
THE EFFECTS OF ENTREPRENEURIAL ORIENTATION ON THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN EMERGING ECONOMIES: EVIDENCE FROM PAKISTAN'S ELECTRIC FANS INDUSTRY

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Abstract

Entrepreneurial orientation (EO) is a crucial multidimensional concept of entrepreneurship that encompasses the entrepreneur's autonomy, attitude towards risk-taking, proactiveness, and competitiveness of entrepreneurs. EO influences the manner in which entrepreneurs perceive and react to their business environment. The majority of research on EO has been conducted in developed countries such as the USA, where institutional development is well established. There is a scarcity of studies focusing on emerging economies. In order to bridge this gap, the current study aims to investigate the construct and application of EO in Pakistan.

The study focuses on Pakistan's electric fan manufacturing industry to gain insight into the implementation of EO and its impact on the performance of small and medium-sized enterprises (SMEs) in emerging economies. In addition, the study aims to provide evidence-based knowledge regarding the causal relationship between EO and SME performance in Pakistan, as well as the impact of moderating variables, through hierarchical regression analysis and an analysis of a sample of 247 SMEs.

The study provides solid evidence that Pakistan's electric fan manufacturing industry demonstrates all five dimensions of EO, as outlined in the existing literature. Furthermore, the study highlights the influence of age, education, and experience as moderating variables in the relationship between EO dimensions and the performance of SMEs in Pakistan.

Keywords

Entrepreneurial Orientation, EO Dimensions, SME Performance, Pakistan, Fan Manufacturing Industry, Hierarchical Regression

1. Introduction

SMEs play a vital role in the economic growth of both developed and developing countries. SMEs have a substantial impact on various aspects of an economy (Taiwo, Ayodeji & Yusuf, 2021). In addition, they significantly contribute to fostering national economic growth, creating more job opportunities, enhancing social welfare, and alleviating poverty (Akhtar et al., 2011). SMEs play a crucial role in promoting national progress by efficiently utilizing local resources, boosting employment rates, fostering self-employment opportunities, improving social welfare, and reducing poverty levels (Khan, 2017; Chughati, 2014).

SMEs account for approximately 90% of businesses worldwide, over 50% of global employment, and more than 40% of the GDP of emerging economies (World Bank, 2023). In emerging markets, SMEs are responsible for the creation of seven out of ten jobs. Similarly, SMEs contribute to roughly 65% of employment in the United States and make up 52% of the GDP of the European Union (Khan, 2017).

Nevertheless, SMEs are more susceptible to economic fluctuations and a competitive business environment. They frequently face difficulties in obtaining bank loans and heavily depend on internal funding. Therefore, SMEs need to prioritize the development and improvement of their innovation capabilities (Troise et al., 2022).

This study uses data from this critical industry of the electric fan manufacturing industry to investigate the effects of EO dimensions on SME performance. Additionally, the study examines the effects of the moderating variables, age, education, and experience, on the relationship between the dimensions of EO and SME performance.

Data was collected from firms in the two major industrial hubs in Pakistan, Gujrat and Gujranwala, using cluster sampling. The data was analyzed using hierarchical multiple regression analysis. Moreover, qualitative analysis and interviews with key personnel in fan manufacturing companies were conducted to gain a deeper understanding of EO and its effects on SMEs. The findings indicate that EO significantly influences SME performance.

Although there is a substantial body of research examining the influence of EO on performance in developed nations, there is a dearth of studies investigating EO in developing countries, and its implementation and effects on SMEs in those economies are scarce. With the exception of a small number of studies, such as the studies of (Al-Swidi and Al-Hosam, 2012; Ndubisi et al., 2014; Chelliah et al., 2023), there is limited literature on the effects of EO on SME performance in developing economies. This study contributes to the existing literature by offering empirical evidence on the implementation of EO in developing economies and its effects on SME performance.

2. Literature Review

Entrepreneurship has gained significance due to its crucial role in promoting the economy through providing employment opportunities and fostering growth in national production. The rise in entrepreneurial endeavors is strongly connected to economic growth and the implementation of entrepreneurial policies at both state and national levels (Hafer, 2013).

