ROLE OF ENTREPRENEURIAL ORIENTATION IN SMEs GLOBAL PERFORMANCE: TESTING MARKETING STRATEGIES AND TECHNOLOGICAL ORIENTATION AS MEDIATORS

Sumaira Aslam¹, Muhammad Naeem Shahid²*, and Faisal Aftab³

ABSTRACT
Entrepreneurial orientation (EO) plays a vital role in a firm’s success, particularly in the context of globalization. Thus, EO has gained prompt attention because of an increasing trend of globalized markets and economies. This article expands the understanding of Entrepreneurial Orientation as it studies EO to assess Small and Medium Enterprise (SMEs) global performance. The study extends the knowledge of SMEs entering global markets by considering firms’ marketing strategy and technological orientation as mediators. Through these mechanisms, corporate EO leads to cross-border excellence. Through a sample of 155 international SMEs in Pakistan, the findings of this study support the impact of EO on global performance, whereas the marketing strategy and technological orientation serve as the mediators in this core relationship. The data were analyzed using a variance-based structural equation model (SEM) in Smart PLS. The findings validate that SMEs, more concentrating on EO, are more able to explore new opportunities in global markets, but their small size, inadequate access to different resources and limited experience in operating in international markets prevents them from taking full advantage of arising opportunities. Hence the findings confirm the significance of EO in the globalization of SMEs; however, it was also observed that although the marketing strategy and technological orientation may reduce the direct impact of EO on international performance, these mechanisms accelerate the indirect impact of EO as a tangible and intangible resource.

Keywords: Marketing Strategy; Entrepreneurial Orientation; SME’s Global Performance; Technological Orientation; Resource-Based Theory.

¹ Independent Researcher, Email: samas7480@yahoo.com
² Assistant Professor, Department of Business Administration, Govt. College University, Chiniot Campus, Pakistan. Email: naeemtuf@yahoo.com
³ Associate Professor, College of Business Administration, Imam Abdulrahman Bin Faisal University, Kingdom of Saudi Arabia. Email: faaftab@iau.edu.sa
*Corresponding Author
INTRODUCTION

Today Small and medium enterprises contribute significantly to developing a country’s economy. Over the previous few decades, researchers have shown a growing interest in finding SMEs’ increasing role in economic development due to globalization (Naradda Gamage et al., 2020). During this era, the changing global economy imposed several challenges and generated different opportunities for SMEs (see Dominguez & Mayrhofer, 2017). The phenomenon of globalization is widely considered a model related to the production systems, political processes, and culture in the modern realm (e.g., Aspers & Kohl, 2015). In addition, globalization also includes trade liberalization since 1995, led by the World Trade Organization known as WTO (Martin 2001). The concept of globalization underlines how modernized economic and political systems are spread in a dependent mode. Globalization also believes in offering new possibilities for eliminating worldwide poverty (Petrova, 2019). Through scientific, cultural, technological, and social sharing, particularly in the area of trade and finance, it can be directly or indirectly beneficial for developing countries. Therefore, globalization can be seen as an opportunity for emerging as well as advanced economies to improve their prosperity by responding to global trade trends (Naradda Gamage et al., 2020; Prasanna et al., 2019). Its emphasis on two main areas, e.g., globalization of production and globalization of the marketplace. The first one serves as a key source of commodities from different countries around the globe to get the potential advantages from socio-economic differences in production costs, and the second, the marketplace globalization, helps to lower the trade restrictions at the international level (Erixon, 2018).

The use of advanced technologies to respond to the global competition effectively has become a greater challenge for SMEs, and the greater potential to increase Operational flexibility can serve as a key source for SMEs to get a competitive advantage in competitive markets (Singh & Kumar, 2020). Small and medium-sized enterprises are indispensable institutions in economic development. SMEs also play an important role in reducing poverty and expanding the national economy. Primarily the SMEs serve in the secondary industry of the country and provide aid to different larger companies in meeting their production targets. Many countries are evidence of the greater contribution of SMEs to their economy; for example, In the UK, the contribution rate of SMEs to GDP is about 70%, and the contribution rate to employment is about 90%. British SMEs have taken advantage of economic progress both locally and internationally (Quayle, 2003). SMEs are the main contributors to the global manufacturing and service industries (e.g., Huin et al.,
2002). According to UNCTAD (1993), SMEs are majorly playing a pivotal role in developing the economy and creating new jobs in many emerging economies. The SMEs in Pakistan showed a larger contribution to the economy of Pakistan from previous years. Nearly 90% of all enterprises meet the SMEs criteria and generate employment opportunities for 80% of labor specialized in non-agriculture skills. SMEs in Pakistan contribute up to 40% of GDP and a 25% share in total earnings from export. Pakistani SMEs play many important roles in different areas like improving economic growth, developing technological innovation, sourcing to large industries, like the textile industry, information technology (IT) industry, cottage industry and promoting economic and social developments (Shaikh, 2019; Dar, Ahmed, & Raziq, 2017).

Globalization creates many opportunities and threats for today’s businesses (Mundim et al., 2000). In addition to the actual results of globalization, access to monetary contracts poses new challenges for small businesses to be competitive in a broader market (Maarof & Mahmud 2016). Primarily, the SME’s survival in a competitive environment and degree of globalization of business operations remained initially questionable. Singh and others (2020) argued that in this era of the digital economy, SMEs must need to be technologically updated to achieve sustainable and rapid growth. Existing literature underlines many constraints and challenges that can restrict the growth of SMEs like everchanging customer demand, interference of middlemen and lesser knowledge about the supply chain (Kumar et al., 2014); little access to resources, information, and knowledge workers (Lester & Tran, 2008; Taylor & Murphy., 2004); small budgets restrict the use of modern technologies (Singh et al., 2020). Similarly, Ng & Kee (2017) advised the companies to prepare themselves to meet challenges relevant to sustainability, technological challenges, and global challenges in this era of globalization.

Literature suggests that Entrepreneurial orientation (EO) plays a crucial role in a film’s success, particularly in the context of globalization (Monteiro, Soares & Rua, 2019; Jalali, Jaafar, & Ramayah, 2014). For over thirty years, academic interest in EO has been continuously growing (Covin & Wales, 2019). In this context of globalization, EO has gained prompt attention, mainly because of the increasing trend of globalized markets and economies. Lumpkin and Dess (1996) defined Entrepreneurial orientation as a company’s strategic intent to make different decisions and choose among appropriate processes to maximize its capability to enter new markets. For entering the international market, an entirely different mentality is particularly important for the company,
and a unique business process targets the nature of market to improve the company’s ability to adapt to a new and turbulent environment (Khanna, 2014).

Entrepreneurship orientation does not always guarantee SME’s success in the international market. Existing literature suggests that presuming a direct link between EO and SME performance in the global market seems too simple theoretically, but it is useless (see Wiklund & Shepherd, 2011; Wales et al., 2015; Wales, 2016). Therefore, by knowing the process through which the impact occurs, it is possible to gain a broader understanding of EO’s impact on SME’s performance in the international market. However, the research has not yet identified the factors that are useful to manage the performance differences of international SMEs to achieve higher performance. Recent research tries to fill this gap by investigating how EO affects the performance of Pakistan's SMEs at the international level.

