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## Linking entrepreneurial orientation to firm performance: the role of differentiation strategy and innovation performance

Cemal Zehir<sup>a</sup>, Esin Can<sup>b</sup>, Tugba Karaboga<sup>c</sup>

<sup>a,b,c</sup> *Yildiz Technical University, Istanbul, 34330, Turkey*

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### Abstract

In the strategy literature, the effect of entrepreneurial orientation (EO) on firm performance has been investigated in many studies. The latest researches investigate the relationship between them by considering the effects of third variables which can be internal and external factors. Within this framework, our study focuses on the mediating role of innovation performance and differentiation strategy on the relationship between entrepreneurial orientation and firm performance. The survey of this study is conducted on 991 middle and senior managers of 331 middle and large scale firms operating in manufacturing industry in Turkey, in 2014. The data gathered from questionnaires are analyzed with SPSS statistical package program at firm level. The results of analyses showed that both differentiation strategy and innovation performance mediate the relationship between EO and firm performance. Also, analyses results revealed another mediating effect in which differentiation strategy mediates the relationship between EO and innovation performance.

*Keywords:* Entrepreneurial orientation, Differentiation strategy, Innovation performance, Firm performance

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### 1. Introduction

In the strategy literature many researchers (eg: Miller, 1983; Lumpkin and Dess, 2001; Zahra and Covin, 1995; Wiklund and Shephard, 2005) have studied the importance of EO on firm performance. Entrepreneurial orientation is a firm level concept and it is closely related to strategic management and strategic decision making processes (Covin and Slevin, 1991; Lumpkin and Dess, 1996; Birkinshaw, 1997). Globalization, global competition, focusing on firm performance for profitability, and inadequacy of traditional managerial techniques due to the changing market conditions can be the reasons for the increase in the importance of corporate entrepreneurship (Morris and Kuratko, 2002).

The concept of “entrepreneur” goes back to 1755 and Cantillon (Hamilton and Harper, 1994). Cantillon defined entrepreneurs as risk takers and they buy at certain prices today and sell at uncertain prices in the future. In the 19th and early 20th centuries entrepreneurs were generally considered in an economic perspective. According to Schumpeter ([1942] 1994, p.132) “The function of the entrepreneur is to reform or revolutionize the pattern of production by exploiting an invention or, more generally, an untried technological possibility for producing a new commodity or producing an old one in new way, by opening up a new source of supply of materials or a new outlet for products, by reorganizing an industry and so on.” According to Lumpkin and Dess (1996), the concept of

Corresponding Author.

*E-mail Address:* [tugba.hidirilar@hotmail.com](mailto:tugba.hidirilar@hotmail.com)

entrepreneurship is mainly related to “new entry” and it is applicable to different levels such as individuals, groups and organizations. With the development of the strategic management literature, a new concept “entrepreneurial orientation” (EO) is emerged. They define EO at firm level, as the reflection of strategic orientation of a firm by affecting processes, practices, and decision-making activities that lead to new entry. Thus, new entry describes what entrepreneurship consists of and EO describes how new entry is carried out (Lumpkin and Dess, 1996).

Today, due to the globalization all sectors, companies, institutions and people are facing intense global competition. Under this pressure, for businesses it is being more difficult to exceed their rivals and outperform. In order to perform better than rivals firms should gain competitive advantage which is one of the most important subjects of management area. Porter has created two basic competitive advantages: low cost and differentiation. Cost leadership is related to producing products and services with lower costs than competitors and reaching a broader customer segment. Differentiation strategy is related to being unique in the market with the unique or different products and services companies offer (Porter, 1980, 1985). According to Barney (1991), in order to have a competitive advantage a firm needs to implement a value creating strategy that is not simultaneously implemented by any other potential competitors. Eisenhardt and Martin (2000) classified cost leadership strategy as temporary and long term sustainability of performance is not possible. Also, Murray (1988) stated that in the cost advantage strategy imitation is inevitable. On the other hand, differentiation strategy creates more sustainable competitive advantage with the unique products and services offered into the market and imitation is very difficult or very costly. (Grant, 1991; Carter and Ruefli, 2006). Also the recent study of Banker, Mashruwala and Tripathy (2014) showed that differentiation strategy creates sustainable higher financial performance in the long run. On the other hand another important subject is innovation or innovativeness which is one of the most important dimensions of EO, critical for differentiation strategy and again crucial for higher performance (e.g. Porter, 1990; Miller, 1983; Hull and Rothenberg, 2008). In the literature, some studies showed that there are relationships between EO, innovation and differentiation strategy (e.g. Prajogo et al., 2007). In this study we will exclude cost leadership strategy because of the higher sustainability of differentiation strategy and higher relationships with other variables (EO, innovation performance and financial performance) we investigate in this study.