Entrepreneurial Orientation

Studying the EO of executives and business owners is an established method for assessing entrepreneurship (De Mol et al., 2019; Covin and Slevin, 1989; Miller, 1983). EO represents a company's strategic approach, reflecting its strategic stance toward seizing opportunities for growth and sustainability in a competitive business environment. It encompasses a range of distinct yet interconnected behaviors that play a crucial role in shaping an organization's inclination toward being entrepreneurial or conservative (Asrofi et al., 2023; Morris et al., 2011; Pearce et al., 2010).

Various studies focused on identifying the dimensions of EO. For instance, Lumpkin and Dess (1996) defined EO as an inclination towards autonomous action, a willingness to innovate, take risks, compete vigorously, and be proactive in pursuing market opportunities (Lumpkin & Dess, 1996). Miller (1983) outlined the dimensions of EO as innovative, risk-taking, and proactive. Furthermore, Lumpkin, 1996 and Lumpkin and Dess (2001) have associated EO with organizations that embrace risk, promote autonomous activities, foster innovation, and respond proactively and aggressively to surpass competitors in the market. EO is demonstrated through the company's managerial beliefs, decision-making processes, and strategic initiatives (Anderson, Covin & Slevin, 2009; Carraher et al., 2016).

Dess (2001) provides a description of EO, focusing on the actions and efforts of organizations. It highlights how owners and managers demonstrate entrepreneurial behaviors and participate in entrepreneurial activities. According to Dess & Lumpkin (2005), EO dimensions encompass proactivity, innovation, competitive drive, and the risk-taking propensity of owners and managers. EO is basically a multidimensional psychological construct reflecting the attitude toward market opportunities and threats. This is pertinent at the entrepreneurial and organizational levels (Perex and Guevara, 2023; Khan, 2017). EO enables organizations to thrive in dynamic, disruptive, and innovative environments (Morris et al., 2011).

In this research, we adopt Lumpkin and Dess's comprehensive five dimensions construct of EO due to its widespread acceptance and recognition (See Krauss et al., 2005; Wiklund & Shepherd, 2005; Coulthard, 2007; Hughes and Morgan, 2007; Farsi et al., 2013). For a comprehensive understanding of the five dimensions of EO, namely autonomy, innovativeness, risk-taking, proactiveness, and competitive aggressiveness, we recommend referring to Lumpkin and Dess's 2005 study (Lumpkin and Dess, 2005).

Entrepreneurial Orientation and Organizational Performance

The impact of EO on firm performance has been extensively studied over the past thirty years. Although there is conflicting evidence from various studies regarding the effects of the different dimensions of EO (Fairoz et al., 2010; Lim, 2008; Lumpkin and Dess, 1996), some research has demonstrated a positive correlation between EO and performance. Khan (2017) illustrated that an EO strategy can significantly impact corporate performance, especially when aligned with the firm's operating and competitive environment. Covin and Lumpkin (2011) demonstrated that there is a widespread consensus on the positive impact of EO on a firm's performance. However, the effectiveness of EO can be influenced by the competence of executives (Covin and Lumpkin, 2011).

We strongly believe that EO has a significant positive effect on the performance of SMEs. Entrepreneurial organizations can achieve greater success in the marketplace by identifying and exploring business opportunities, thereby establishing a competitive advantage. Therefore, we believe that EO can positively impact the performance of SMEs in the electric fan industry in Pakistan, particularly when appropriate moderating factors are present. Consequently, our study aims to investigate the effects of the different dimensions of EO on the performance of SMEs in the electric fan manufacturing industry in Pakistan. In addition, the study aims to examine the effects of the moderating factors, age, education, and experience of the entrepreneur leading the organization. The literature has documented the impact of moderating factors (Sajilan et al., 2015; Ferk et al., 2013; Unger et al., 2011; Ucbasaran, 2008). Therefore, it is crucial to consider these demographic factors when studying the effects of EO on firm performance.

3. Research Questions

In order to explore the research objective mentioned above, the study will examine the following two research questions:

RQ1: What are the effects of autonomy, innovativeness, risk-taking, proactiveness, and competitive aggressiveness as dimensions of EO on the performance of SMEs in the Pakistani fan manufacturing industry?

RQ2: How do owners' demographic variables of age, education, and experience influence the relationship between EO dimensions and the performance of SMEs in the Pakistani fan manufacturing industry?

We address the research questions through the following five hypotheses:

Hypothesis 1: Autonomy has a positive impact on SME performance in the electric fan manufacturing industry in Pakistan.