To compete in global markets, small and medium-sized enterprises first need a market strategy to increase their contextual intelligence—a firm’s ability to identify their knowledge limitations and find that knowledge in the international market (Khanna, 2015). Usually, firms use the same mental model to compete even in the global market, which it applies locally (Khanna, 2015). Going global is iterative in nature, and businesses hardly gain success on their first entry into global markets. In this case, EO will help SMEs adjust their thinking models to get a better position among their foreign competitors because EO helps companies seek novel ideas and identify unique ways to enter new markets (Lumpkin & Dess, 1996). In addition, research shows that EO supports companies to understand that they know less than they think (see Khanna, 2015). So, a high level of EO will encourage companies to become more submissive instead of only satisfied with their success. Resultantly, advanced EO companies will attempt to acquire more information and knowledge of global businesses and better adapt to international markets by developing and implementing effective marketing strategies and learning from their personal as well as other firms' experiences in the market. EO scholars also emphasized that although little research has explored the marketing strategy, it is a causal pathway using which EO affects the results of various organizations (Wales et al., 2013). Therefore, this research discusses how EO as an entrepreneurial strategy (Lumpkin & Dess, 1996) can improve the global performance of SMEs through the marketing strategy. Rendering upon the relationship between EO and global performance via marketing strategy can offer considerable theoretic support to theorize the EO in the global context.
(Wiklund & Shepherd, 2011; Wales et al., 2015; Wales, 2016). Secondly, the study tests the EO and global performance relationship through the firm's technology orientation (TO).

Because to rapid technological progress and the shortening of product and service life cycles, companies are forced to enhance their technical expertise to be competitive in their industry (e.g., Yadav et al., 2016; Osman, 2014). Technology orientation (TO) is called the company that focuses on R&D and emphasizes the acquisition and integration of new technologies in different phases of the product development process (Hortinha et al., 2011). Technology orientation is viewed as the degree of a firm’s openness and tendency to adopt new ideas and technologies to develop the products, services and processes (Kocak et al., 2017).

**THEORY AND HYPOTHESES**

The Resource Based Theory (RBT) is a process of strategy formulation aimed at exploiting the firm’s resources effectively to achieve a competitive advantage (e.g., Ong et al., 2010). Barney (1991) explains that a resource-based perspective permits the firms to seek an edge over their competitors based on internal rather than external resources. Relatively, the combination of key resources of a specific company allows it to generate a competitive advantage and excellent performance over the years (e.g., Ainuddin et al., 2007).

Small and medium-sized enterprises confront more complexities when they decide to enter international markets because it’s very difficult for them to learn the required export capabilities and resources than larger enterprises (Xie & Suh 2014). RBT perspective shows that SMEs can get better access and resource availability, either tangible or intangible, using inter-organizational relationship networks and effective marketing strategies to positively impact their performance globally (Hessels & Parker, 2013; Rice et al., 2012). Shortly, the idea behind the theory in question is related to the execution of business in an environment that allows free trade. Therefore, a broad theory indicates the significance of increasing or developing the resources to enhance the competitiveness of enterprises.

**Entrepreneurial Orientation (EO) and Global Performance**

According to the existing research internationalization of SMEs is often seen as an entrepreneurial phenomenon because it allows companies to identify and exploit the different opportunities across borders (Wu & Deng, 2020; Al-Henzab, Tarhini, & Obeidat, 2018). The wide literature on globalization provide support for exploring and exploiting opportunities to get a competitive
advantage and improve the firm’s performance at the international level (Joensuu-Salo et al., 2018). As it is well known that the globalization increases the environmental uncertainty (Sarasvathy et al., 2014), EO encourages the opportunity to explore patterns of the company in the global context (Karami & Tang, 2019) as it links the firms to exploit uncertain choices of entrepreneurial opportunities gradually (Wales, 2016). EO also reflects the ways companies explore and exploit the prevailing opportunities to meet their growth intents (Baker & Sinkula, 2009). Therefore, it is essential to find the relation between EO and global performance (Brouthers et al., 2015).

Numerous studies confirmed the positive influences of EO on a company’s overall performance, innovation, growth, and profitability (Wales et al., 2013), especially for SMEs (Asemokha et al., 2019). Such positive influence also applies in the context of globalization (Wales et al., 2019). For example, prior research shows that EO influences the overall international performance (Asemokha et al., 2019; Karami & Tang, 2019; Wales et al., 2013); export performance (Imran et al., 2018; Asad, Sharif, Mohd, & Alekam, 2016; Mostafa et al., 2005); and internationalization extent (Javalgi & Todd, 2011). In addition, Thanos et al., in (2017) suggested that EO extends the firm’s ability to explore and exploit the opportunities and also considered to be important for capturing possible opportunities in the turbulent and aggressive competitive environment. Similarly, Khan et al. (2021) discussed the relationship between EO and Pakistani firms' financial and non-financial performance in emerging economies. Wales (2016) argued that using EO to get a high degree of success and identifying factors helpful to reduce the performance differences are important concerns for firms.

In this regard, previous studies have found many intervening variables, like marketing orientation (Amin et al., 2016), competitive advantage (Rua, França, & Ortiz, 2018), differentiation strategy and innovation performance (Zehir, Can, & Karaboga 2015); the scope and scale of innate global strategies (Kuivalainen et al., 2007); marketing capability and reward philosophy (Pratono, & Mahmood, 2015) Technology and market action (Choi, & Williams, 2016) functional performance (Rezaei, & Ortt, 2018) and organizational learning (Hina et al., 2021). Based on this research route, and in response to requests to examine the mechanism of EO and the performance of multinational companies (De Clercq et al., 2005), this research believes that marketing strategy and technological orientation are two important mechanisms of EO – in Under the background of
the globalization of SMEs, the international performance relationship is explored by digging deeply into the links between these structures.

**Marketing Strategy**

Many scholars create the link between entrepreneurship and a company’s marketing strategies (Knight, 2000; Lumpkin & Dess, 1996; Morris & Paul, 1987). Strategy formulation is the organization level practice that integrates the variety of actions that firms start to convey their strategic goals and mission (Connor et al., 2014). *Marketing strategies* comprise basic guidelines that management use on a continual basis to attract their customers and meet with the competition. It reflects product specialization, quality leadership, and marketing leadership (G. Knight, 2000; Morrison & Roth, 1992). Marketing strategy is a tool to enhance the market performance of the firm and to get a competitive advantage in both local and international markets (Shaw, 2012).

‘*Marketing leadership*’ is the utilization of different innovative marketing-related skills, hiring a skilled salesforce, and managing distribution channels carefully (G. Knight, 2000; Kotler, 2000). *Quality leadership* is providing superior quality products and services. Thus, high quality increases customer loyalty and expectations and increases the rate of market share and profitability. Businesses have realized that quality standing is more than important than any other factors; it is related to company image in the market. Quality leadership also plays an important role in competitive advantage (Knight, 2000; Knight, 1997; Morrison & Roth, 1992). *Product specialization* is when a company gives specialty products, the target market is narrow, and the company charges relatively high prices (Porter 1980). It is similar to Porter’s focus strategy, in which the company with innovation or unique and differentiated products superior to its rival in a niche market (Knight, 2000; Knight, 1997).