In this study we investigate the relationships between EO, differentiation strategy, innovation performance and financial performance. More precisely, we want to analyze the role of differentiation strategy and innovation performance within the EO-financial performance relationship. Our expectation is that differentiation strategy and innovation performance will play a mediating role in the EO-financial performance relationship. In the rest of the paper we give literature review about our variables, we create our hypotheses, draw our research model and methodology, give empirical results from our analysis and present our conclusions.

## **2. Literature Review And Hypotheses**

### *2.1. Entrepreneurial Orientation*

Entrepreneurial orientation is defined as an organizational willingness to find and accept new opportunities and taking responsibility to affect change (Morris et al., 1996). According to Rauch and Frese (2009), EO describes firm level strategic processes that businesses use to gain competitive advantage. Thus, EO is not related to individual level variables as in the previous entrepreneurship theories, it is related to firm level processes (Rauch and Frese, 2009). Especially newly established firms should be very careful in pursuing strategic orientations because they have limited financial and managerial resources (Eisenhardt and Schoonhoven, 1990).

When the importance of EO on firm performance is considered, the EO can be a good measure to explore opportunities in the market and to utilize from them (Barringer and Bluedorn, 1999; Zahra and Garvis, 2000; Ireland et al. 2003). If a firm offers new products and services above averages and enter new markets it can be said that this firm is an entrepreneurial firm (Jennings ve Lumpkin, 1989). According to Lumpkin and Dess (1996), EO consists of independent variables and in the recent researches it is studied as a multidimensional concept (Lumpkin and Dess, 1996; Kreiser et al., 2002; Rauch et al., 2009). Miller (1983) defined entrepreneurial orientation in three dimensions: innovativeness, risk taking and proactiveness. Then Lumpkin and Dess, (1996) added aggressive competitiveness and autonomy to Miller’s 3 dimensions. In this study, depending on different models of corporate entrepreneurship we use

5 dimensions of entrepreneurship; innovativeness, risk taking, proactiveness, aggressive competitiveness and autonomy.

### 2.1.1. EO Dimensions

According to Lumpkin and Dess (1996: 142), **innovativeness** reflects “willingness to support creativity and experimentation in introducing new products/services, and novelty, technological leadership and R&D in developing new processes”. Schumpeter is one of the researchers who firstly emphasized the importance of innovativeness in entrepreneurial processes and defined innovativeness as doing new things or doing existing things in new ways (Schumpeter, 1947). According to Drucker (1985), innovativeness is the most important subject of entrepreneurship and in a similar way Lumpkin and Dess (1996) found it as the key component of entrepreneurship.

Lumpkin and Dess (1996: 144) defined **risk taking propensity** as a reflection of activities of entrepreneurial firms such as “incurring heavy debt or making large resource commitments, in the interest of obtaining high returns by seizing opportunities in the marketplace”. Risk taking behavior is a crucial factor that differentiates entrepreneurs from others because it can create losses and inconsistencies in the performance (Morris and Kuratko, 2002), but it is the behavioral dimension of an EO along which opportunity is pursued (Lumpkin and Dess, 1996).

**Proactiveness** is defined as seeking new opportunities in the market and firms can be proactive by anticipating future demands and opportunities in the market, participating in emerging markets, shaping the environment, and introducing new products and brands before their rivals, (Venkatraman, 1989). Proactive companies perform better than rivals because they respond market changes instantly (Hughes and Morgan, 2007), and they become leaders of the industry with opportunities they find before their rivals (Lumpkin and Dess; 1996).

**Competitive aggressiveness** refers to “a firm's propensity to directly and intensely challenge its competitors to achieve entry or improve position, that is, to outperform industry rivals in the marketplace” (Lumpkin and Dess, 1996: 148). Also, they viewed competitive aggressiveness as responses of companies to achieve competitive advantage in the market.