While some studies support the positive relationship between autonomy and performance (see, for instance, Awand et al., 2009), others contradict this relationship (e.g., Caillas & Moreno, 2010; Hughes & Morgan, 2007), indicating the inconsistent nature of the findings and the need for further research.

Various studies have shown a positive correlation between innovativeness and firm performance. Hypothesis 2 seeks to explore this connection within the context of SMEs in the electric fan manufacturing sector in Pakistan. We propose:

Hypothesis 2: Innovativeness positively affects SME performance in Pakistan's electric fan manufacturing industry.

Entrepreneurship entails anticipating potential benefits while considering the associated risks (Gebreegziabhr & Tadessem, 2014; Jalali et al., 2014; Segal et al., 2005). Risk-taking is a crucial component of entrepreneurship due to the intense competition in the business environment (Al-Swidi & Al-Hosam, 2012). Consequently, it is hypothesized that entrepreneurs with a higher risk-taking tolerance will achieve greater success than risk-averse entrepreneurs. Consequently, we suggest the following hypothesis:

Hypothesis 3: Risk-taking has a positive effect on the performance of SMEs in the fan manufacturing industry in Pakistan.

Proactiveness is essential for firms to gain a competitive edge and foster innovation (Jalali et al., 2014). Firms can command higher prices by actively seeking profitable opportunities and taking proactive measures, allowing them to surpass their competitors (Craig et al., 2014; Zahara & Covin, 1995). According to Wiklund and Shephers (2005), proactive firms have effectively dominated the market and established strong brand recognition compared to their non-proactive counterparts. We expect to observe a comparable relationship among SMEs in the electric fan manufacturing industry in Pakistan. Therefore, we propose:

Hypothesis 4: Proactiveness has a positive effect on the performance of SMEs in the electric fan manufacturing industry in Pakistan.

The relationship between competitive aggressiveness and the performance of firms has been a subject of debate. Certain studies suggest a positive connection between competitive aggressiveness and firm performance (Madhoushi et al., 2011). Nevertheless, Hughes & Morgan (2007) and Casillas & Moreno (2010) have

demonstrated that there is no correlation between competitive aggressiveness and firm performance. Similar to the study conducted by Madhoushi et al., 2011, we anticipate competitive aggressiveness to have a positive effect on

the performance of SMEs operating in the electric fan manufacturing industry in Pakistan. Accordingly, we propose:

Hypothesis 5: Competitive aggressiveness has a positive effect on the performance of SMEs in the electric fan manufacturing industry in Pakistan.

As previously mentioned, there has been a growing interest in the effect of demographic characteristics on entrepreneurial behavior. In numerous studies, the behavior of entrepreneurs and the performance of their firms have been influenced by a variety of factors, including age, religion, gender, experience, background, and education (Welmilla et al., 2011; Ahmad, 2007; Davidsson, 1995).

The impact of entrepreneurs' characteristics on business performance has also been investigated in terms of personality traits (Frese et al., 2002; Pearson & Chatterjee, 2001). Furthermore, Bates (1995) and Davidsson (2015) have highlighted the significance of demographic characteristics in relation to entrepreneurs and their impact on firm performance (Bates, 1995; Davidsson, 2015). In this study, we suggest that entrepreneurs' demographic characteristics are valuable, unique, and rare resources contributing to their firms' sustainable competitive advantage and superior performance. Our suggested model, as demonstrated in (Figure 1) posits that entrepreneurs' age, education, and experience moderate the effects of the independent variables on the performance of SMEs in the electric fan manufacturing industry in Pakistan. To test our hypotheses, we present the following research model (Figure 1).

