, which sheds new light on our understanding of entrepreneurial behaviours and suggests revising these operationalisations of EO that highlight the role of competing behaviours and omit collaborative actions. Furthermore, the findings confirm the positive impact of EO on competitive orientation and collaborative orientation, as well as the positive impact of these three factors (EO, COM, and COL)

on firm performance. With these findings, the study contributes to the literature on entrepreneurship and inter-organizational relationships. Furthermore, the study adds value to the tourism management literature by explaining the relationships examined in low-category hotels.

This study offers implications for both researchers and practitioners and suggests considering inter-organizational relationships as a factor that can enhance entrepreneurial efforts. Thus, inter-organizational relationships can play an important role in managerial practice and be a subject of research focused on organizational entrepreneurship. The results indicate that hoteliers should improve both collaborative and competitive abilities along with their entrepreneurial skills and use them concurrently to maximize their gains.

However, when applying the presented results, several limitations should be considered. I obtained the results based on the examination of a homogeneous sample (small one- and two-star hotels operating in one country). Therefore, in the case of other companies, the results may differ from those presented in this study. Moreover, it is necessary to take into account the applied operationalization of the tested phenomena, especially collaborating and competing; the use of other operationalisations, which would expose other aspects of these phenomena, can lead to differing results. Finally, there may be more relationships than just the unveiled ones (for example, moderating roles of collaborating or competing); the size of the sample surveyed in this study allowed for testing only selected hypotheses. The above limitations indicate directions for further research exploring the role of inter-organizational relationships in entrepreneurial activities. In particular, I recommend conducting similar research in other contexts (*e.g.* in terms of industry, location, organization type). In the tourism context, studies focused on hotels of other categories (including accommodations that are not classified) or family-owned hotels can be relevant to get a full picture of the role of entrepreneurial, collaborative, and competitive orientations in the hospitality sector. The inclusion of other variables that can affect the tested relationships is also recommended as they can help to explain the contingencies related to the tested model. Finally, I recommend further testing and improvement of the constructs used (especially those reflecting cooperation and competition). Such research would make it possible to confirm the relationships indicated in this study, which could provide a basis for formulating new proposals in the field of inter-organizational relationships and entrepreneurship theory.

REFERENCES

Abbas, J., Raza, S., Nurunnabi, M., Minai, M.S., & Bano, S. (2019). The Impact of Entrepreneurial Business Networks on Firms' Performance Through a Mediating Role of Dynamic Capabilities. *Sustainability, 11*(11), 3006. https://doi.org/10.3390/su11113006

Ajamieh, A., Benitez, J., Braojos, J., & Gelhard, C. (2016). IT infrastructure and competitive aggressiveness in explaining and predicting performance. *Journal of Business Research, 69*(10), 4667-4674. https://doi.org/10.1016/j.jbusres.2016.03.056.

Alexiev, A.S., Volberda, H.W., & Van den Bosch, F.A.J. (2016). Interorganizational collaboration and firm innovativeness: Unpacking the role of the organizational environment. *Journal of Business Research, 69*, 974-984. https://doi.org/doi.org/10.1016/j.jbusres.2015.09.002, hdl.handle.net/1765/82316

Andrevski, G., & Ferrier, W.J. (2019). Does it pay to compete aggressively? Contingent roles of internal and external resources. *Journal of Management, 45*(2), 620-644. https://doi.org/10.1177/0149206316673718

Baker, W.E., Grinstein, A., & Harmancioglu N. (2016). Whose innovation performance benefits more from external networks: Entrepreneurial or conservative firms?. *Journal of Product Innovation Management, 33*(1), 104-120. https://doi.org/10.1111/jpim.12263

Banchuen, P., Sadler, I., & Shee, H. (2017). Supply chain collaboration aligns order-winning strategy with business outcomes. *IIMB Management Review, 29*, 109-121. https://doi.org/10.1016/j.iimb.2017.05.001

Bengtsson, M., & Kock, S. (2000). 'Coopetition' in business networks: to cooperate and compete simultaneously. *Industrial Marketing Management, 29*(5), 411-426. https://doi.org/10.1016/S0019-8501(99)00067-X

Bernerth, J.B., & Aguinis, H. (2016). A critical review and best-practice recommendations for control variable usage. *Personnel Psychology, 69*(1), 229-283. https://doi.org/10.1111/peps.12103

Blomqvist, K., & Levy, J. (2006) Collaboration capability: A focal concept in knowledge creation and collaborative innovation in networks. *International Journal of Management Concepts and Philosophy, 2*(1), 31-48. https://doi.org/10.1504/IJMCP.2006.009645

Bouncken, R.B., Gast, J., Kraus, S., & Boges, M. (2015). Coopetition: a systematic review, synthesis, and future research directions. *Review of Managerial Sciences 9*(3), 577-601. https://doi.org/10.1007/s11846-015-0168-6

Brandenburger, A., & Nalebuff, B. (1996). *Co-opetition*. Doubleday Publishing, New York.