Strategy making is an organization-level process that includes the variety of actions a company involves to formulate its strategic mission and goals (Dess et al., 1997). Entrepreneurs dissatisfied with environmental circumstances are more motivated to introduce new projects such as developing globalization. Mostly EO organizations are more motivated to implement proactive and responsive marketing strategies that recommend a revolutionary perspective convoyed by innovative or new-venturing activity (Dess et al., 1997; Knight, 2000; Lumpkin & Dess, 1996; Morris & Paul, 1987). Organizations that establish a stronger entrepreneurial orientation will emphasize marketing strategy to increase firm performance (Boso et al., 2013; Morris & Paul,
Amin et al. (2016) examined marketing orientation as a mediator between EO and firm performance and reported a significant mediating effect. Moreover, Fang et al. (2021) reported that strategic market adoption mediates the relation between EO and firm performance. Therefore, based on the current literature, the study proposes:

**H1**: Marketing strategy mediates between Entrepreneurial orientation and SME’s international performance.

**Technology Orientation**

The firms with technology orientation firms dedicate their key resources to acquiring advanced and latest technologies and developing new products, services, and processes to be competitive in the market even though the rapidly occurring technological advancement in business markets may have more considerable effects on their pace of technological development and adaptation (Gao, Zhou & Yim, 2007). When an organization tries to develop new processes and products, and primarily works on generating new ideas, technological orientation, also called innovation orientation, emerges. This is achieved by using technology to coordinate the company's resources systems and structure to extend the firm’s capability (Yousaf et al., 2020; Al-Henzab, Tarhini, & Obeidat, 2018). In addition, technological orientation broadens the firm’s technological base, R&D resources, and technical skills to bring innovation and improvement in product designs to be offered in the market. The entrepreneurial orientation motivates the firm to proactively acquire new technologies and apply the new technologies to design their products or services (Tsou et al., 2014). Innovation has a positive impact on the company's long-term performance because it affects new product development, willingness to change, and flexibility while reducing the firm’s apathy (Grinstein, 2008). Therefore, the firms having advanced technology emphasize increasing their capability to produce quality goods instead of knowing about customers’ needs (Freitas et al., 2013). Because new production processes, innovations, products or services innovation and technical solutions can lead the firm toward sustainable customer value and firm performance (Hakala, 2011; Gatignon & Xuereb, 1997), making technology orientation a critical part of strategic orientation.

EO is defined as the proactive and risk-taking ability of a firm to capture the externally available opportunities to compete effectively (Liu et al., 2014). Do Hyung and Dedahanov (2014) believe that technology-oriented companies have accumulated a wealth of technical knowledge from their
prior processes and experiences, like a large amount of R&D investment, rapid implementation of the latest technology, and acquiring new information about the advanced technology? So, both EO and TO help them use their existing capabilities in differentiated products and refining technology to actively respond to the new changes in the market. Technology orientation allows firms to identify opportunities or emergent technology trends and then re-allocate resources to take advantage of available opportunities and improve the firm performance. Therefore, the following assumptions:

**H2:** Technological orientation mediates between Entrepreneurial orientation and SME’s international performance.

![Theoretical Framework](image)

**Figure 1. Theoretical Framework**

**RESEARCH METHODOLOGY**

To test the hypothesis, this study collected data from SMEs mainly operating in the manufacturing sector of Pakistan. SMEs play a vital role in the economic development of Pakistan. According to SMEDA (2021) data, SMEs accounted for 90% of the country’s enterprises and 40% of the country’s GDP. According to SMEDA, a company with fewer than 250 employees is considered as a small and medium enterprise. So, for this study, we only select SMEs already operating
globally. The author extracted a list from the website of the chamber of commerce to choose international SMEs. Moreover, foreign operations are ensured from each company’s website. As a result, our target sample reached 549 companies. Among the 549 companies, 307 companies refused to participate in the survey due to different reasons, like not being interested in research topics or being overloaded with business activities. Out of the 242 companies that showed their consent to participate in the investigation, 87 companies did not initiate or submit an investigation after three reminders. Therefore, our final sample contains 155 complete responses.

Data collection started from November 2020 to March 2021. A survey was floated among the CEOs or senior managers of companies dealing with the company's international operations. The survey was created through google forms and managed online because the unrepresentative sample risk can be controlled using an online survey (Sills & Song, 2002). To improve the response rate using a variety of techniques.

Lying upon the basic cost and benefit perspective principles, the respondents are motivated (Dillman, 1991). First, a requesting email was sent to get the consent of the target respondent to participate in the survey (Sheehan & Hoy, 1999), and follow-up calls were done to motivate participants to respond. After getting respondents' consent, desktop and mobile versions of the survey were emailed. For the firm that did not respond, reminder emails were sent after 4 and 7 weeks. Next, confidentiality was ensured by communicating that only aggregated survey results would be published and shared (e.g., Sills & Song, 2002). Lastly, it is promised to share the summary of the survey results with the participants (Im & Rai, 2008). Learning from the successful experiences of other SMEs might be an important motivation for respondents to be agreed to complete the survey.

The non-response bias was handled according to the suggestions of Armstrong and Overton (1977), and an ‘independent t-test’ was conducted to assess the potential variance between early and late responses of study variables and no significant differences in groups were found. Moreover, to manage the problem of common method variance (CMV), the study used the Podsakoff and Mackenzie (2012) approach; following Herman’s single factor test criteria, all scale items are entered in the single exploratory factor. The result showed seven factors account for 68.53% of the total variance explained. The first factor explained 13.47%, confirming that none of
the factors explains most of the variance. So that CMV will not cause a common issue in a dataset. However, we understand that these tests cannot eliminate CMV.

**Measures**

*SME’s Global performance* was measured using the eleven-item scale of Gerschewski et al. (2015). The scale accesses the global performance of SMEs and contains the questions about its sales growth; sales volume; profitability; return on investment (ROI); overall global performance; market share; new product; accurate time to enter in global market Firm’s reputation; positioning; and success from a global perspective on a seven-point Likert scale where 1 represents “completely unsuccessful,” and 7 represents “completely successful.” To measure the Entrepreneurial Orientation, the study adopted the six-item scale of Walter et al.’s (2006). The 10-item scale for measuring the Technology Orientation was adopted from Osman (2014). Marketing Strategy was measured using a 10-item scale by Zou and Cavusgil (2002). The scale measures the marketing strategy across three dimensions, e.g., standardization/adaptation consisting of 4 items; coordination of marketing activities consisting of 4 items; and integration of the marketing activities consisting of 2 items. All items of Entrepreneurial orientation, Marketing strategy and technology orientation are measured on a seven-point Likert scale where 1 represents “strongly disagree,” and 7 represents “strongly agree.” Table 1 shows the detail of items with their mean value and standard deviation. Existing research that collected data using these scales showed strong reliability and validity.

**Control Variables**

The study opted for a set of control variables to explain the influence of the company’s intrinsic features like company age, company size, foreign market experience, and its industry. These variables have been used in the literature (Karami & Tang, 2019; Covin & Wales, 2019; Stam Elfring, 2008; Laforet, 2008; Zahra & Garvis, 2000).

**ANALYSIS AND RESULTS**

The proposed relationship between entrepreneurial orientation, marketing strategies, technological orientation and SME’s Global performance was analyzed using the variance based structural equation model (SEM) in Smart PLS software. Researchers use PLS-SEM to confirm the hypothesized relationship among latent variables to explain the possible variance in the dependent variable (Reinartz et al., 2009), particularly in cases with relatively a small sample size (Hair et
al., 2013). Moreover, SmartPLS sets very low requisites while assuming the distribution and scale assumption (Wold, 1982). The descriptive statistic for study variables are shown in Table 1.