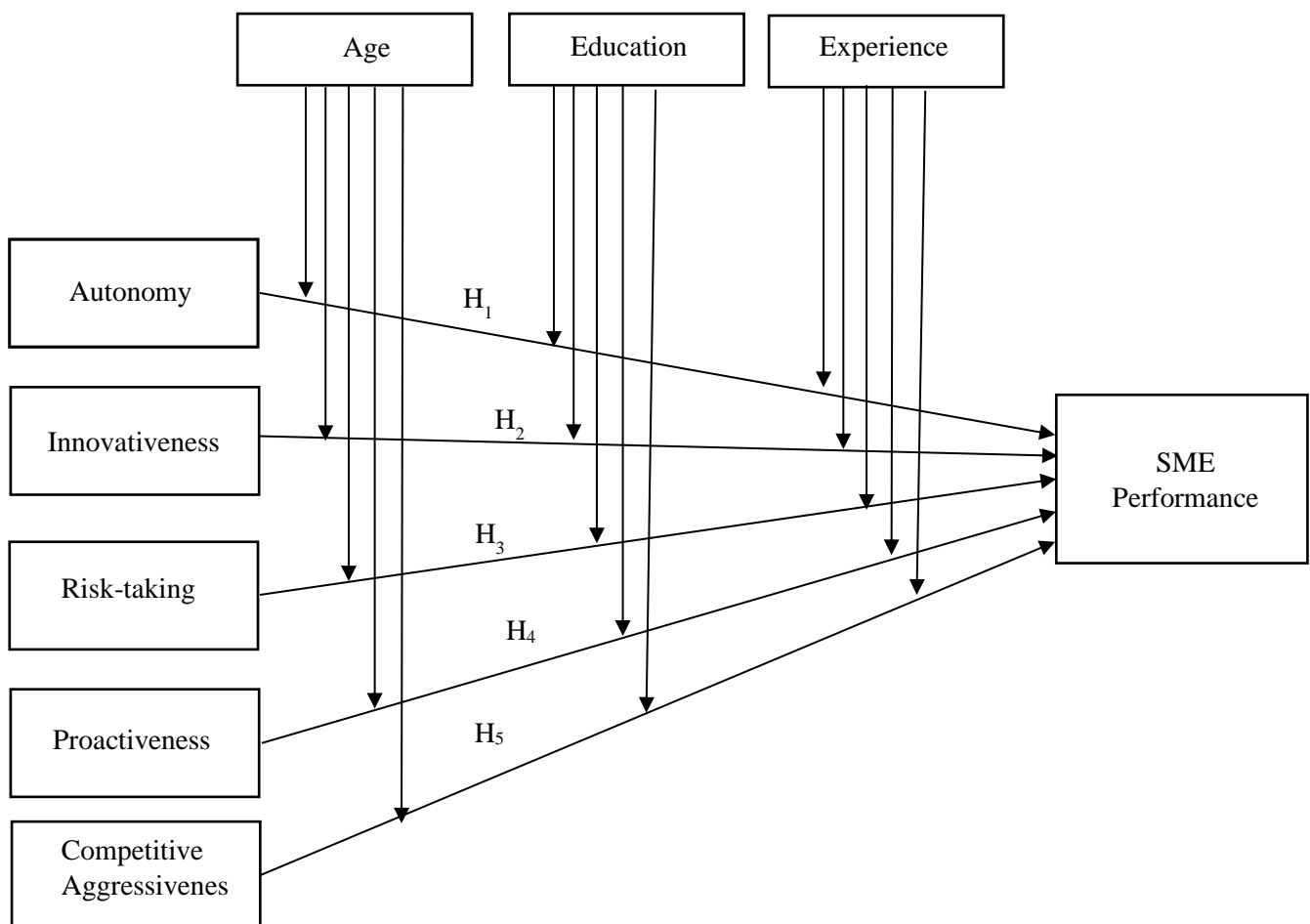


Figure 1: Research Model

Figure 1 demonstrates that our model comprises the dimensions of EO - autonomy, innovativeness, risk-taking, proactiveness, and competitive aggressiveness – as the independent variables. The entrepreneurs' demographic characteristics act as moderators, influencing how the independent variables impact the dependent variable, firm performance.

4. Research Methodology

Population, sample, and Unit of Analysis

Given that our research focuses on Pakistani SMEs, we adhere to the definition provided by the State Bank of Pakistan for SMEs. According to the State Bank of Pakistan's regulations (SBP 2021), an SME is classified as a business entity with 55 employees or fewer and a sales turnover of Es 70 million or less (equivalent to 396,040 USD). The data collection for the study was conducted from organizations meeting these specific criteria. In Pakistan, the fan sector consists of 450 SMEs, with 98% of them concentrated in Gujrat and Gujranwala cities (Small and Medium Enterprises Development Authority – SMEDA, 2023). Our research is specifically focused on the cities of Gujrat and Gujranwala, as these two locations house the majority of electric fan manufacturers in Pakistan.