**Autonomy** is defined as an independent action by an individual or a team focused on creating a business concept or a vision and carrying it through to completion (Lumpkin and Dess, 1996). According to Mintzberg and Waters (1985), entrepreneurs are strong leaders because their decision making processes requires decisive and risky actions, so entrepreneurial autonomy is related to freedom of entrepreneurs, free actions and independent decision making (Lumpkin and Dess, 1996).

### 2.2. EO, Differentiation Strategy and Innovation Performance Relationship

From the beginning of the recent decade, due to the speed of the globalization the intensity of the competition increased and as a result firms started to focus on searching strategies which will provide them sustainable competitive advantage. These strategies generally make firms differentiate their products and processes in other words, force them to innovate (Popadiuk & Choo, 2007). Differentiation strategy is one of the Porter's generic strategies (differentiation, cost leadership and focus) and closely related to innovation and performance (Porter, 1985).

Differentiation strategy is related to being unique in the market with the unique or different products and services companies offer. According to Barney and Hesterly (2006), differentiation is the reflection of individuals and groups working in a firm. When compared to competitive rivals, differentiation strategy provides higher profitability by creating brand loyalty and low price sensitivity (Porter, 1988). Due to the product or service differentiation, customers are ready to pay higher prices. Therefore this strategy reduces price sensitivity, decreases power of suppliers, creates a powerful entry barrier and reduces threat of substitute products. Brand positioning, innovation in marketing techniques, control of distribution channels, advertising campaigns, technological developments, high quality, improving brand image and company reputation are signs of differentiation strategy (Dess and Davis, 1984; Fitzsimmons and Fitzsimmons, 2004). Therefore advantages gained with differentiation strategy are more likely to be sustainable because unique products and services cannot be easily imitated by competitors (Grant, 1991).

In the strategy literature innovation is an important concept that creates value for companies and enables sustainable competitive advantage in the complex and rapidly changing business environment (Madhavan and Grover, 1998). Firms that have higher innovation capabilities are more successful in responding to changing conditions and developing new capabilities to adopt changes and as a result achieve better performance (Montes et al., 2004). Innovation is related to organizations' adoption of a new idea or behavior (Zaltman et al. 1973). Differentiation strategies involve expending resources through research and development, marketing new products and services and promoting brand image (Porter, 1985). Similar to differentiation strategy, innovation occurs in different types such as product innovation, process innovation, service innovation and technological innovation. Also, according to Ireland and Webb (2007), entrepreneurial activities have effects on innovations of the firms. Therefore, due to the intense competitive environment, firms need entrepreneurially oriented individuals or groups in order to innovate new and different products, services, images and processes which cannot be imitated easily by others. This is why differentiation strategies, innovation and EO are closely related with each other.

### 2.3. Firm Performance

In today's business world it is highly emphasized on firm performance. However, there are a lot of criteria used in studies and determining the performance. According to Venkatraman and Ramanujam (1986), performance can be measured with financial and operational (non-financial) indicators. Financial measures are related to economic factors such as profitability and sales growth (e.g. return on investment, return on sales and return on equity) and operational measures are related to non-financial success factors such as quality, market share, satisfaction, new product development and market effectiveness. Also, they classified performance data in two dimensions; primary or secondary data. Primary data are directly collected from organizations and secondary data are collected from publicly available sources. Another classification in the performance measure includes objective and subjective measures. Objective performance measures refer to quantified indicators. They are generally financial indicators and obtained from organizations. On the other hand, subjective measures depend on judgmental assessments of respondents and these indicators cover both financial and non-financial indicators (Gonzalez-Benito, and Gonzalez-Benito, 2005). In the management field, Gonzalez-Benito, and Gonzalez-Benito (2005), suggest the use of subjective measures because subjective measure facilitates the measurement of complex dimensions of performance. Also some authors found difficult to obtain objective measures and perceive objective measures as unreliable because the data can be narrow in scope or cannot be up to date (e.g. Pitt, Caruana, & Berthon, 1996). Depending on similar views in the literature, subjective measures are used in this study and the role of differentiation strategy and innovation performance between the EO – performance relationship is investigated. Data are collected directly from executives of the firms, which show that primary data are used. Also firm performance questions in the survey include profitability and growth questions which mean financial performance is measured.