Casson, M. (1982). *The entrepreneur*. Barnes & Noble Books, Totowa, NJ.

Child, J., Faulkner, D., & Tallman, S. (2005). *Cooperative Strategy. Managing Alliances, Networks, and Joint Ventures*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199266241.001.0001

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Mahwah, NJ: Lawrence Erlbaum.

Covin, J.G., & Wales, W.J. (2019). Crafting high impact entrepreneurial orientation research: Some suggested guidelines. *Entrepreneurship Theory and Practice, 43*(1), 3-18. https://doi.org/10.1177/104225871877318

Covin, J.G., & Lumpkin, G.T. (2011). Entrepreneurial Orientation Theory and Research: Reflections on a Needed Construct. *Entrepreneurship Theory and Practice, 35*(5), 855-872. https://doi.org/10.1111%2Fj.1540-6520.2011.00482.x

Covin, J.G., & Slevin, D.P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal, 10*(1), 75-87.

Crick, J.M., & Crick D. (2020). Coopetition and COVID-19: Collaborative business-to-business marketing strategies in a pandemic crisis. *Industrial Marketing Management, 88*, 206-213. https://doi.org/10.1016/j.indmarman.2020.05.016

Czernek-Marszałek, K. (2019). Applying mixed methods in social network research – The case of cooperation in a Polish tourist destination. *Journal of Destination Marketing & Management, 11*, 40-52. https://doi.org/10.1016/j.jdmm.2018.10.004

Czernek-Marszałek, K. (2020a). Social embeddedness and its benefits for cooperation in a tourism destination. *Journal of Destination Marketing & Management, 15*, 100401. https://doi.org/10.1016/j.jdmm.2019.100401

Czernek-Marszałek, K. (2020b). The overembeddedness impact on tourism cooperation. *Annals of Tourism Research, 81*, 102852. https://doi.org/10.1016/j.annals.2019.102852

Dang, V.T., & Wang, J. (2022). Building competitive advantage for hospitality companies: The roles of green innovation strategic orientation and green intellectual capital. *International Journal of Hospitality Management, 102*, 103161. https://doi.org/10.1016/j.ijhm.2022.103161

Della Peruta, M.R., Del Giudice, M., Lombardi, R., & Soto-Acosta, P. (2018). Open Innovation, Product Development, and Inter-Company Relationships Within Regional Knowledge Clusters. *Journal of the Knowledge Economy, 9*, 680-693. http://doi.org/10.1007/s13132-016-0356-x

Diamantopoulos, A., & Siguaw, J.A. (2006). Formative versus reflective indicators in organizational measure development: A comparison and empirical illustration. *British Journal of Management*, *17*(4), 263-282.

Diamantopoulos, A., & Winklhofer, H.M. (2001). Index construction with formative indicators: An alternative to scale development. *Journal of Marketing Research, 38*(2), 269-277. https://doi.org/10.1509/jmkr.38.2.269.18845

D'Souza, E., & Fan, G. (2022). A capability-anchored articulation of the EO-organizational performance relationship in emergent and post-emergent organizations. *Journal of Business Research, 146*, 107-117. https://doi.org/10.1016/j.jbusres.2022.03.069

Drucker, P.F. (1985). *Innovation and Entrepreneurship*. New York: Harper & Row. https://doi.org/10.1002/hrm.3930240410

Duda, J., Kusa, R., Suder, M., Gródek-Szostak, Z., & Grumadaite, K. (2024). Role of inter-organizational cooperation during times of crisis. In J. Duda, & T. Bernat (Eds.), *Business Impacts of COVID-19. International Business, Crisis Management, and the Global Economy*. New York: Routledge.