A total of 244 SMEs were randomly selected from the two cities. Of the randomly selected SMEs, 143 (59%) were from Gujrat, and 101 (41%) were from Gujranwala. Since the behavior and actions of the organization's leaders reflect EO (Wales and McKelvie, 2011), our unit of analysis is the owners/managers or CEOs of the SMEs being studied.

Data Collection Procedure

The data was collected using a questionnaire that comprised three sections. The first section focused on inquiries regarding the company and the respondents' backgrounds. The second section delved into the EO of the organization being studied, including questions pertaining to all five dimensions of EO.

Face-to-face meetings were conducted with the respondents to collect the required data. If no response was received, a subsequent questionnaire was sent either by regular mail or email. Additionally, contact was made with the Pakistani Electric Fan Manufacturing Association (PEFMA) and the chamber of commerce in the relevant cities to increase the response rate and request their assistance. PEFMA and the Chamber of Commerce provided an encouragement letter to motivate organizations to participate in the study. The assistance provided by these entities was vital in securing the collaboration of the relevant SMEs. Of the 244 questionnaires that were distributed, 209 were received, yielding a response rate of 85.7%. Nevertheless, 7 of these questionnaires were considered invalid, resulting in a usable response rate of 82.8% (202 questionnaires). The high response rate can be attributed to the follow-up questionnaires and the support provided by PEFMA and the Chamber of Commerce.

Measurement Constructs

EO Measurement

The study uses a five-point Likert Scale to measure each of the five dimensions of EO. In order to ensure reliability, the study utilizes measures that have been well-established in the literature. Autonomy was evaluated through seven items adapted from Lumpkin et al. (2009). Innovativeness was assessed using seven items adopted from Lumpkin et al. (2009), Soyninen (2012), and Covin and Slevin (1989). Risk-taking was measured using five items adopted from Soyninen (2012) and Covin and Slevin (1989). Additionally, proactiveness was measured using six items adopted from Soyninen (2012), Wu (2009), and Covin and Slevin (1989). Lastly, competitive aggressiveness was evaluated using five items adopted from Lumpkin and Dess (2001), Covin and Slevin (1989), and Lumpkin et al. (2009).

Firm's Performance Measurement

The study also uses a five-point Likert scale to evaluate the firm's performance. The assessment of a firm's performance is based on metrics that are widely acknowledged in academic literature and suggested by Zaheer (2017), Jarvis et al. (2000), Naldj et al. (2007), Stam and Elfring (2008) and Wang and Zhang (2009).

Validity and Reliability of the Measures

The construct validity of the proposed EO dimensions was evaluated using principal component analysis (PCA) with varimax rotation. Additionally, it was used to reduce the number of items in each dimension if needed. All primary factor loadings were greater than 0.5 and demonstrated significant loadings on five distinct factors with minimal or no cross-loading. This suggests that each factor measures a distinct concept. The five factors collectively accounted for 52.64% of the total variance in the data. Table 1 presents the loading on each of the five factors or components, as well as the eigenvalues and the percentage of variance explained.

Variable	Factor	Item	Item Loading	KMO	Eigenvalues	% Variance
Autonomy						
	Freedom	AUT1	0.879			
	Discretion	AUT2	0.865			
	Role of owners/managers	AUT3	0.894	0.818	3.448	15.58
	Authority	AUT5	0.689			
Innovativeness						
	Product innovation	INV3	0.62			
	Product development	INV6	0.753			
	Differentiation	INV7	0.739	0.775	3.094	11.264
	New product development	INV8	0.815			
	Sensitivity towards innovation	INV9	0.69			
Risk-taking						
	Risk-taking tendency	RTK1	0.735			
	Risk-taking support	RTK2	0.898			
	Risk-taking proclivity	RTK3	0.544	0.783	2.837	7.604
	Bold actions	RTK4	0.865			
	Decision-making style	RTK5	0.669			
Proactiveness						
	Competitive posture	PRO1	0.931			
	Initiates action	PRO2	0.939			
	Opportunity seeking	PRO3	0.892	0.734	2.852	8.434
	Opportunity recognition	PRO4	0.556			
	We aim at being at the forefront of development	PRO5	0.516			
Competitive Aggressiveness						
	Competitive rivalry	CAG1	0.579			
	Aggressive approach	CAG2	0.733			
	Intense competition	CAG3	0.678			
	Undo competitors	CAG4	0.696	0.734	2.78	8.434
	Futuristic approach	CAG5	0.66			

Table 1: Factor Analysis

To ensure the internal consistency of the constructs, a panel of experts (comprising academic lecturers and industry representatives) reviewed the instrument. The reliability of the scales was statistically evaluated using Cronbach's alpha coefficient (Cronbach, 1951; Nunnally, 1967; Hull & Nie, 1981; Peter & Kim, 2013). Table 2 displays the Cronbach's Alpha values for all six constructs utilized in our model.