### 2.4. Development of Hypotheses

According to Lyon, Lumpkin and Dess (2000), there is a general perception that EO affects firm performance. In the entrepreneurship literature, many researchers emphasized the importance of EO – performance relationship and in most of the studies powerful relationship is found between EO and firm performance (e.g. Miller, 1983; Lumpkin and Dess, 2001; Wiklund, 1999; Wiklund & Shepherd, 2005; Zahra & Covin, 1995; Hult, Snow, & Kandemir, 2003). Also some researchers made longitudinal researches and found that the positive influence of entrepreneurial orientation on performance increases over time (e.g. Zahra and Covin, 1995; Wiklund, 1999). On the other hand, some studies were unable to find any significant relationship between EO and performance (e.g. George, Wood, & Khan, 2001; Covin, Slevin, & Schultz, 1994). Thus, there is a variation in the previous research findings. As a result, researchers began to seek internal and external factors that mediate the relationship between EO and firm performance rather than measuring the direct link between them (e.g. Lumpkin and Dess, 1996; Zahra and Garvis, 2000; Lumpkin and Dess, 2001; Li, Huang and Tsai, 2008; Wang, 2008; Alegria and Chiva, 2013). Therefore, in this study, we are investigating mediator effect of differentiation strategy and innovation performance on the relationship between EO and financial performance. In order to measure innovation performance researchers generally examine the indicators such as R&D, patents, new products and services offered by firms (Hagedorn and Cloudt, 2003). On the other hand differentiation strategies involve expending resources through research and development, marketing new products and services and promoting brand image (Porter, 1985). When the relation of differentiation strategy with EO and innovation performance is investigated, differentiation strategy is shown to be the strongest predictors for product and process

innovation in the literature (e.g. Richard, McMillan, and Chadwick, 2003; Prajago et al., 2007; Khalili, Nejadhussein, and Fazel; 2013). Also Lumpkin and Dess (2001), Hughes and Morgan (2007) and Ireland *et al.* (2005) have concluded that EO directly affects organizational innovation and performance. Therefore, it is expected that that good implementation of differentiation strategy can increase financial and innovative performance of companies. Also, depending on the literature, we argue that innovation performance and differentiation strategy will enhance the EO – performance relationship. In accordance with the literature review, our research model is developed as at Figure 1 below:

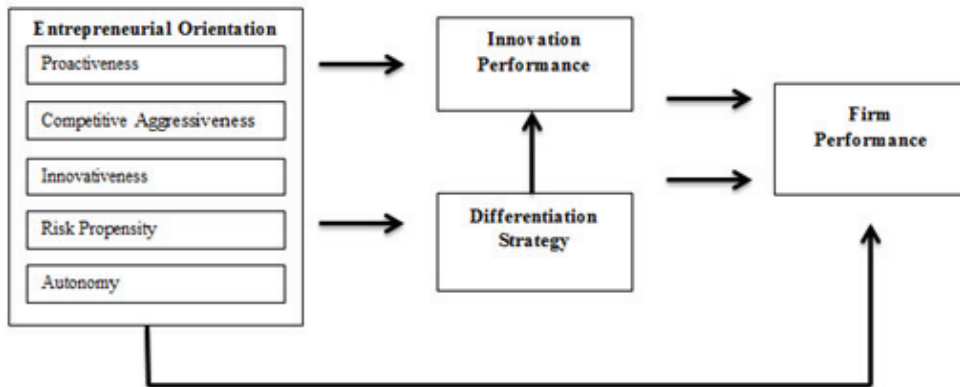


Fig 1. Research Model

Depending on the model, our hypotheses are created as following:

*H1: Differentiation strategy mediates the relationship between entrepreneurial orientation and firm performance.*

*H2: Innovation performance mediates the relationship between entrepreneurial orientation and firm performance.*

*H3: Differentiation strategy mediates the relationship between entrepreneurial orientation and innovation performance.*

### 3. Methodology

#### 3.1. Research Goal

In this survey we aim to examine the mediating effect of differentiation strategy and innovation performance on the relationship between EO and firm performance.