**The Measurement Model**

Before examining the hypothesized relationship among variables, it is important to handle the reliability and validity concerns of data. Research suggests that some of the SmartPLS standards showing model fit might not be appropriate in all cases, so research suggests using them carefully according to the study nature (Hair et al., 2013). Hence, to evaluate the reliability and validity of data, the study tested the measurement model. First, the results of the reliability test display the Cronbach's alpha values of all constructs that are above the acceptable value of 0.70 (Nunnaly, 1978). Second, it is assured that either shared variance among different scale items and related constructs is greater than variance among constructs and error terms. The results show no cross-loading, and the loading of all projects of our key structure is higher than the acceptable threshold of 0.7 (Hulland, 1999). Third, in order to access the convergent validity, we measure the extracted average variance (AVE). The value of AVE for all added items is above the acceptable value of 0.5, as suggested by (Hulland, 1999). Next, the composite reliability test is performed to assess the internal consistency of the selected scale. Table 1 displays that the composite reliability values of all scales are higher than the acceptable value of 0.7 (Hair et al., 2013). Lastly, in order to evaluate the discriminative validity, we calculated the square root of AVE (as shown by the diagonal line in Table 1) and found that all values are larger than the scores in the relevant rows and columns, showing that our measures have acceptable discriminant validity (Birkinshaw & Morrison, 1995).

**Table 1. Means, Standard Deviations and Correlations.**

| Variable                     | Composite Reliability | Cronbach's Alpha | AVE    | Mean | SD  | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
|------------------------------|-----------------------|------------------|--------|------|-----|------|------|------|------|------|------|------|------|
| 1. Firm size                 | –                     | –                | –      | 37   | 27.69 | –    | –    | –    | –    | –    | –    | –    |
| 2. Firm age                  | –                     | –                | –      | 30   | 23.88 | –    | –    | –    | –    | –    | –    | –    |
| 3. Foreign market experience | –                     | –                | –      | 12   | 11.92 | –    | –    | –    | –    | –    | –    | –    | –    |
| 4. Industry                  | –                     | –                | –      | 0.11 | 0.37 | –.23*| –.04 | –.03 |
| 5. EO                        | .89                   | .83              | .69    | 5.36 | 1.16 | .03  | –.27*| –.14 | –.00 | (.82) |
| 6. Marketing strategy        | .87                   | .84              | .72    | 5.49 | 1.31 | –.01 | –.15 | –.09 | –.12 | .47**| (.82) |
| 7. Technological orientation | .91                   | .91              | .75    | 5.44 | 1.21 | .07  | –.01 | .26*| –.03 | .43**| .34**| (.86) |
| 8. SME’s global performance  | .93                   | .94              | .73    | 5.12 | 1.09 | .08  | .07  | .13  | –.11 | .31**| .25**| .54**| (.81) |

AVE: average variance extracted; SD: standard deviation; EO: entrepreneurial orientation.

*Correlation is significant at the 0.05 level; **correlation is significant at the 0.01 level (two-tailed test).
The Structural Model

The hypotheses are tested using the structural model to examine the weights and importance of the structural paths and how much variance is explained in each path. To test the mediation models, SEM is considered to be a more advantageous technique than others because it allows testing all paths directly, no paths are omitted, and all issues of measurement errors, correlation in measurement errors and also feedback are directly incorporated into the path model (Baron and Kenny, 1986). Following the hair and others. (2013), the study applied a non-parametric bootstrapping technique (500 sub-samples) to test the accuracy of the structural path (Tibshirani, 1994).

To test the mediation, the study first examined the direct relationship between entrepreneurial orientation and SME’s global performance. The results confirmed that Entrepreneurial orientation predicts the SME’s global performance. The entrepreneurial orientation’s direct impact on SME’s global performance found to be significant e.g., ($\beta = .41$, $t = 6.84$, $p < .001$). After confirming the direct relationship, a mediation model is specified, which includes the mediating variables for marketing strategy and technological orientation (as shown in Figure-1). The result of the
structural model shows that most of the variance explained is 0.39 in the dependent variable (SME’s global performance) is due to mediators. The R2 value for mediators is as follows: marketing strategy is 0.31, and technological orientation is 0.30. From all control variables, the size of the firm confirmed a significant and positive relationship with SME’s global performance ($\beta = .24, t = 4.22, p < .001$). This result is consistent with previous studies; that is, the larger the size of the firm, the more resources it has that help it to actively perform in the global market. To test the mediation, the Baron and Kenny (1986) criteria were followed. The complete mediation model must meet three conditions: (1) the independent variable (e.g., Entrepreneurial orientation) has a significant relationship with mediating variables (e.g., marketing strategy and technological orientation) and with the dependent variable (e.g., SME’s global performance); (2) the relation of mediating variables with the dependent variable is significant (3) After adding the mediating variables, the direct relationship among independent variable and the dependent variable must become insignificant.

Hypothesis-1 predicts that marketing strategy plays a mediating role between the association of Entrepreneurial orientation and SME’s global performance, and Hypothesis-2 proposes that technological orientation serves as a mediator between the relation of EO-SME’s global performance. Figure-2 shows a significant relationship of EO with marketing strategies ($\beta = .63, t = 8.23, p < .001$), and technological orientation ($\beta = .61, t = 8.11, p < .001$) statistically. The significant values fulfill the 1st requirement of the mediation model. Figure 2 also shows that marketing strategies and SME’s global performance were also found to be related significantly ($\beta = .33, t = 4.25, p < .001$), and technological orientation and SME’s global performance have also a significant relationship ($\beta = .47, t = 4.93, P < .01$), meeting with the second requirement of the mediation model. Lastly, the addition of both mediating variables in the model makes the direct relation of EO and SME’s global performance insignificant ($\beta = .07, t = 0.71, p = .45$), proving the fulfillment of 3rd requirement of the mediation model as prescribed by Barron and Kenny (1986). Therefore, in the light of study results, Hypothesis-1 and Hypothesis-2 are supported.
Figure 2. The mediation model-B with some alternative set of control variables

Robustness Checks
To ensure the appropriateness of the statistical tests, two robustness tests were conducted. First, the possibility of multicollinearity was checked in the study findings. The results for the variance inflation factor (VIF) show a value of 4.01, which is lower than the acceptable threshold of 5. Second, the potential for alternative explanations was controlled by again performing the VIF analysis on some other set of variables (e.g., control variables), as previous studies have shown the impact of these variables on the study model (Cuervo-Cazurra et al., 2016). The results are reported in Figure 2 and are basically consistent with the figure-1 results. This type of comparative test minimizes the concerns for possible alternative interpretations of the dependent variable.

DISCUSSION
Entrepreneurial orientation Research in the field of international business has been very active because some people suggest that EO has a positive impact on the company’s ability, growth, and survival in the process of internationalization. The study tested marketing strategy as a mediator between EO and firm global performance. The findings confirm the existing studies; for example, Boso et al., 2013 reported the mediation of marketing strategy between EO and firm global performance. Similarly, the research also confirms the mediating role of technological orientation
between EO and firm global performance, consistent with the findings of Do Hyung and Dedahanov (2014); Tsou et al. (2014). In order to conduct theoretically and empirically rich research on EO in an international business context, the study investigates the ways in which EO affects the performance of SMEs entering global markets. By exploring the important role of marketing strategy in the development of competitive intelligence (Wu, 2011) and the technological orientation as the main channel for obtaining complementary resources to take advantage of opportunities (Wu & Deng, 2020; Al-Henzab, Tarhini, & Obeidat, 2018), this research paved the way for new avenues that may help SMEs to form their results of EO implementation (Karami & Tang, 2019; Wales, 2016). In doing so, we responded to the call from Karami and Tang (2019) and Wales (2016) to build a sounder theory in the EO by promoting our understanding of why and how EO helps to improve company performance in the global context.

