



Entrepreneurial networking as a mediator between entrepreneurial orientation and business performance: Insights from small business owners in Malaysia



 Ardio Sagita¹

 Muhammad Suhaimi Mohd Yusof²⁺

 Roy Budiharjo³

 Isa Nsereko⁴

 Shyalwi Suhimi⁵

^{1,3}School of Economics and Business, Telkom University, Bandung, West Java, Indonesia.

¹Email: ardiosagita@telkomuniversity.ac.id

³Email: roybudiharjo@telkomuniversity.ac.id

²Faculty of Business and Communications, INTI International University, Nilai, Negeri Sembilan, Malaysia.

²Email: muhdsuhaimi.yusof@newinti.edu.my

⁴Faculty of Entrepreneurship and Small Business Management, Department of Projects and Small Business Management, Makerere University Business School, Uganda.

⁴Email: insereko@mubs.ac.ug

⁵School of Business, Universiti Utara Malaysia, Sintok, Kedah, Malaysia.

⁵Email: shyalwisuhimi@gmail.com



(+ Corresponding author)

ABSTRACT

Article History

Received: 12 October 2024

Revised: 11 December 2024

Accepted: 1 January 2025

Published: 24 January 2025

Keywords

Entrepreneurial orientation
Networking
Risk-taking
Small business performance
Small medium enterprises.

JEL Classification:

L25; L26.

This research investigates the influence of entrepreneurial orientation on small business performance in Malaysia with the mediating effect of entrepreneurial networking. The responses from 146 business owners in the manufacturing sector were analysed using SPSS and Smart Partial-Least Square (PLS). The results showed that being innovative and proactive don't have a big impact on performance, but being independent, taking risks, and being competitively aggressive do. Contrary to the widespread belief about innovation and firm performance, this study highlighted possible cultural or regional effects of entrepreneurial orientation. Although limited in sample size, the results encourage further inquiry into variations within different markets. This may offer some benefits in terms of Malaysia's small business success for practitioners and scholars as well, which accentuates the importance of entrepreneurial networking. Additionally, the findings suggest that fostering a culture of autonomy and encouraging risk-taking behaviours could be more beneficial for small businesses in Malaysia than previously thought. This insight is particularly valuable for policymakers and business advisors who aim to tailor their support strategies to the unique entrepreneurial landscape of Malaysia, and it could also serve as a focus for future research. Future research could explore these dynamics in other sectors and regions to build a more comprehensive understanding of how entrepreneurial orientation impacts business performance globally.

Contribution/ Originality: This study reveals distinct impacts of entrepreneurial orientation dimensions on Malaysian SMEs, challenging RBV assumptions. Innovativeness and proactiveness showed limited influence, while entrepreneurial networking lacked mediation effects. The results give us new information about how to help small businesses grow. They focus on giving specific help and making useful policy suggestions for developing countries.

1. INTRODUCTION

Malaysia grapples with the challenges of this technology and moment in time as we move into our second half-century, where expectations have grown higher. The widespread dissemination of technology and information as a result has made the public more discerning in terms of business standards and practices, with consequences not seen before (Zhe & Hamid, 2021). The numbers of people living in poverty have always been the crucial matter since

Malaysia gained independence in 1957, despite its bold economic growth, which embodies a global challenge for many developing nations (Idham, Yusof, & Ariffin, 2020). In order to achieve high-income status, Malaysia must emulate and even surpass the economic success of other developed nations, in both Association of Southeast Asian Nations (ASEAN) region countries as well as participating on a global scale (Ratnasari, Gunawan, Pitchay, & Mohd Salleh, 2022).

In this ever-changing economic environment, the contribution of small business owners is no lesser than any other business that comes up in Malaysia. Small and Medium Enterprises (SMEs) represent 97% of business establishments, contribute 36% to national Gross Domestic Product (GDP), and employ about two-thirds of the workforce, with nearly one-fifth of Malaysia's export revenue derived from the SME sector. Although this is a good figure, Malaysia's contribution lags that of ASEAN in the form of GDP from SMEs, which only accounted for 25% compared to Indonesia (51%), Singapore (43%), and Vietnam (40%). This gap highlights a damning requirement for Malaysia to strengthen its SME sector to match that of other regional players, as shown in Table 1.

Table 1. SMEs contribution to GDP in ASEAN countries in 2021.

Country	SMEs contribution to GDP
Indonesia	51%
Singapore	43%
Vietnam	40%
Philippines	36%
Thailand	35%
Malaysia	25%

Source: Development Bank (2021).