#### 3.2. Sample and Data Collection

The survey of this study is conducted on 991 middle and senior managers of 331 middle and large scale firms operating in manufacturing industry in Turkey, in 2014. Firms were contacted via e mail or phone and informed about the research. Data gathered from 991 questionnaires were reduced to firm level and 331 data were created at firm level. These 331 data were analyzed through SPSS statistical package program and hypotheses were tested through regression analyses.

#### 3.3. Analyses and Results

To measure entrepreneurial orientation, 21-item questionnaire is created to measure 5 dimensions (5 questions for proactiveness, 4 questions for competitive aggressiveness, 5 questions for innovativeness, 4 questions for risk propensity and 3 questions for autonomy) by adapting from literature (Covin and Slevin, 1988; Venkatraman, 1989; Andersen, 2001; Li, Zhao and Liu, 2006;). To measure differentiation strategy 14-item questionnaire is created by adapting from literature (Porter, 1980; Dess and Davis, 1984; Kohli and Jaworski, 1990; Chang et al., 2003). 8-item questionnaire is created to measure innovation performance by adapting from Prajago and Sohal (2006). To measure

firm performance 7- item questionnaire is created by adapting from literature that focus on financial performance indicators such as profitability and growth (Baker and Sininkula, 1999; Antoncic and Hisrich, 2001). During the analyses 3 questions are deleted (1 question from proactiveness and 2 questions from innovation performance) because they showed a weak loading or loaded two different factors. Overall 47 questions are used to measure variables. Factor loadings can be seen on the Table 1 and Cronbach's Alpha values can be seen on table 2.

Table 1 Factor Analysis Results

	DIFFERENTIATION STRATEGY	FIRM PERFORMANCE	INNOVATION PERFORMANCE	Innovativeness	Risk Propensity	Competitive Aggressiveness	Proactiveness	Autonomy
Developing new products and services	0,704							
Offering products according to the special needs of our customers	0,725							
Offering better quality products compared to our competitors	0,618							
Offering products in differentiating features	0,687							
Hiring qualified and creative people to achieve strategic goals	0,692							
Coordination among R&D, product development and marketing	0,762							
First company in introducing new products/brands to our customers	0,718							
Differentiated products of our company take place in the market	0,728							
Developing additional models and sizes upon our existing products	0,770							
Reducing new product development and marketing time	0,735							
Continuous improvement and development of products	0,735							
Benefiting from identified new businesses and market opportunities	0,721							
Satisfying the needs of different customers in different markets	0,711							
Expanding production line in order to produce different products	0,693							
Average net profitability compared to equity		0,819						
Net profitability before tax compared to all available resources		0,813						
Net revenue achieved from basic operations		0,839						
Financial success of the new products offered to market.		0,734						
Overall success level in financial terms		0,752						
Average annual increase in sales		0,658						
Overall level of profitability		0,740						
Technological competitiveness of our company			0,686					
Level of new product offering to the market			0,539					
Latest technological innovations in our new products and processes			0,789					
Adaption of the latest technological innovations in all processes			0,690					
The rate of change in our processes, techniques and technology.			0,685					
Importance given to R&D, technological leadership and innovation			0,659					
<b>ENTREPRENEURIAL ORIENTATION</b>								
Technical innovations based on research results are accepted quickly.				0,570				
Importance given to innovative ideas regarding products and services				0,612				
In our firm, innovations are accepted easily in projects.				0,612				
Employees are not punished even if their new ideas do not work.				0,690				
Innovativeness is encouraged in the firm.				0,702				
There is a strong proclivity for high risk projects					0,542			
In general, our operations include high risk.					0,743			
Taking bold, wide-ranging acts which are not tried before.					0,769			
Taking aggressive postures to maximize the probability of exploiting potential opportunities					0,774			
We often sacrifice profitability to gain market share						0,685		
We often cut prices to increase market share						0,794		
For higher prices, we often set prices below competitors						0,752		
Market share position at the expense of cash flow and profitability						0,739		
Effectiveness in providing new products/services							0,732	
Changes in the products are more radical compared to competitors							0,686	
Great importance to the development of new and innovative products							0,574	
First move instead of responding to the moves of our competitors							0,526	
We generally follow tried and right ways while conducting activities.								0,663
New projects are approved step by step not as a whole.								0,706
A more conservative way is followed in taking major decisions.								0,717
Total Explained Variance for Differentiation Strategy % 60,891								
Total Explained Variance for Financial Performance % 70,483								
Total Explained Variance for Innovation Performance % 69,898								