Item	Cronbach's Alpha
Autonomy	0.77
Innovativeness	0.76
Risk-taking	0.74
Proactiveness	0.81
Competitive Aggressiveness	0.79
Firm's Performance	0.76

Table 2: Cronbach's Alpha

The data presented in Table 2 indicate that all the scales used in the study had values higher than 0.7, indicating the internal consistency of the measurements (Cronbach, 1951; Nunnally, 1967; Hull & Nie, 1981).

5. Empirical Analysis

Multiple regression analysis was used to investigate the impact of EO on the firm's performance. The effects of the moderating variables of age, education, and experience were subsequently tested using hierarchical multiple regression analysis.

The regression model used to determine the causal relationship between firm performance and EO dimensions is:

$$Y = \beta_0 + \beta_1 \text{AUT} + \beta_2 \text{INV} + \beta_3 \text{RTK} + \beta_4 \text{PRO} + \beta_5 \text{CAG} + \varepsilon$$

Where;

Y = firm's performance

β_0 = intercept

AUT = Autonomy

INV = Innovativeness

RTK = Risk-taking

PRO = Proactiveness

CAG = Competitive aggressiveness

The Beta coefficients, significance level, and the goodness of fit of the regression model are presented in Table 3.

	Coefficients	Sig
Constant	0.339 -0.828	0.409
AUT	0.078 -1.772	0.078*
INV	0.466 -8.165	.000***
RTK	0.221 -4.022	.000***
PRO	0.008 -0.177	0.859
CAG	0.121 -4.022	0.033**
R	0.615	
R²	0.379	
Adjusted R²	0.363	
F	23.89	
Sig	.000***	
Durbin-Watson	2.16	

(*sig. 10%; ** sig. 5%; *** sig. 1%)

Table 3: Regression Model Results

According to Table 3, EO plays a crucial role in influencing firm performance. Autonomy, innovativeness, risk-taking, proactiveness, and competitive aggressiveness collectively account for 36.3% of the variance in firm performance (Adjusted R² = .363). The regression model is significant at the 99% confidence level, with an F-value of 23.89 and a p-value less than .01. The Durban-Watson value of 2.16 exceeds the critical value of 1.87, indicating the absence of autocorrelation concerns.

The model demonstrates that the performance of a firm is directly proportional to the degree of autonomy. This relationship is significant at the 90% confidence level. Consequently, H₁ is partially supported.

Additionally, Table 3 indicates that the higher the firm's degree of innovativeness, the higher its performance. This relationship is statistically significant at the 99% confidence level. As a result, H₂ is supported. Similarly, risk-taking positively influences a firm's performance. This relationship is significant at the 99% level of confidence. Accordingly, H₃ is supported.

Proactiveness did not have a significant effect on the firm's performance in the electric fan manufacturing industry in Pakistan. Table 3 shows that the beta coefficient (.008) is negligible at the conventional confidence levels ($p > .1$). Therefore, H₄ is not supported. Competitive aggressiveness had a positive impact on the company's performance at the 95% confidence level. Therefore, H₅ is supported.

The Effects of Moderating Variables

We used Hayes, A. F. (2012) process macro to evaluate the impact of each moderating variable. Table 4 shows the impact of the age moderating variable on the relationship between EO and the firm's performance.

Model	Interaction Term				
		β	t	p	ΔR^2
1	Age x AUT	1.182	1.31	0.191	0.007
2	Age x INV	0.588***	4.889	0	0.076
3	Age x RTK	0.102	0.784	0.434	0.003
4	Age x PRO	0.154	1.18	0.239	0.007
5	Age x CAG	0.324**	2.032	0.043	0.019

(*-sig. 10%; ** sig. 5%; *** sig. 1% - ΔR^2 is the improvement in R^2 over the original regression model achieved by the moderating variable)

Table 4: The Moderating effects of age on the relationship between EO and firm's performance

As indicated in Table 4, the moderating variable age plays a crucial role in influencing the connection between innovativeness and firm performance ($\beta = .588$; $\Delta R^2 = 0.076$, $p = .000$). Similarly, the relationship between competitive aggressiveness and firm performance is significantly influenced by age as a moderating variable ($\beta = .324$; $\Delta R^2 = 0.019$, $p = .043$). However, age does not have a significant effect on the relationship between autonomy, proactiveness, risk-taking, and firm performance.