Dwyer, F.R., Schurr, P.H., & Oh, S. (1987). Developing buyer–supplier relationships. *Journal of Marketing 51*(2), 11-27.

Dyduch, W. (2019). Entrepreneurial Strategy Stimulating Value Creation: Conceptual Findings and Some Empirical Tests. *Entrepreneurial Business and Economics Review, 7*(3), 65-82. https://doi.org/10.15678/EBER.2019.070304

Faulkner, D.O. (1995). *International Strategic Alliances: Co-operating to Compete*. Maidenhead: McGraw-Hill.

Fawcett, S.E., Magnan, G.M., & McCarter, M.W. (2008). A three-stage implementation model for supply chain collaboration. *Journal of Business Logistics, 29*(1), 93-112. https://doi.org/10.1002/j.2158-1592.2008.tb00070.x

Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50. https://doi.org/10.2307/3151312

Franco, M., & Haase, H. (2013). Firm resources and entrepreneurial orientation as determinants for collaborative entrepreneurship. *Management Decision, 51*(3), 680-696. https://doi.org/10.1108/00251741311309724

Galkina, T., & Lundgren-Henriksson, E.L. (2017). Coopetition as an entrepreneurial process: Interplay of causation and effectuation. *Industrial Marketing Management, 67*(Nov), 158-173. https://doi.org/10.1016/j.indmarman.2017.09.004

García-Villaverde, P.M., Parra-Requena, G., & Ruiz-Ortega, M.J. (2017). From pioneering orientation to new product performance through competitive tactics in SMEs. *BRQ Business Research Quarterly, 20*(4), 275-290. https://doi.org/10.1016/j.brq.2017.05.002

Gartner, W.B. (1989). "Who is an entrepreneur?" Is the wrong question. *Entrepreneurship Theory and Practice, 13*(4), 47-67.

Giachetti, C. (2016). Competing in emerging markets: Performance implications of competitive aggressiveness. *Management International Review, 56*, 325-352. https://doi.org/10.1007/s11575-015-0263-6

Gupta, A.K., & Govindarajan, V. (2000). Knowledge flows within multinational corporations. *Strategic Management Journal, 21*(4), 481-510. https://doi.org/10.1002/(SICI)1097-0266(200004)21:4<473::AID-SMJ84>3.0.CO;2-I

Hair, J.F., Celsi, M.W., Money, A.H., Samouel, P., & Page, M.J. (2011). *Essentials of Business Research Methods*. M.E. Sharpe Inc.

Hair, J.F., Hult, T.M., Ringle, C.M., & Sarstedt, M. (2017). *A primer on partial least square structural equation modeling (PLS-SEM)*. Sage Publications.

Hair, J.F., Hult, G.T.M., Ringle, C.M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM) (3nd ed.)*. SAGE Publications.

Helm, S., Eggert, A., & Garnefeld, I. (2010). Modeling the Impact of Corporate Reputation on Customer Satisfaction and Loyalty Using Partial Least Squares. In Esposito Vinzi, V., Chin, W., Henseler, J., & Wang, H. (Eds.), *Handbook of Partial Least Squares. Springer Handbooks of Computational Statistics* (pp. 515-534). Springer, Berlin-Heidelberg.

Henseler, J., Ringle, C.M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1), 115-135. https://doi.org/10.1007/s11747-014-0403-8

Hernández-Perlines, F. (2016). Entrepreneurial orientation in hotel industry: Multi-group analysis of quality certification. *Journal of Business Research, 69*(10), 4714-4724. https://doi.org/10.1016/j.jbusres.2016.04.019

Hitt, M., Ireland, R., Camp, M., & Sexton, D. (2001). Strategic Entrepreneurship: Entrepreneurial Strategies for Wealth Creation. *Strategic Management Journal, 22*, 479-491. https://doi.org/10.1002/smj.196

Hughes, M., & Morgan, R.E. (2007). Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. *Industrial Marketing Management, 36*(5), 651-661. https://doi.org/10.1016/j.indmarman.2006.04.003

Hughes-Morgan, M., Kolev, K., & Mcnamara, G. (2018). A meta-analytic review of competitive aggressiveness research. *Journal of Business Research, 85*, 73-82. https://doi.org/10.1016/j.jbusres.2017.10.053

Iacobucci, D. (2010). Structural equations modeling: Fit indices, sample size, and advanced topics. *Journal of Consumer Psychology*, *20*(1), 90-98. https://doi.org/10.1016/j.jcps.2009.09.003