As Malaysia navigates the post-COVID-19 landscape, small businesses face critical challenges that necessitate substantial support to secure their sustainability and growth. Despite ongoing government assistance programs, small business failure rates are notably high, with a 60 percent failure rate within the first five years—a trend that has worsened during the pandemic (Adam, Hassan, & Abdullah, 2021; Carter, 2021). The anticipated recovery in 2021, led by the manufacturing sector, did not materialize, leading to poorer performance among small businesses in 2022 compared to 2020 (Economic Census, 2022; News Straits Time Business, 2021). It is an uncontested fact that small and medium enterprises (SMEs) play a crucial role in the Malaysian economy, yet with the increasing failure rate of SMEs, research on understanding to uncover its critical success factors is essential to increase performance. Previous research indicates that entrepreneurial orientation, such as proactive strategies and innovative behaviors, leads to a higher performance compared with more conservative behavior (Ferreira, Coelho, & Moutinho, 2020; Shahriari & Mahmoudi-Mesineh, 2021). Entrepreneurial networks are also crucial as they provide access to a unique resource bundle supporting business performance and resilience (Zighan, Abualqumboz, Dwaikat, & Alkalha, 2022). This study is based on the theory called Resource-Based View (RBV), which says that companies can get a competitive edge by having unique and valuable resources, which can be things or ideas. This theory, which was first put forward by Penrose (1959) and later expanded upon by Barney (2001) says that an entrepreneurial mindset is a type of intangible resource that creates dynamic capabilities and, in turn, long-term competitive advantage and profit. These results show that more research needs to be done to find out how entrepreneurial mindset and networks might affect performance, especially in Malaysia, which has a unique cultural and economic environment (Kibui, Gachunga, & Namusonge, 2014; Okeyo, Gathungu, & K'Obonyo, 2016).

2. LITERATURE REVIEW, HYPOTHESIS DEVELOPMENT, AND RESEARCH FRAMEWORK

2.1. Small Business Owners

The term "small business" in Malaysia has long overlapped with the concept of small and medium industries (SMI), creating definitional ambiguities until recently (Saad, Hagelaar, Van Der Velde, & Omta, 2021; Tsuruta,

2020). The inconsistency resulted from differences in how small businesses are defined across institutions and government agencies, challenging policies and research on the topic. Before the formation of the National SME Development Council (NSDC) in 2004, each authority had its definition, which was based on sectoral focus, size, and turnover categories (Mohamad, Mohd Rizal, Kamarudin, & Sahimi, 2022; Pertheban et al., 2023). The NSDC came up with a standard definition because it saw that there was a need for consistency across sectors. It also wanted to show that people understood how important it is to have common definitions for key variables that have effects beyond just classification in policy or other support frameworks.

At the 14th Council Meeting in 2013, Malaysia's NSDC revised the SME definition to encompass a wider range of economic activities, taking into account changes in the country's economic landscape, as well as changes in cost structure and business practices. The inflation-adjusted definition that reflects the current economic scenario: This new definition of SME is expected to cover businesses in all sectors, including manufacturing, services such as restaurants and beauty parlors, the agriculture sector, and construction activities besides mining & quarrying. The criteria are now predominantly based upon the number of full-time employees and annual sales turnover, with small businesses being those having an annual sale below RM300k or less than five full-time employees, including part-timers also (Hoo et al., 2023; Muhmad, Ismail, Rahim, & Ahmad, 2020). The new criteria make it easier to understand how small businesses work in Malaysia. This has some effect on research because it makes it easier to measure, look into, or make any kind of revival plan or policy that aims to improve performance and meet needs (Khalil, Haque, bin S Senathirajah, Chowdhury, & Ahmed, 2022).

The importance of SMEs in the Malaysian economy is undeniable, as the *Economic Census (2022)* confirms their central role, representing 97% of all business establishments and accounting for a considerable portion of employment quota as well as GDP output. Standing as the largest are those within it: the Food and Beverages (F&B) subsector, which accounts for 9.7% of the services sector base, while F&Bs contribute approximately half, or a total market share of about 17.6%. The weight of the F&B subsector highlights that its performance could have significant repercussions on Malaysia's overall economic trajectory. To the best of our knowledge, most studies investigated an overall services sector environment, and very few studied the F&B industry in Malaysia, including growth barriers and resilience factors, or studied their contribution to economic stability. This research helps fill this gap by concentrating on the F&B subsector as part of SMEs.