Total Explained Variance for Entrepreneurial Orientation %68,570  
 Explained Total Variance 68,368%

Table 2. Cronbach Alpha Values

Concepts	Number of Items	Scale Format	Cronbach Alpha	% of Variance	Cumulative %
Differentiation Strategy	14	LRF	0,950	19,592	19,592
Financial Performance	7	LRF	0,930	11,289	30,881
Innovation Performance	6	LRF	0,913	8,184	39,065
Innovativeness	5	LRF	0,854	7,018	46,083
Risk Propensity	4	LRF	0,832	6,563	52,646
Competitive Aggressiveness	4	LRF	0,842	6,387	59,033
Proactiveness	4	LRF	0,863	5,356	64,389
Autonomy	3	LRF	0,708	3,980	68,368

Notes: LRF - Likert Response Format (Five point: 1=strongly disagree to 5=strongly agree)

Table 3: Correlations, means and standard deviations of all variables

	Mean	Std. Deviation	1	2	3	4	5	6	7	8
Proactiveness	3,7478	,67881	1							
Competitive Aggressiveness	3,4194	,75452	,373**	1						
Innovativeness	3,8549	,57418	,689**	,397**	1					
Risk Propensity	3,2893	,74137	,432**	,573**	,397**	1				
Autonomy	3,8078	,53575	,415**	,433**	,461**	,378**	1			
Differentiation Strategy	3,9793	,53455	,613**	,259**	,599**	,363**	,395**	1		
Innovation Performance	3,8183	,59531	,653**	,261**	,587**	,380**	,335**	,687**	1	
Financial Performance	3,7728	,56381	,501**	,362**	,512**	,364**	,375**	,535**	,544**	1

\*\* Correlation is significant at the 0.01 level (2-tailed).

In this study, we conducted regression analysis to test the hypotheses and to define the direction of relations. When we examined the Table 4, it can be seen that in the first regression analysis, 5 dimensions of EO (proactiveness, competitive aggressiveness, innovativeness, risk propensity, and autonomy) have significant effect on differentiation strategy and the total model is significant at  $p=,000$ . In the 2<sup>nd</sup> regression model proactiveness, competitive aggressiveness, risk propensity and innovativeness dimensions of EO have significant effect on innovation performance but autonomy do not have a direct effect on innovation performance and model is significant at  $p=,000$ . In the 3<sup>rd</sup> and 4<sup>th</sup> regression models, it can be seen that differentiation strategy ( $\beta=,535$ ;  $p=,000$ ) and innovation performance ( $\beta=,544$ ;  $p=,000$ ) have significant effect on firm performance. In the 5<sup>th</sup> model, it can be seen that three dimensions of EO (proactiveness, innovativeness and autonomy) have significant effects on EO-performance relationship (model is significant at  $p=,000$ ). In model 6, differentiation strategy is added to EO-performance relationship and the direct effect of autonomy on firm performance disappears and the effect of innovativeness and proactiveness decrease which means differentiation strategy partially mediates the relationship between EO and firm performance (model significant at  $p=,000$ ). In model 7, innovation performance is added to EO-performance relationship and the direct effect of proactiveness on firm performance disappears and the effect of innovativeness reduces which means innovation performance partially mediates the relationship between EO and firm performance (model significant at  $p=,000$ ). Also, in model 8 we put both differentiation strategy and innovation performance to the regression analysis and we saw that the previous effects of proactiveness and autonomy on firm performance disappear and the effect of innovativeness and differentiation strategy decrease, so we can say that differentiation strategy mediates the EO-firm performance relationship through innovation performance. Depending on the regression analyses results we can say that differentiation strategy and innovation performance mediate the relationship between EO and firm performance which means H1 and H2 is supported. Also, in model 9 differentiation strategy is added to EO-innovation performance relationship and the direct effect of risk propensity disappeared and the effect of innovativeness decrease which means differentiation strategy mediates the relationship between EO and innovation performance, so H3 is also supported.