The moderating influence of education on the relationship between EO and firm performance is illustrated in Table 5.

Model	Interaction Term				
		β	t	p	ΔR^2
1	EDU x AUT	1.194	1.398	0.163	0.009
2	EDU x INV	0.576***	4.242	0.000	0.059
3	EDU x RTK	0.276*	1.742	0.083	0.013
4	EDU x PRO	0.066	0.447	0.655	0.001
5	EDU x CAG	0.020	0.141	0.888	0.000

(*-sig. 10%; ** sig. 5%; *** sig. 1% - ΔR^2 is the improvement in R^2 achieved by the moderating variable over the original regression model)

Table 5: The moderating effects of education on the relationship between EO and firm's performance

The results depicted in Table 5 indicate that the moderating variable of education plays a significant role in influencing the relationship between innovativeness and firm performance ($\beta = .576$; $\Delta R^2 = 0.059$, $p = .000$). Education also shows a moderating impact on the relationship between risk-taking and firm performance at a 90% confidence level ($\beta = .276$; $\Delta R^2 = 0.013$, $p = .083$). However, the moderating effects on autonomy, proactiveness, and competitive aggressiveness were insignificant.

Table 6 illustrates the effect of experience as a moderating factor in the relationship between EO and firm performance.

Model	Interaction Term				
		β	t	p	ΔR^2
1	EXP x AUT	0.439***	2.701	0.007	0.035
2	EXP x INV	0.695***	0.695	0.000	0.100
3	EXP x RTK	0.224	0.125	0.211	0.006
4	EXP x PRO	0.029	0.118	0.905	0.000
5	EXP x CAG	0.421	1.712	0.088	0.013

(*-sig. 10%; ** sig. 5%; *** sig. 1% - ΔR^2 is the improvement in R^2 achieved by the moderating variable over the original regression model)

Table 6: The moderating effects of experience on the relationship between EO and firm's performance

As presented in Table 6, the impact of experience on the relationship between autonomy and firm performance is statistically significant at the 99% confidence level ($\beta = .439$; $\Delta R^2 = 0.035$, $p = .007$). Similarly, the influence of experience on the relationship between innovativeness and firm performance is also statistically

significant at the 99% confidence level ($\beta = .695$; $\Delta R^2 = 0.100$, $p = .000$). Experience also shows a moderating impact on the relationship between competitive aggressiveness and firm performance at a 90% confidence level (β

$= .421$; $\Delta R^2 = 0.013$, $p = .088$). However, the moderating effects of experience on proactiveness and risk-taking were found to be insignificant.

Table 7 summarizes the results of the statistical analysis.

Hypothesis	Relationship	Conclusion
H1	Autonomy -> Performance	Partially Supported
H2	Innovativeness -> Performance	Supported
H3	Risk-Taking -> Performance	Supported
H4	Proactiveness -> Performance	Not Supported
H5	Competitive aggressiveness -> Performance	Supported
	Age X autonomy -> Performance	Insignificant effect
	Age X innovativeness -> Performance	Significant effect
	Age X risk-taking -> Performance	Insignificant effect
	Age X proactiveness -> Performance	Insignificant effect
	Age X Competitive Aggressiveness -> Performance	Significant effect
	Education X autonomy -> Performance	Insignificant effect
	Education X innovativeness -> Performance	Significant effect
	Education X risk-taking -> Performance	Partially significant effect
	Education X proactiveness -> Performance	Insignificant effect
	Education X competitive aggressiveness -> Performance	Insignificant effect
	Experience X autonomy -> Performance	Significant effect
	Experience X innovativeness -> Performance	Significant effect
	Experience X risk-taking -> Performance	Insignificant effect
	Experience X proactiveness -> Performance	Insignificant effect
	Experience X competitive aggressiveness -> Performance	Partially significant effect

Table 7: Statistical Analysis Results

6. Discussion

The study verified that the SMEs being investigated exhibited all five dimensions of entrepreneurial orientation (EO) as described in the existing literature. EO had a notable effect on the performance of these firms. In addition, it was demonstrated that the moderating variables, namely age, education, and experience, affect the relationship between entrepreneurial orientation dimensions and firm performance.