Previous research has progressed in showing how important small and medium-sized businesses are to national economies. However, many of the current studies don't look into why Malaysian SMEs face different problems than those in other ASEAN countries. Malaysia. Malaysia's SMEs constitute only 25% of the GDP as a share, which is significantly lower than Indonesia (51%), Singapore (43%), and Vietnam (40%). This discrepancy suggests that unique structural or market challenges may impede the participation of Malaysian SMEs. Even though initiatives such as government support, financial assistance, and training programs have been rolled out to enhance the performance of SMEs, the reoccurring gap necessitates more research in understanding factors that handicapped growth among Malaysian SMEs.

Existing literature argues that entrepreneurial orientation could be considered a driver of SME success. It is fast that the emphasis on entrepreneurial orientation, defined as derived from orientation autonomy, innovativeness, risk-taking, and proactiveness, has a positive effect on enterprise performance (Al-Mamary & Alshallaqi, 2022; Kowo & Akanmu, 2021). Yet, while these dimensions are often associated with positive outcomes, the delivery of care may be more or less effective depending on its context. For instance, while research has clearly highlighted the importance of innovativeness and proactiveness in achieving superior business performance within Western economies specifically, evidence on firm practices does not corroborate this assertion for Malaysia. This study therefore seeks to challenge the long-held tenet that all dimensions of EO contribute equally to SME success in Malaysia by further investigating these elements within their culturally and economically distinct contexts.

Entrepreneurial networking is another key facilitator of bootstrapping behavior (Kolyaka, 2021; Robledo, Vasquez, Duque3-Méndez, & Duque-Urbe, 2023). The importance of access to resources, information, and market opportunity offered in entrepreneurial networks is especially important for SMEs, which may not have internal resources (Valdez-Juárez & Pérez-de-Lema, 2023; Xu et al., 2024). The advantage of networking for a small business owner is that it allows him or her to use relationships with others as competitive tools that are incredibly proactive in nature. In a resource-constrained environment like Malaysia, where SMEs often struggle due to lack of resources, entrepreneurial networks can address the void. Relatively few studies have been conducted in the context of Malaysian SMEs, with even less research investigating how networking can mediate between entrepreneurial orientation and business performance. Hence, there is a gap in the literature that this study aims to fill by looking into the moderating effect of entrepreneurial orientation and networking with respect to F&B SME performance within Malaysia.

This study built up rationale from the Resource-Based View (RBV) theory suggesting that competitive advantage arises through firms' unique resources beyond market positioning, with these assets including both tangible and intangible capacities (Barney, 2001; Penrose, 1959). According to RBV, entrepreneurial orientation and networking can be considered as intangible resources that may lead towards competitive advantage and performance. Despite the strength of prior research in establishing RBV as a dependable lens for exploring SME performance, an illumination exercise is justified when we turn our attention to perform context-centric examinations on how these (RBVs) resources manifest within different cultural and economic undertones. By investigating the interaction between a strategic or tangible resource and relational resources in order to observe how they work together towards SME performance, this study adds value to literature on RBV.

To sum up, this review demonstrates the value and shortfalls in previous scholarship on SME typologies (classification), entrepreneurial orientation, and networks within Malaysia. This study therefore contributes to a deeper understanding of how small businesses in the F&B sector can expand and become more resilient by paying special attention to these precincts while examining both the challenges specific to this industry and those that arise from participating in entrepreneurial networks. By critically examining previous research, this study aims to provide not only Malaysian-specific insights but also contribute towards wider discussions regarding SMEs in an emerging market.

2.2. Business Performance

According to Akpa, Asikhia, and Nneji (2021); Asim et al. (2022) and Mubarak, Petraite, Rasli, and Shabbir (2023) business performance is one of the most important ideas in management research. Numerous financial and non-financial indicators measure it, revealing the extent to which an organization achieves its goals. For decades, businesses have relied on quantitative measures as indicators of performance, such as return on investment, revenue growth, staff turnover, and customer acquisition, to name a few. However, the choice of performance metrics can have a big impact on the conclusions drawn about the relative contributions of different organizational drivers to performance outcomes. This means that metrics should be carefully chosen in order to make meaningful assessments (Aguilera, De Massis, Fini, & Vismara, 2024).