Kallmuenzer, A., Zach, F.J., Wachter, T., Kraus, S., & Salner, P. (2021). Antecedents of coopetition in small and medium-sized hospitality firms. *International Journal of Hospitality Management, 99*, 103076. https://doi.org/10.1016/j.ijhm.2021.103076

Klarner, P., Sarstedt, M., Hoeck, M., & Ringle, C.M. (2013). Disentangling the effects of team competences, team adaptability, and client communication on the performance of management consulting teams. *Long Range Planning*, *46*(3), 258-286. https://doi.org/10.1016/j.lrp.2013.03.001

Kock, N. (2014). *Stable p value calculation methods in PLS-SEM*. ScriptWarp Systems.

Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration, 11*(4), 1-10. https://doi.org/10.4018/ijec.2015100101

Kock, N. (2020). Full latent growth and its use in PLS-SEM: Testing moderating relationships. *Data Analysis Perspectives Journal, 1*(1), 1-5.

Kock, N., & Lynn, G. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for Information Systems, 13*(7). https://doi.org/10.17705/1jais.00302

Kraus, S., Rigtering, J.P.C., Hughes, M., & Hosman, V. (2012). Entrepreneurial orientation and the business performance of SMEs: a quantitative study from the Netherlands. *Review of Managerial Science, 6*, 161-182. https://doi.org/10.1007/s11846-011-0062-9

Kusa, R. (2017). Interorganisational collaboration in view of the theory of entrepreneurship. *Studia i Materiały, 23*(1), 83-93.

Kusa, R. (2020). Theorizing on coopetition as dimension of entrepreneurial orientation. In J. Duda, & T. Bernat (Eds.), *Business, Economics and Science. Common Challenges* (pp. 85-91). Bologna: Filodiritto Publisher. https://doi.org/10.26352/CY29_MONOGRAPH_BUSNESS_ECONOMICS_KRAKOV2020

Kusa, R., Duda, J., & Suder, M. (2021). Explaining SME performance with fsQCA: The role of entrepreneurial orientation, entrepreneur motivation, and opportunity perception. *Journal of Innovation and Knowledge, 6*(4), 234-245. http://doi.org/10.1016/j.jik.2021.06.001

Kusa, R., Duda, J., & Suder, M. (2022). How to sustain company growth in times of crisis: The mitigating role of entrepreneurial management. *Journal of Business Research, 142*, 377-389. https://doi.org/10.1016/j.jbusres.2021.12.081

Kusa, R., Palacios-Marques, D., & Ribeiro-Navarrete, B. (2019). External cooperation and entrepreneurial orientation in industrial clusters. *Entrepreneurship and Regional Development, 31*(1-2), 119-132. https://doi.org/10.1080/08985626.2018.1537151

Kusa, R., Suder, M., Barbosa, B., Glinka, B., & Duda, J. (2022). Entrepreneurial behaviors that shape performance in small family and non-family hotels during times of crisis*. International Entrepreneurship and Management Journal, 18*, 1545-1575. https://doi.org/10.1007/s11365-022-00812-7

Kusa, R., Suder, M., & Baumane-Vītoliņa, I. (2022). Inter-Organizational Relationships and Entrepreneurial Orientation. Investigating Their Impact on Firm Performance. In J. Duda, & T. Bernat (Eds.), *Science, Business, and Universities. Cooperation, Knowledge Transfer, and Entrepreneurship* (pp. 77-91). New York: Routledge. https://doi.org/10.4324/9781003258278-7

Kusa, R., Suder, M., Gretzinger, S., & Schachtebeck, C. (2023). Entrepreneurial orientation and networking as enablers of firm performance: A fuzzy-set based comparative analysis of micro, small and medium-sized enterprises. *management revue – Socio-Economic Studies*. In press.