This study has made several contributions to the existing literature. First of all, it confirms the marketing strategy and technological orientation as mediators to measure the indirect relationship between entrepreneurial orientation and SME’s global performance. Particularly, firms with entrepreneurial orientation and considerable global experience are more able to adopt the marketing strategy and technology orientation coordination to enhance the firm performance (Wu, 2011). The prior literature explained globalization as meeting global standards to be competitive in the market (Schweizer, 2012; Vahlne et al., 2017) and referred to the contribution of marketing strategy (Schike et al., 2009; Zou & Cavusgil, 2002) and technological orientation (Laukkanen et al., 2013; Eris et al., 2012; Altindag et al., 2011) for foreign companies. Our findings are also in line with the resource-based theory (RBT), which views international customers, technology and foreign licenses to be the precious resources of the firm.

The concern is that although the marketing strategy and technological orientation may reduce the direct impact of EO on international performance, these mechanisms accelerate the indirect impact of EO as a tangible and intangible resource. In addition, our research helps to understand EO, marketing strategy, and technological orientation impact the performance of Pakistani SMEs operating in foreign markets. According to Broughters et al. (2015), the performance of international SMEs is still questionable. SMEs more concentrating on EO are more able to explore new opportunities in global markets, but their small size, inadequate access to different resources and limited experience in operating in international markets prevents them from taking full advantage of arising opportunities. Regarding this, an effective marketing strategy to deal with
various stakeholders in foreign markets can provide SMEs with explicit and tacit knowledge about
the customer and markets (e.g., Nahapiet & Ghoshal, 1998), as well as key information about
essential technological resources (Chen et al., 2014; Vahlne et al., 2017). Similarly, technological
orientation enables SMEs to adopt new technology to advance the experience of suppliers,
customers and competitors in the international market (Vahlne et al., 2017), which will help them
adapt to the new environment (Khanna, 2014). Therefore, marketing strategy and technological
orientation can promote SMEs to take advantage of international opportunities and ultimately
improve their global performance. In short, this research spreads the EO discussion to SME’s
internationalization by proving that EO serves as a strong basis for learning about the SME’s
performance in global markets.

Finally, our research is particularly helpful in understanding Pakistan’s SMEs because Pakistan is
highly dependent on the global operations of SMEs to support its economic development (Soomro,
Shah, & Mangi, 2018). The selected SMEs are operating in many global markets, like China,
Malaysia, India, Canada, the UK, and the Middle East, using various modes of entry like export,
import, licensing, franchising, distribution, strategic alliance and joint venture. The study assumes
that it may be a result of having a relatively higher level of EO, effective marketing strategy and
high technological orientation of these SMEs, and richer international business experience, which
undoubtedly helped these SMEs improve their ability. Therefore, by studying the international
SMEs in Pakistan, this study reveals the “cultural and geographic demographic factors” in EO
research (Wales et al., 2013).

MANAGERIAL IMPLICATIONS
Our research also provides inspiration for practitioners. First, our results show that international
SMEs can benefit from marketing strategy. Therefore, the founders and managers of SMEs are
encouraged to develop and implement internationally focused competitive strategy because these
are important in improving their performance and helping them to gain a sustainable competitive
advantage (see, Gerschewski et al., 2015). Moreover, Khanna (2014) suggests that SMEs must
engage their key workers to handle their customers in some specific indigenous environment”. By
doing so, they provide an opportunity for SME members to reflect on and learn about new
experiences at the international level. This process can enable the company to get a competitive
advantage by effectively exploiting the globally available opportunities and persevere when
encountering different situations in foreign markets, thereby improving the success chances in
global markets. Secondly, the study emphasizes that establishing connections with other successful domestic or foreign SMEs is vital to help SMEs manage their responsibilities. The marketing strategy and technological orientation add value to the existing tools of SMEs and convert them into a unique and imitable set of resources (e.g., Read et al., 2009). Thus, SME managers must utilize their existing customer bases in both local and international markets to take full advantage of available opportunities and conduct frequent dialogues with colleagues inside and outside the firm to explore new ways of doing business. In this way, SMEs can further develop their key resources and facilitates the flow of marketing knowledge and information necessary to successfully attain the company's strategic and technology-oriented goals. In addition, the managers of SMEs must be cautious about finding new technology in the local and global environment to gain marketing information and some other necessary resources.
REFERENCES

Ainuddin, R. A., Beamish, P. W., Hulland, J. S., & Rouse, M. J. (2007). Resource attributes and firm performance in international joint ventures. *Journal of World Business, 42*(1), 47–60. https://doi.org/10.1016/j.jwb.2006.11.001

Al-Henzab, J., Tarhini, A., & Obeidat, B. Y. (2018). The associations among market orientation, technology orientation, entrepreneurial orientation, and organizational performance. *Benchmarking: An International Journal, 25*(8), 3117–3142. https://doi.org/10.1108/bij-02-2017-0024

Altindag, E., Zehir, C., & Acar, A. (2011). Learning, Entrepreneurship and Innovation Orientations in Turkish Family-Owned Firms. *EMAJ: Emerging Markets Journal, 1*(2), 36–47. https://doi.org/10.5195/emaj.2011.11

Amin, M., Thurasamy, R., Aldakhil, A. M., & Kaswuri, A. H. B. (2016). The effect of market orientation as a mediating variable in the relationship between entrepreneurial orientation and SMEs performance. *Nankai Business Review International, 7*(1), 39–59. https://doi.org/10.1108/nbri-08-2015-0019

Armstrong, J. S., & Overton, T. S. (1977). Estimating Nonresponse Bias in Mail Surveys. *Journal of Marketing Research, 14*(3), 396–402. https://doi.org/10.1177/002224377701400320

Asemokha, A., Musona, J., Torkkeli, L., & Saarenketo, S. (2019). Business model innovation and entrepreneurial orientation relationships in SMEs: Implications for international performance. *Journal of International Entrepreneurship, 17*(3), 425–453. https://doi.org/10.1007/s10843-019-00254-3

Baker, W. E., & Sinkula, J. M. (2009). The Complementary Effects of Market Orientation and Entrepreneurial Orientation on Profitability in Small Businesses. *Journal of Small Business Management, 47*(4), 443–464. https://doi.org/10.1111/j.1540-627x.2009.00278.x
Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182. [https://doi.org/10.1037/0022-3514.51.6.1173](https://doi.org/10.1037/0022-3514.51.6.1173)

Birkinshaw, J. M., & Morrison, A. J. (1995). Configurations of Strategy and Structure in Subsidiaries of Multinational Corporations. *Journal of International Business Studies, 26*(4), 729–753. [https://doi.org/10.1057/palgrave.jibs.8490818](https://doi.org/10.1057/palgrave.jibs.8490818)

Boso, N., Story, V. M., & Cadogan, J. W. (2013). Entrepreneurial orientation, market orientation, network ties, and performance: Study of entrepreneurial firms in a developing economy. *Journal of Business Venturing, 28*(6), 708–727. [https://doi.org/10.1016/j.jbusvent.2013.04.001](https://doi.org/10.1016/j.jbusvent.2013.04.001)

Brouthers, K. D., Nakos, G., & Dimitratos, P. (2015). SME Entrepreneurial Orientation, International Performance, and the Moderating Role of Strategic Alliances. *Entrepreneurship Theory and Practice, 39*(5), 1161–1187. [https://doi.org/10.1111/etap.12101](https://doi.org/10.1111/etap.12101)

Chen, Y., Tang, G., Jin, J., Xie, Q., & Li, J. (2014). CEOs’ Transformational Leadership and Product Innovation Performance: The Roles of Corporate Entrepreneurship and Technology Orientation. *Journal of Product Innovation Management, 31*, 2–17. [https://doi.org/10.1111/jpim.12188](https://doi.org/10.1111/jpim.12188)