Adomako et al. (2022) present a two-dimensional view of business performance, which includes both objective outcomes (e.g., financial indicators) and managerial perceptions. More recently, they have proposed a more nuanced set of performance indicators ranging from profitability through market share to return on assets and product innovation success (Shirokova, Galieva, White, & Doktorova, 2024). According to previous studies, combining these indicators together provides a more comprehensive understanding of the business's operations. The dependent variable serving as a composite score is a fundamental limitation of such an approach; it can mask the contributions of individual performance indicators and limit the detail of findings.

The balanced scorecard embeds financial measures into a framework that includes other performance dimensions, such as customer satisfaction, internal processes, and learning and growth. Though providing a multidimensional perspective, this approach is not without its challenges, the most significant of which are the biases introduced in Subjective Judgments and the lack of possible alignment between subjective evaluation and quantitative data.

The definition of Key Performance Indicators (KPIs) used in this paper is a useful instrument for measuring performance in terms of two types: leading (customer satisfaction, employee engagement, and customer loyalty) and lagging customer indicators (revenue growth and profitability) (Midor, Sujová, Cierna, Zarebinska, & Kaniak, 2020). Leading indicators are metrics that lead to financial health, whereas lagging indicators are measures of past performance. This difference is thus useful for organisations; managers can predict the future directions and modify strategies at an appropriate time. Using only lagging indicators could, however, hinder strategic agility: lagging indicators are backward-looking and can never tell you how well you will perform in the future.

In addition, subjective or perceptual measures provide important information about performance components that objective measures may not be able to detect. Drawing from the ideas expressed by Dess and Beard (1984) or Venkatraman and Ramanujam (1986) integrating managerial judgments in performance assessments of organisations can offer a richer perspective on organizational outcomes. Looking at both tangible results (profitability, etc.) and analytical results (market position, etc.) allows organizations to obtain a balanced perspective on performance with the complexities of business dynamics. This approach is insightful, but it requires careful implementation due to managerial perception biases that can skew performance assessments.

Although an integrated performance measurement approach has its benefits, the literature indicates that it is difficult to balance objective and subjective indicators. Although both are reliable and comparable, objective metrics do not always encapsulate the quality of the characteristic that differentiates successful and sustainable players in the long run. While subjective measures provide insights, they also entail biases and can vary wildly based on the perspective of management. Its balance is necessary for a global perspective of performance but also reinforces an extant gap contained in the literature—that is, the effective combination of both types (financial and non-financial) of measures to provide a more complete picture capable of capturing a holistic view of business performance, without compromising (financial) validity or (non-financial) reliability.

Conclusion Although many studies have improved the evaluation of performance by providing it with objective as well as subjective measures, there still exist critical gaps. Research that is always being done shows the problems with one-dimensional measures and how important it is to use multidimensional methods that combine quantitative and qualitative data. Future research should investigate new ways of integrating these measures, especially with the aim of reducing bias in subjectively assessed Open Architecture Products (OAPs). Better and more organized ways to judge performance help researchers and business people come up with more reliable metrics that can handle more complex business situations and help them make better strategic decisions.

2.3. Entrepreneurial Orientation

Miller (1983) classic definitions say that an organization's entrepreneurial orientation is how much it takes risks, how innovative it is, and how open it is to new products and markets. A company's entrepreneurial orientation also includes how much it initiates and develops the processes of innovation. Because of this, Covin, Green, and Slevin (2006) thought of entrepreneurial orientation as a way of doing business that is deeply rooted in a company's culture and made it relevant to small manufacturing companies in particular. This perspective, while limited by its emphasis on small enterprises and generalizability issues, also drew attention to the fact that entrepreneurial orientation is a collective approach that should not be separated into various practices.

Expanding on this viewpoint, Lumpkin and Dess (1996) identified five fundamental dimensions of entrepreneurial orientation: autonomy, innovativeness, risk-taking, proactiveness, and competitive aggressiveness.

This multivariate view recognized that entrepreneurial orientation is not a binary construct but instead a portfolio of behaviours that each serve different roles in different situations. In some sectors, under certain conditions, innovativeness is the overriding aspect of any tech-related environment, while in others, competitive aggressiveness appears to be a requisite for any saturated market.

The framework is useful but limited by itself. These dimensions can at times be at loggerheads with each other; risk-taking behaviour in an organization, unless carefully managed, can corrode the more fundamental need for stability. Culture and industry also influence each dimension, determining its importance. For instance, the representation of autonomy as a cultural value varies between collectivist and individualist patterns.