Li, Y., Huang, L., & Tong, Y. (2021). Cooperation with competitor or not? The strategic choice of a focal firm's green innovation strategy. *Computers & Industrial Engineering, 157*, 107301. http://doi.org/10.1016/j.cie.2021.107301

Lumpkin, G.T., & Dess, G.G. (1996). Clarifying the EO construct and linking it to performance. *Academy of Management Review, 21*(1), 135-172. https://doi.org/10.2307/258632

MacKinnon, D.P., Fairchild, A.J., & Fritz, M.S. (2007). Mediation analysis. *Annual Revision Psychology, 58*(1), 593-614. https://doi.org/10.1146/annurev.psych.58.110405.085542

Markin, E., Swab, R.G., & Marshall, D.R. (2017). Who is driving the bus? An analysis of author and institution contributions to entrepreneurship research. *Journal of Innovation and Knowledge, 2*(1), 1-9. https://doi.org/10.1016/j.jik.2016.10.001

Ministry of Sport and Tourism of the Republic of Poland (2021). *Central List of Hotel Facilities (Centralny Wykaz Obiektów Hotelarskich)*. Retrieved from https://turystyka.gov.pl/cwoh on November 10, 2021.

Nason, R.S., & Wiklund, J. (2018). An assessment of resource-based theorizing on firm growth and suggestions for the future. *Journal of Management, 44*(1), 32-60. https://doi.org/10.1177/0149206315610635

Netemeyer, R.G., Bearden, W.O., & Sharma, S. (2003). *Scaling procedures: issues and applications*. Thousand Oaks: Sage Publications.

Nielsen, R.P. (1986). Cooperative strategies. *Planning Review, 14*(2), 16-20. https://doi.org/10.1108/eb054137

Nitzl, C., Roldan, J.L., & Cepeda, G. (2016). Mediation analysis in partial least squares path modeling: Helping researchers discuss more sophisticated models*. Industrial Management & Data Systems, 116*(9), 1849-1864. https://doi.org/10.1108/IMDS-07-2015-0302

Perdomo-Verdecia, V., Sacristán-Díaz, M., & Garrido-Vega, P. (2022). Lean management in hotels: Where we are and where we might go. *International Journal of Hospitality Management, 104*, 103250. https://doi.org/10.1016/j.ijhm.2022.103250

Pham, L.D.Q., Coles, T., Ritchie, B.W., & Wang, J. (2021). Building business resilience to external shocks: Conceptualising the role of social networks to small tourism & hospitality businesses. *Journal of Hospitality and Tourism Management, 48*, 210-219. https://doi.org/10.1016/j.jhtm.2021.06.012

Porter, M.E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. Free Press.

Powers, T.L., & Hahn, W. (2002). Skill and resource based competitive methods: impact on firm performance. *Journal of Services Marketing, 16*(2), 113-124. https://doi.org/10.1108/08876040210422664

Ramayah, T.J.F.H., Cheah, J., Chuah, F., Ting, H., & Memon, M.A. (2018). *Partial least squares structural equation modeling (PLS-SEM) using smartPLS 3.0. An updated guide and practical guide to statistical analysis*. Pearson Malaysia Sdn Bhd.

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

Raza-Ullah, T., Bengtsson, M., & Vanyushyn, V. (2018). Coopetition capacity: What is it?. In A.S. Fernandez, P. Chiambaretto, F. Le Roy, & W. Czakon (Eds.), *The Routledge Companion to Coopetition Strategies* (pp. 197-204). Abingdon: Routledge.

Renko, M., Carsrud, A., & Brännback, M. (2009). The effect of market orientation, entrepreneurial orientation, and technological capability on innovativeness: A study of young biotechnology ventures in the United States, Scandinavia. *Journal of Small Business Management, 47*(3), 331-369. https://doi.org/10.1111/j.1540-627X.2009.00274.x

Ribeiro-Soriano, D. (2017). Small business and entrepreneurship: their role in economic and social development. *Entrepreneurship & Regional Development, 29*(1-2), 1-3. https://doi.org/10.1080/08985626.2016.1255438

Ribeiro-Soriano, D., & Urbano, D. (2009). Overview of collaborative entrepreneurship: An integrated approach between business decisions and negotiations. *Group Decision and Negotiation, 18*(5), 419-430. https://doi.org/10.1007/s10726-008-9134-x

Rocha, H., & Miles, R. (2009). A model of collaborative entrepreneurship for a more humanistic management. *Journal of Business Ethics, 88*(3), 445-462. Retrieved from https://www.jstor.org/stable/40295011 on March 2, 2023.