Choi, S. B., & Williams, C. (2016). Entrepreneurial orientation and performance: mediating effects of technology and marketing action across industry types. *Industry and Innovation, 23*(8), 673–693. [https://doi.org/10.1080/13662716.2016.1208552](https://doi.org/10.1080/13662716.2016.1208552)

Clercq, D. D., Sapienza, H. J., & Crijns, H. (2005). The Internationalization of Small and Medium-Sized Firms. *Small Business Economics, 24*(4), 409–419. [https://doi.org/10.1007/s11187-005-5333-x](https://doi.org/10.1007/s11187-005-5333-x)

Covin, J. G., & Wales, W. J. (2018). Crafting High-Impact Entrepreneurial Orientation Research: Some Suggested Guidelines. *Entrepreneurship Theory and Practice, 43*(1), 3–18. [https://doi.org/10.1177/1042258718773181](https://doi.org/10.1177/1042258718773181)
Cuervo-Cazurra, A. (2016). Multilatinas as sources of new research insights: The learning and escape drivers of international expansion. *Journal of Business Research, 69*(6), 1963–1972. https://doi.org/10.1016/j.jbusres.2015.10.142

Dar, M. S., Ahmed, S., & Raziq, A. (2017). Small and medium-size enterprises in Pakistan: Definition and critical issues. *Pakistan Business Review, 19*(1), 46-70.

Dillman, D. A. (1991). The Design and Administration of Mail Surveys. *Annual Review of Sociology, 17*(1), 225–249. https://doi.org/10.1146/annurev.so.17.080191.001301

do Hyung, L., & Dedahanov, A. (2014). Firm Performance and Entrepreneurial, Market and Technology Orientations in Korean Technology Intensive SMEs. *Asian Social Science, 10*(22). https://doi.org/10.5539/ass.v10n22p37

Dominguez, N., & Mayrhofer, U. (2017). Internationalization stages of traditional SMEs: Increasing, decreasing and re-increasing commitment to foreign markets. *International Business Review, 26*(6), 1051–1063. https://doi.org/10.1016/j.ibusrev.2017.03.010

Eris, E. D., & Ozmen, O. N. T. (2012). The effect of market orientation, learning orientation and innovativeness on firm performance: A research from Turkish logistics sector. *International Journal of Economic Sciences & Applied Research, 5*(1).

Erixon, F. (2018). The economic benefits of globalization for business and consumers. European Centre for International Political Economy.

Fang, G. G., Qalati, S. A., Ostic, D., Shah, S. M. M., & Mirani, M. A. (2021). Effects of entrepreneurial orientation, social media, and innovation capabilities on SME performance in emerging countries: a mediated–moderated model. *Technology Analysis & Strategic Management, 1–13*. https://doi.org/10.1080/09537325.2021.1957816

Freitas, I. M., Marques, R. A., & Silva, E. M. D. P. E. (2013). University–industry collaboration and innovation in emergent and mature industries in new industrialized countries. *Research Policy, 42*(2), 443–453. https://doi.org/10.1016/j.respol.2012.06.006

Gao, G. Y., Zhou, K. Z., & Yim, C. K. B. (2007). On what should firms focus in transitional economies? A study of the contingent value of strategic orientations in China. *International Journal of Research in Marketing, 24*(1), 3–15. https://doi.org/10.1016/j.ijresmar.2006.09.004
Gatignon, H., & Xuereb, J. M. (1997). Strategic Orientation of the Firm and New Product Performance. *Journal of Marketing Research, 34*(1), 77–90. https://doi.org/10.1177/002224379703400107

Gerschewski, S., Rose, E. L., & Lindsay, V. J. (2015). Understanding the drivers of international performance for born global firms: An integrated perspective. *Journal of World Business, 50*(3), 558-575.

Grinstein, A. (2007). The effect of market orientation and its components on innovation consequences: a meta-analysis. *Journal of the Academy of Marketing Science, 36*(2), 166–173. https://doi.org/10.1007/s11747-007-0053-1

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial Least Squares Structural Equation Modeling: Rigorous Applications, Better Results and Higher Acceptance. *Long Range Planning, 46*(1–2), 1–12. https://doi.org/10.1016/j.lrp.2013.01.001

Hakala, H. (2011). Strategic orientations in management literature: Three approaches to understanding the interaction between market, technology, entrepreneurial and learning orientations. *International Journal of Management Reviews, 13*(2), 199-217.

Hessels, J., & Parker, S. C. (2013). Constraints, internationalization and growth: A cross-country analysis of European SMEs. *Journal of World Business, 48*(1), 137–148. https://doi.org/10.1016/j.jwb.2012.06.014

Hina, S. M., Hassan, G., Parveen, M., & Arooj, S. (2021). Impact of Entrepreneurial Orientation on Firm Performance through Organizational Learning: The Moderating Role of Environmental Turbulence. *Performance Improvement Quarterly, 34*(1), 77-104.

Hortinha, P., Lages, C., & Lages, L. F. (2011). The trade-off between customer and technology orientations: impact on innovation capabilities and export performance. *Journal of International Marketing, 19*(3), 36-58.

Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic management journal, 20*(2), 195-204.

Im, G., & Rai, A. (2008). Knowledge sharing ambidexterity in long-term interorganizational relationships. *Management science, 54*(7), 1281-1296.
Imran, M., Binti Aziz, A., Binti Abdul Hamid, S. N., Shabbir, M. S., Salman, R., & Jian, Z. (2018). The mediating role of total quality management between entrepreneurial orientation and SMEs export performance. *Management Science Letters, 519–532.* [https://doi.org/10.5267/j.msl.2018.5.003](https://doi.org/10.5267/j.msl.2018.5.003)

Jalali, A., Jaafar, M., & Ramayah, T. (2014). Entrepreneurial orientation and performance: the interaction effect of customer capital. *World Journal of Entrepreneurship, Management and Sustainable Development, 10*(1), 48–68. [https://doi.org/10.1108/wjemsd-05-2013-0030](https://doi.org/10.1108/wjemsd-05-2013-0030)

Javalgi, R. R. G., & Todd, P. R. (2011). Entrepreneurial orientation, management commitment, and human capital: The internationalization of SMEs in India. *Journal of Business Research, 64*(9), 1004-1010.

Joensuu-Salo, S., Sorama, K., Viljamaa, A., & Varamäki, E. (2018). Firm performance among internationalized SMEs: The interplay of market orientation, marketing capability and digitalization. *Administrative Sciences, 8*(3), 31.

Karami, M., & Tang, J. (2019). Entrepreneurial orientation and SME international performance: The mediating role of networking capability and experiential learning. *International Small Business Journal, 37*(2), 105-124.

Khan, R. U., Salamzadeh, Y., Kawamorita, H., & Rethi, G. (2020). Entrepreneurial Orientation and Small and Medium-sized Enterprises’ Performance; Does ‘Access to Finance’ Moderate the Relation in Emerging Economies? *Vision: The Journal of Business Perspective, 25*(1), 88–102. [https://doi.org/10.1177/0972262920954604](https://doi.org/10.1177/0972262920954604)

Khanna, T. (2014). Contextual intelligence. *Harvard Business Review, 92*(9), 58-68.

Khanna, T. (2015). A case for contextual intelligence. *Management International Review, 55*(2), 181-190.

Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies, 35*(2), 124–141. [https://doi.org/10.1057/palgrave.jibs.8400071](https://doi.org/10.1057/palgrave.jibs.8400071)

Kocak, A., Carsrud, A., & Oflazoglu, S. (2017). Market, entrepreneurial, and technology orientations: impact on innovation and firm performance. *Management Decision, 55*(2), 248–270. [https://doi.org/10.1108/md-04-2015-0146](https://doi.org/10.1108/md-04-2015-0146)
Kuivalainen, O., Sundqvist, S., & Servais, P. (2007). Firms’ degree of born-globalness, international entrepreneurial orientation and export performance. *Journal of World Business, 42*(3), 253–267. [https://doi.org/10.1016/j.jwb.2007.04.010](https://doi.org/10.1016/j.jwb.2007.04.010)

Laforet, S. (2008). Size, strategic, and market orientation affects on innovation. *Journal of Business Research, 61*(7), 753–764. [https://doi.org/10.1016/j.jbusres.2007.08.002](https://doi.org/10.1016/j.jbusres.2007.08.002)

Laukkanen, T., Nagy, G., Hirvonen, S., Reijonen, H., & Pasanen, M. (2013). The effect of strategic orientations on business performance in SMEs. *International Marketing Review, 30*(6), 510–535. [https://doi.org/10.1108/imr-09-2011-0230](https://doi.org/10.1108/imr-09-2011-0230)

Lester, D. L., & Tran, T. T. (2008). Information Technology Capabilities: Suggestions for SME Growth. *Journal of Behavioral and Applied Management, 10*(1). [https://doi.org/10.21818/001c.17169](https://doi.org/10.21818/001c.17169)

Liu, H., Ding, X. H., Guo, H., & Luo, J. H. (2012). How does slack affect product innovation in high-tech Chinese firms: The contingent value of entrepreneurial orientation. *Asia Pacific Journal of Management, 31*(1), 47–68. [https://doi.org/10.1007/s10490-012-9309-5](https://doi.org/10.1007/s10490-012-9309-5)

Maarof, M. G., & Mahmud, F. (2016). A Review of Contributing Factors and Challenges in Implementing Kaizen in Small and Medium Enterprises. *Procedia Economics and Finance, 35*, 522–531. [https://doi.org/10.1016/s2212-5671(16)00654](https://doi.org/10.1016/s2212-5671(16)00654)

Martin, J. (2001). *Organizational culture: Mapping the terrain*. Sage publications.

Monteiro, A. P., Soares, A. M., & Rua, O. L. (2019). Linking intangible resources and entrepreneurial orientation to export performance: The mediating effect of dynamic capabilities. *Journal of Innovation & Knowledge, 4*(3), 179–187. [https://doi.org/10.1016/j.jik.2019.04.001](https://doi.org/10.1016/j.jik.2019.04.001)

Mostafa, R. H. A., Wheeler, C., & Jones, M. V. (2005). Entrepreneurial orientation, commitment to the Internet and export performance in small and medium sized exporting firms. *Journal of International Entrepreneurship, 3*(4), 291–302. [https://doi.org/10.1007/s10843-006-7857-9](https://doi.org/10.1007/s10843-006-7857-9)

Mundim, A. P. F., Alessandro, R., & Stochetti, A. (2000). SMEs in global market: challenges, opportunities and threats. Brazilian Electronic Journal of Economics, 3(1), 9-20.
Nahapiet, J., & Ghoshal, S. (1998). Social Capital, Intellectual Capital, and the Organizational Advantage. *Academy of Management Review, 23*(2), 242–266. [https://doi.org/10.5465/amr.1998.533225](https://doi.org/10.5465/amr.1998.533225)

Naradda Gamage, S. K., Ekanayake, E., Abeyrathne, G., Prasanna, R., Jayasundara, J., & Rajapakshe, P. (2020). A Review of Global Challenges and Survival Strategies of Small and Medium Enterprises (SMEs). *Economies, 8*(4), 79. [https://doi.org/10.3390/economies8040079](https://doi.org/10.3390/economies8040079)

Ng, H. S., & Kee, D. M. H. (2017). Entrepreneurial SMEs surviving in the era of globalization: Critical success factors. In Global opportunities for entrepreneurial growth: Coopetition and knowledge dynamics within and across firms. Emerald Publishing Limited.

Nunnaly, J. C. (1978). *PSychoneric Theory. Second Edition, McGraw-Hill.*

Ong, J. W., Ismail, H. B., & Goh, G. G. G. (2010). The Competitive Advantage of Small and Medium Enterprises (SMEs): The Role of Entrepreneurship and Luck. *Journal of Small Business & Entrepreneurship, 23*(3), 373–391. [https://doi.org/10.1080/08276331.2010.10593491](https://doi.org/10.1080/08276331.2010.10593491)

Osman, J. (2014). An empirical investigation into the significance of intellectual capital and strategic orientations on innovation capability and firm performance in Malaysian information and communications technology (ICT) small-to-medium enterprises (SMEs). *Management, RMIT University.*

Petrova, K. (2019). Globalization and the Informal Economy in Developing Countries. In Globalization and Development (pp. 49-73). Springer, Cham.

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of Method Bias in Social Science Research and Recommendations on How to Control It. *Annual Review of Psychology, 63*(1), 539–569. [https://doi.org/10.1146/annurev-psych-120710-100452](https://doi.org/10.1146/annurev-psych-120710-100452)

Prasanna, R., Jayasundara, J., Naradda Gamage, S. K., Ekanayake, E., Rajapakshe, P., & Abeyrathne, G. (2019). Sustainability of SMEs in the Competition: A Systemic Review on Technological Challenges and SME Performance. *Journal of Open Innovation: Technology, Market, and Complexity, 5*(4), 100. [https://doi.org/10.3390/joitmc5040100](https://doi.org/10.3390/joitmc5040100)
Pratono, A. H., & Mahmood, R. (2015). Mediating effect of marketing capability and reward philosophy in the relationship between entrepreneurial orientation and firm performance. *Journal of Global Entrepreneurship Research, 5*(1). [https://doi.org/10.1186/s40497-015-0023-x](https://doi.org/10.1186/s40497-015-0023-x)

Quayle, M. (2003). A study of supply chain management practice in UK industrial SMEs. *Supply Chain Management: An International Journal, 8*(1), 79–86. [https://doi.org/10.1108/13598540310463387](https://doi.org/10.1108/13598540310463387)

Read, S., Dew, N., Sarasvathy, S. D., Song, M., & Wiltbank, R. (2009). Marketing under uncertainty: The logic of an effectual approach. *Journal of Marketing, 73*(3), 1-18.

Reinartz, W., Haenlein, M., & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of Research in Marketing, 26*(4), 332–344. [https://doi.org/10.1016/j.ijresmar.2009.08.001](https://doi.org/10.1016/j.ijresmar.2009.08.001)

Rezaei, J., & Ortt, R. (2018). Entrepreneurial orientation and firm performance: the mediating role of functional performances. *Management Research Review, 41*(7), 878–900. [https://doi.org/10.1108/mrr-03-2017-0092](https://doi.org/10.1108/mrr-03-2017-0092)

Rice, J., Liao, T. S., Martin, N., & Galvin, P. (2012). The role of strategic alliances in complementing firm capabilities. *Journal of Management & Organization, 18*(6), 858–869. [https://doi.org/10.1017/s1833367200000493](https://doi.org/10.1017/s1833367200000493)

Rua, O., França, A., & Fernández Ortiz, R. (2018). Key drivers of SMEs export performance: the mediating effect of competitive advantage. *Journal of Knowledge Management, 22*(2), 257–279. [https://doi.org/10.1108/jkm-07-2017-0267](https://doi.org/10.1108/jkm-07-2017-0267)

Sarasvathy, S., Kumar, K., York, J. G., & Bhagavatula, S. (2014). An effectual approach to international entrepreneurship: Overlaps, challenges, and provocative possibilities. *Entrepreneurship Theory and Practice, 38*(1), 71-93.