Numerous studies have utilized samples from countries with well-established institutional frameworks, such as the USA and European Union nations, to investigate EO. Examining the Pakistani market as an illustration of a developing market enhances our understanding of EO's application and impact in different economic contexts. The results from the studied Pakistani firms align with EO dimensions observed in more advanced economies. Therefore, this highlights the EO constructs' universal nature, reliability, and validity across diverse national contexts.

Frishammar & Anderson (2009) demonstrate that the concept of EO is more commonly associated with large companies rather than SMEs. They further suggest that the results obtained from studying large firms may not be applied to SMEs in general. The findings of this study suggest otherwise. The findings suggest that EO is not only significant for the survival and growth of large firms but also applicable and relevant within the organizational context of SMEs in developing countries.

7. Conclusion and Recommendations

The study of the Pakistani fan manufacturing industry was driven by the need to gain a comprehensive understanding of the role of EO in developing economies. Recent literature has shown inconclusive findings regarding EO dimensions, as well as a lack of entrepreneurial studies in developing economies. Recent literature has demonstrated inconclusive results regarding the dimensions of EO, as well as a dearth of entrepreneurial research in developing economies. Recent research has emphasized that theoretical models developed in advanced countries may not be directly relevant to developing countries, underscoring the need to study a developing economy such as Pakistan. The study's findings indicate that SMEs in the electric fans manufacturing industry in Pakistan exhibit the five EO dimensions identified in the literature. The entrepreneurial activities within these SMEs encompass elements of autonomy, innovativeness, risk-taking, proactiveness, competitiveness, and

aggressiveness. The study found that innovativeness, risk-taking propensity, and competitive aggressiveness had a significant impact on the performance of SMEs. The characteristics of entrepreneurs, such as their age, level of education, and prior experience, have an impact on the correlation between innovativeness and performance.

The current study indicates that the studied SMEs actively engage in innovation, take risks, and compete aggressively in the marketplace. This study further supports the notion that EO is multidimensional, with each dimension having independent effects. Moreover, the study provides evidence that the EO construct is valid and applicable to SMEs, in contrast to the findings reported in the existing literature. These findings align with Lumpkin and Dess's (1996) hypothesis that the relationship between EO and firm performance may be context specific.

The implications of this study are relevant for both managers and policymakers. Just like in large organizations, managers of SMEs should be mindful of the impact of EO. Additionally, the personal characteristics of SME owners/managers also play a significant role in their business performance. Therefore, SME owners/managers must consistently assess and enhance their EO capabilities. In the context of the electric manufacturing fan industry in Pakistan, the dimensions of proactiveness within EO were found to have no significant effect on the performance of SMEs. This can be attributed to the unique characteristics of this industry and the stable local demand. Moreover, the implementation of proactiveness within EO was impeded by resource limitations and economic challenges in Pakistan. It is worth noting that studying the complete impact of economic conditions on the implementation of EO dimensions in both SMEs and large organizations warrants a separate study.

Policymakers must endeavor to establish a more dynamic and successful business environment in order to improve the industry and its economic impact on Pakistan. By fostering a constant influx of new and promising opportunities, entrepreneurs in the electric fan industry will be encouraged to take a proactive approach. Consequently, this will propel the industry to unprecedented levels of competitiveness.

8. Limitations and Future Research

In order to offer a comprehensive perspective, the research focused solely on the electric fans manufacturing industry in Punjab province in Pakistan. Consequently, the sample size only represents a limited portion of the entire SME population in Pakistan. Although the study effectively provides a comprehensive account of the EO within the studied industry, considering their unique characteristics, it is important to exercise caution when applying these findings to other industries. We recommend conducting similar studies that encompass a wider range of industries in order to improve the generalizability of our findings. The significance of this study is not reduced by its specialized focus, which is limited to a specific industry. Instead, it enhances its in-depth and comprehensive analysis of that specific industry.

This study utilized a cross-sectional approach. Therefore, the study provides a thorough examination of the influence of EO on the performance of SMEs within a specific timeframe. However, it does not capture the long-term effects of EO dimensions on SME performance. Conducting a longitudinal study would provide further insights into the effects of EO on organizational performance.

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