Table 4. Regression Analysis Results

Regression Model	Independent Variables	Dependent Variables	Standardized $\beta$	Sig.	Adjusted R2	F Value	Model Sig.
1	Proactiveness	Differentiation Strategy	,274***	,000	,445	53,915	,000 <sup>a</sup>
	Competitive Aggressiveness		-,073*	,051			
	Innovativeness		,283***	,000			
	Risk Propensity		,078**	,040			
	Autonomy		,114**	,021			
2	Proactiveness	Innovation Performance	,446***	,000	,465	58,454	,000 <sup>a</sup>
	Competitive Aggressiveness		-,090*	,083			
	Innovativeness		,254***	,000			
	Risk Propensity		,129**	,013			
	Autonomy		,023	,635			
3	Differentiation Strategy	Financial Performance	,535***	,000	,284	132,033	,000 <sup>a</sup>
4	Innovation Performance	Financial Performance	,544***	,000	,294	138,372	,000 <sup>a</sup>
5	Proactiveness	Financial Performance	,222**	,001	,326	32,971	,000 <sup>a</sup>
	Competitive Aggressiveness		,094	,107			
	Innovativeness		,245***	,000			
	Risk Propensity		,079	,171			
	Autonomy		,099*	,068			
6	Proactiveness	Financial Performance	,120*	,069	,372	33,589	,000 <sup>a</sup>
	Competitive Aggressiveness		,124**	,029			
	Innovativeness		,156**	,018			
	Risk Propensity		,048	,398			
	Autonomy		,066	,214			
	Differentiation Strategy		,293***	,000			
7	Proactiveness	Financial Performance	,080	,237	,379	34,510	,000 <sup>a</sup>
	Competitive Aggressiveness		,122**	,030			
	Innovativeness		,164**	,011			
	Risk Propensity		,038	,497			
	Autonomy		,092*	,078			
	Innovation Performance		,318***	,000			
8	Proactiveness	Financial Performance	,050	,462	,394	31,670	,000 <sup>a</sup>
	Competitive Aggressiveness		,135**	,015			
	Innovativeness		,126*	,053			
	Risk Propensity		,028	,614			
	Autonomy		,071	,169			
	Differentiation Strategy		,195**	,002			
	Innovation Performance		,234***	,000			
9	Proactiveness	Innovation Performance	,300***	,000	,561	71,251	,000 <sup>a</sup>
	Competitive Aggressiveness		-,047	,321			
	Innovativeness		,127**	,021			
	Risk Propensity		,084*	,075			
	Autonomy		-,025	,574			
	Differentiation Strategy		,418***	,000			

Significance: \* p<0.10 \*\* p<0.05 \*\*\* p<0.01

#### 4. Conclusion

This study highlighted the relationship among EO, differentiation strategy, innovation performance and firm performance. The results of the regression analyses indicate that differentiation strategy and innovation performance mediate the effect of EO on firm performance. So, H1 and H2 is supported according to regression analyses. Also, in the regression analyses it is seen that differentiation strategy mediates the relationship between EO and innovation performance which means H3 is supported. These results are consistent with the literature which supports that EO-firm performance relationship can be mediated by other variables which can be external or external (e.g. Lumpkin and Dess, 1996; Zahra and Garvis, 2000; Wang, 2008; Alegra and Chiva, 2013). Although there are many studies examining the EO-innovation performance relation (e.g. Khalili et al., 2013), innovation-firm performance relation (e.g. Montes et al., 2004), differentiation strategy-innovation performance (e.g. Prajogo et al., 2007), and differentiation strategy-firm performance relation (e.g. Porter, 1985) in the literature; the mediator effect of differentiation strategy and innovation performance on the relationship between EO and firm performance is examined



for the first time through this survey, which differentiates this survey from others. However, in this study there are some limitations. This survey is conducted on middle and large scale manufacturing firms in Turkey, findings might not be transferable to all types of organizations. Thus, it is recommended that further researches can be conducted on small scale firms in different countries or service companies in Turkey and other countries for the generalizability of findings. The other limitation of this survey is that questions related to EO, innovation performance, differentiation strategy and firm performance are answered by same respondents which are middle or senior managers of firms. In the future surveys questions can be filled out by different respondents to prevent same-source bias.

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