Schweizer, R. (2012). The internationalization process of SMEs: A muddling-through process. *Journal of Business Research, 65*(6), 745-751.

Shaikh, S. (2019). Impact of Financial Constraints on the Performance of SMEs - A Study of Sindh Province. *Journal of Independent Studies and Research-Management, Social Sciences and Economics, 17*(1), 99–107. [https://doi.org/10.31384/jisrmsse/2019.17.1.6](https://doi.org/10.31384/jisrmsse/2019.17.1.6)
Shaw, E. H. (2012). Marketing strategy: From the origin of the concept to the development of a conceptual framework. *Journal of Historical Research in Marketing*.

Sheehan, K. B., & Hoy, M. G. (2006). Using E-mail to Survey Internet Users In The United States: Methodology And Assessment. *Journal of Computer-Mediated Communication, 4*(3), 0. https://doi.org/10.1111/j.1083-6101.1999.tb00101.x

Sills, S. J., & Song, C. (2002). Innovations in Survey Research. *Social Science Computer Review, 20*(1), 22–30. https://doi.org/10.1177/089443930202000103

Singh, R. K., & Kumar, R. (2020). Strategic issues in supply chain management of Indian SMEs due to globalization: an empirical study. *Benchmarking: An International Journal, 27*(3), 913–932. https://doi.org/10.1108/bij-09-2019-0429

Soomro, B. A., Shah, N., & Mangi, S. (2019). Factors affecting the entrepreneurial leadership in small- and medium-sized enterprises (SMEs) of Pakistan. *World Journal of Entrepreneurship, Management and Sustainable Development, 15*(1), 31–44. https://doi.org/10.1108/wjemsd-05-2018-0054

Sosnick, S. H. (1972). Scherer, F. M., *Industrial Market Structure and Economic Performance* , Chicago, Rand McNally . . Co., 1970, xi + 576 pp. ($13.00). *American Journal of Agricultural Economics, 54*(3), 547–548. https://doi.org/10.2307/1239196

Stam, W., & Elfring, T. (2008). Entrepreneurial Orientation and New Venture Performance: The Moderating Role of Intra- And Extraindustry Social Capital. *Academy of Management Journal, 51*(1), 97–111. https://doi.org/10.5465/amj.2008.30744031

Taylor, M., & Murphy, A. (2004). SMEs and e-business. *Journal of Small Business and Enterprise Development, 11*(3), 280–289. https://doi.org/10.1108/14626000410551546

Thanos, I. C., Dimitratos, P., & Sapouna, P. (2016). The implications of international entrepreneurial orientation, politicization, and hostility upon SME international performance. *International Small Business Journal: Researching Entrepreneurship, 35*(4), 495–514. https://doi.org/10.1177/0266242616641749

Tibshirani, R. J. (1994). An Introduction to the Bootstrap. *Biometrics, 50*(3), 890. https://doi.org/10.2307/2532810
Tsou, H. T., Chen, J. S., & Liao, W. H. (2014). Market and technology orientations for service delivery innovation: the link of innovative competence. *Journal of Business & Industrial Marketing, 29*(6), 499–513. https://doi.org/10.1108/jbim-09-2011-0128

Vahlne, J. E., Hamberg, M., & Schweizer, R. (2017). Management under uncertainty—the unavoidable risk-taking. *Multinational Business Review, 25*(2), 91-109.

Wales, W. J. (2015). Entrepreneurial orientation: A review and synthesis of promising research directions. *International Small Business Journal: Researching Entrepreneurship, 34*(1), 3–15. https://doi.org/10.1177/0266242615613840

Wales, W. J., Patel, P. C., & Lumpkin, G. T. (2013). In Pursuit of Greatness: CEO Narcissism, Entrepreneurial Orientation, and Firm Performance Variance. *Journal of Management Studies, 50*(6), 1041–1069. https://doi.org/10.1111/joms.12034

Wales, W., Gupta, V. K., Marino, L., & Shirokova, G. (2019). Entrepreneurial orientation: International, global and cross-cultural research. *International Small Business Journal: Researching Entrepreneurship, 37*(2), 95–104. https://doi.org/10.1177/0266242618813423

Wales, W., Wiklund, J., & McKelvie, A. (2013). What about new entry? Examining the theorized role of new entry in the entrepreneurial orientation–performance relationship. *International Small Business Journal: Researching Entrepreneurship, 33*(4), 351–373. https://doi.org/10.1177/0266242613506023

Walter, A., Auer, M., & Ritter, T. (2006). The impact of network capabilities and entrepreneurial orientation on university spin-off performance. *Journal of Business Venturing, 21*(4), 541–567. https://doi.org/10.1016/j.jbusvent.2005.02.005

Wernerfelt, B., & Karnani, A. (1987). Competitive strategy under uncertainty. *Strategic Management Journal, 8*(2), 187–194. https://doi.org/10.1002/smj.4250080209

Wiklund, J., & Shepherd, D. A. (2011). Where to from Here? EO-as-Experimentation, Failure, and Distribution of Outcomes. *Entrepreneurship Theory and Practice, 35*(5), 925–946. https://doi.org/10.1111/j.1540-6520.2011.00454.x

Wold, H. (1982). Models for knowledge. In *The making of statisticians* (pp. 189-212). Springer, New York, NY.
Wu, B., & Deng, P. (2020). Internationalization of SMEs from emerging markets: An institutional escape perspective. *Journal of Business Research, 108*, 337–350. https://doi.org/10.1016/j.jbusres.2019.10.037

Wu, C. W. (2011). Global marketing strategy modeling of high tech products. *Journal of Business Research, 64*(11), 1229–1233. https://doi.org/10.1016/j.jbusres.2011.06.028

Xie, Y. H., & Suh, T. (2014). Perceived resource deficiency and internationalization of small- and medium-sized firms. *Journal of International Entrepreneurship, 12*(3), 207–229. https://doi.org/10.1007/s10843-014-0121-9

Yousaf, S., Anser, M. K., Tariq, M., Sahibzada Jawad, S. U. R., Naushad, S., & Yousaf, Z. (2020). Does technology orientation predict firm performance through firm innovativeness? *World Journal of Entrepreneurship, Management and Sustainable Development, 17*(1), 140–151. https://doi.org/10.1108/wjemsd-11-2019-0091

Zahra, S. A., & Garvis, D. M. (2000). International corporate entrepreneurship and firm performance. *Journal of Business Venturing, 15*(5–6), 469–492. https://doi.org/10.1016/s0883-9026(99)00036-1

Zehir, C., Can, E., & Karaboga, T. (2015). Linking Entrepreneurial Orientation to Firm Performance: The Role of Differentiation Strategy and Innovation Performance. *Procedia - Social and Behavioral Sciences, 210*, 358–367. https://doi.org/10.1016/j.sbspro.2015.11.381

Zou, S., & Cavusgil, S. T. (2002). The GMS: A Broad Conceptualization of Global Marketing Strategy and Its Effect on Firm Performance. *Journal of Marketing, 66*(4), 40–56. https://doi.org/10.1509/jmkg.66.4.40.18519

This is an open-access article distributed under the Creative Commons Attribution License 4.0