Rosenbusch, N., Rauch, A., & Bausch, A. (2013). The mediating role of entrepreneurial orientation in the task environment–performance relationship: A meta-analysis. *Journal of Management, 39*(3), 633-659. https://doi.org/10.1177/0149206311425612

Rasoolimanesh, S.M. (2022). Discriminant validity assessment in PLS-SEM: A comprehensive composite-based approach. *Data Analysis Perspectives Journal, 3*(2), 1-8.

Ruef, M. (2010). *The entrepreneurial group: Social identities. relations. and collective action* (In The Kauffman Foundation Series on Innovation and Entrepreneurship). Princeton: Princeton University Press.

Schulze, A., Townsend, J.D., & Talay, M.B. (2022). Completing the market orientation matrix: The impact of proactive competitor orientation on innovation and firm performance. *Industrial Marketing Management, 103,* 198-214. https://doi.org/10.1016/j.indmarman.2022.03.013

Sarstedt, M., Hair, Jr, J.F., Cheah, J.H., Becker, J.M., & Ringle, C.M. (2019). How to specify, estimate, and validate higher-order constructs in PLS-SEM. *Australasian Marketing Journal, 27*(3), 197-211. https://doi.org/10.1016/j.ausmj.2019.05.003

Singal, M., & Batra, S. (2021). The role of socioemotional wealth and entrepreneurial orientation in family-managed hotels. *Journal of Hospitality and Tourism Management, 49*, 204-213. https://doi.org/10.1016/j.jhtm.2021.09.012

Soppe B., Lechner, C., & Dowling, M. (2014). Vertical coopetition in entrepreneurial firms: theory and practice. *Journal of Small Business and Enterprise Development, 21*(4), 548-564. https://doi.org/10.1108/JSBED-03-2014-0052

Staniewski, M.W., Nowacki, R., & Awruk, K. (2016). Entrepreneurship and innovativeness of small and medium-sized construction enterprises. *International Entrepreneurship and Management Journal, 12*, 861-877. https://doi.org/10.1007/s11365-016-0385-8

Stevenson, H.H., & Jarillo J.C. (1990). A paradigm of entrepreneurship: entrepreneurial management. *Strategic Management Journal, 11*(4), 17-27.

Suder, M., Duda, J., Kusa, R., & Mora-Cruz, A. (2023). At the crossroad of digital and tourism entrepreneurship: Mediating effect of digitalization in hospitality management. *European Journal of Innovation Management*. In press. https://doi.org/10.1108/EJIM-08-2022-0422

Suder, M., Kusa, R., Duda, J., & Dunska, M. (2022). How small printing firms alleviate impact of pandemic crisis? Identifying configurations of successful strategies with fuzzy-set qualitative comparative analysis. *Entrepreneurial Business and Economics Review, 10*(2), 61-80. https://doi.org/10.15678/EBER.2022.100204

Tajeddini, K., Gamage, T.C., Tajeddini, O., & Kallmuenzer, A. (2023). How entrepreneurial bricolage drives sustained competitive advantage of tourism and hospitality SMEs: The mediating role of differentiation and risk management. *International Journal of Hospitality Management, 111*, 103480. https://doi.org/10.1016/j.ijhm.2023.103480

Tajeddini, K., Martin, E., & Ali, A. (2020). Enhancing hospitality business performance: The role of entrepreneurial orientation and networking ties in a dynamic environment*. International Journal of Hospitality Management, 90*, 102605. https://doi.org/10.1016/j.ijhm.2020.102605

Tang, Z., Kreiser, P.M., Marino, L., Dickson, P., & Weaver, K.M. (2009). A hierarchical perspective of the dimensions of entrepreneurial orientation. *International Entrepreneurship and Management Journal, 5*(2), 181-201. https://doi.org/10.1007/s11365-008-0097-9

Tavitiyaman, P., Qu, H., & Zhang, H.Q. (2011). The impact of industry force factors on resource competitive strategies and hotel performance. *International Journal of Hospitality Management, 30*(3), 648-657. https://doi.org/10.1016/j.ijhm.2010.11.010

Vlas, C.O., Richard, O.C., Andrevski, G., Konrad, A.M., & Yang, Y. (2022). Dynamic capabilities for managing racially diverse workforces: Effects on competitive action variety and firm performance*. Journal of Business Research, 141,* 600-618. https://doi.org/10.1016/j.jbusres.2021.11.060

Wales, W.J., Covin, J.G., & Monsen, E. (2020). Entrepreneurial orientation: The necessity of a multilevel conceptualization. *Strategic Entrepreneurship Journal, 14*(4), 639-660. https://doi.org/10.1002/sej.1344

Wales, W.J., Patel, P.C., Parida, V., & Kreiser, P.M. (2013). Nonlinear effects of entrepreneurial orientation on small firm performance: The moderating role of resource orchestration capabilities. *Strategic Entrepreneurship Journal, 7*(2), 93-121. https://doi.org/10.1002/sej.1153

Weinzimmer, L., Esken, C.A., Michel, E.J., McDowell, W.C., & Mahto, R.V. (2023). The differential impact of strategic aggressiveness on firm performance: The role of firm size. *Journal of Business Research, 158*, 113623. https://doi.org/10.1016/j.jbusres.2022.113623

Welbourne, T.M., & Pardo-del-Val, M. (2009) Relational capital: Strategic advantage for small and medium-size enterprises (SMEs) through negotiation and collaboration. *Group Decision Negotiation, 18*(5), 483-497. https://doi.org/10.1007/s10726-008-9138-6

Wójcik-Karpacz, A., Karpacz, J., Pavlov, D., & Rudawska, J. (2019). Entrepreneurial orientation and performance in the context of market dynamism: similarities and differences between Polish and Bulgarian companies. *Management Forum, 6*(4), 40-47. https://doi.org/10.15611/mf.2018.4.06

Xu, Y., Gong, C., & Law, R. (2022). Face the competition and take proactive actions: How does neighborhood competition affect hotel online effort?. *International Journal of Hospitality Management, 100*, 103092. https://doi.org/10.1016/j.ijhm.2021.103092

Yue-Ming, S. (2005). Inter-organizational network and firm performance: The case of the bicycle industry in Taiwan. *Asian Business and Management, 4*, 67-91. https://doi.org/10.1057/palgrave.abm.9200119

Zhao, X., Lynch, J.G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research, 37*(2), 197-206. https://doi.org/10.1086/651257

Appendix A: Constructs' items

Innovativeness
- Our organization seeks out new ways to do things.
- We actively introduce improvements and innovations in our organization.
- Innovation is the source of our success.

Proactiveness
- We analyze our external environment.
- We strive to identify future trends.
- We initiate actions to which other organizations respond.

Risk taking
- When we see an attractive opportunity, we follow it regardless of the accompanying risk.
- The term 'risk taker' is considered a positive attribute for people in our business.
- Relative to our competitors, we pursue high-risk opportunities oftener.

Collaborative orientation
- We are more collaborative than our competitors.
- We take advantage of collaboration when we launch new products on the market.
- We take advantage of collaboration when we introduce new processes.
- We perceive collaboration as facilitator of our development.

Competitive orientation
- In general, our organization takes a bold or aggressive approach when competing.
- We try to undo and out-maneuver the competition as best as we can.
- We are more competitive than our competitors.

Market Performance
- Relative to competing products, our products are more successful in terms of sales.
- Relative to competing products, those of our business achieve and maintain a higher market share.
- Relative to our competitors, our income is greater.
- Relative to our competitors, our profit is greater.

Author

Rafał Kusa
Assistant Professor at the AGH University of Science and Technology, Faculty of Management; PhD in Economics and Management (2007, Krakow University of Economics, Krakow, Poland). His research interests include strategic management, organizational entrepreneurship, social entrepreneurship, non-profit organizations, digitalization, and tourist management.
Correspondence to: Dr Rafał Kusa, Akademia Górniczo-Hutnicza, Wydział Zarządzania, ul. Gramatyka 10, 30-067 Krakow, Poland, e-mail: rkusa@agh.edu.pl
ORCID http://orcid.org/0000-0002-9819-897X

Acknowledgements and Financial Disclosure

This research project was supported by program "Excellence initiative – research university" for the AGH University of Science and Technology and the statutory funds for the maintenance and development of the research capacity of the Faculty of Management of the AGH University of Science and Technology in Krakow.

Conflict of Interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Copyright and License

Published by Krakow University of Economics – Krakow, Poland

Ministry of Education and Science
Republic of Poland

The journal is co-financed in the years 2022-2024 by the Ministry of Education and Science of the Republic of Poland in the framework of the ministerial programme "Development of Scientific Journals" (RCN) on the basis of contract no. RCN/SP/0583/2021/1 concluded on 13 October 2022 and being in force until 13 October 2024.