2.3.1. *Autonomy*

Autonomy is an integral part of entrepreneurial orientation, creating room for invention by permitting persons to pursue opinions without restriction. Casillas, Moreno, and Barbero (2010) identified autonomy as an essential part of process innovation, enabling the flexibility for individuals to explore creative solutions. Lumpkin and Dess (1996) stated that autonomy pertains to both an organization and an individual's ability to seize opportunities.

Autonomy supports empowerment and expeditious decision-making, which is particularly useful in fast-moving sectors; however, it can lead to alignment and coordination challenges across larger organizations. Too much autonomy can result in disjointed action or conflicting objectives. Thus, there is a need to balance autonomy with effective communication and an aligned organizational vision.

In addition, the effect of autonomy suffers from various cultural influences; it is more effective in cultures that favor independence, whereas collectivist cultures often prioritize harmony within groups. In brief, autonomy can strengthen entrepreneurial behavior, originality, and energy, but at the same time, it might have a negative impact if the freedom is not moderated with alignment. We must contextualize autonomy to align with the cultural norms of any given organization or nation, as it is a culturally sensitive construct. In the future, researchers can look into how autonomy interacts with the other aspects of entrepreneurial orientation in order to help innovation last.

2.3.2. *Correlation between Autonomy and Business Performance*

Basu and Virick (2008) argue that entrepreneurship is progressive and results through open-minded entrepreneurial individuals who are autonomous enough to perform experiments with innovative economic activities. Being in this autonomous team creates a sense of growth opportunity and new thought generation. In accordance with Monsen and Wayne Boss (2009) when management has the same belief in ideas from its workers, then it can produce a reliable performance and increase revenues (Lisboa, Skarmeeas, & Lages, 2011). According to Lichtenstein (2011) "a tremendous deal of successful entrepreneurship is developed through the innovative ideas that are allowed to rise in either creative or destructive cultures when so many resources can go into bringing all those less powerful initiatives into being effectively.

Autonomy and Performance: The literature presents a mixed picture of the relationship between autonomy and performance. Despite the findings reported by Hughes and Morgan (2007) and Musa, Ghani, and Ahmad (2014) the relationship between autonomy and performance remains ambiguous. Anisul Huq, Stevenson, and Zorzini (2014) on the other hand, don't see a strong link between autonomy and performance (Maldonado-Guzman, Martinez-Serna, & Pinzón-Castro, 2017) and other researchers still have mixed findings. On the other hand, Mojikon, Abdullah, and Shamsuddin (2016) contend that there is a positive correlation between high levels of autonomy and business performance. This inconsistency reveals discrepancies in the literature regarding the relationship between these variables.

H₁: Autonomy significantly enhances the business performance of small business owners in Malaysia.

2.3.3. Innovativeness

Innovativeness involves leveraging creative solutions to address business challenges, as highlighted by Darling, Gabrielsson, and Seristö (2007). It is a core component of entrepreneurial orientation, emphasizing the importance of a proactive commitment to innovation among managers and business owners (Kuratko & Audretsch, 2009). Lumpkin and Dess (1996) defined innovativeness as a firm's inclination toward creativity and originality, encouraging a culture of experimentation that drives the development of new products, services, and processes.

Innovativeness goes beyond incremental improvements, promoting transformative ideas that can set a business apart in competitive markets. This orientation requires both a willingness to take risks and a culture that supports and values novel approaches, enabling businesses to adapt to changing environments and meet evolving customer needs. As a dimension of entrepreneurial orientation, innovativeness enables firms to not only respond to industry trends but also actively shape them, positioning themselves as leaders in their sectors. Thus, innovativeness is critical to sustaining long-term competitive advantage and fostering resilience in a dynamic business landscape.

2.3.4. Correlation between Innovativeness and Business Performance

According to Chaudhuri, Chatterjee, Vrontis, and Thrassou (2024) new innovations that create unique qualities have been shown to lead to better performance, which helps businesses get new customers and keep the ones they already have. Nonetheless, there is no consensus regarding the relationship between innovativeness and firm performance. For instance, Raj Gautam (2016) found no significant relationship, suggesting that innovativeness does not directly contribute to measurable performance.

This discrepancy between findings represents an important area for future exploration. Although other studies, such as the work of Maldonado-Guzman et al. (2017); Haider, Asad, and Fatima (2017) and Zeebaree and Siron (2017) say that there is a strong positive link between being innovative and business performance, saying that innovative behavior helps firms grow and be competitive. However, other contributions suggest a more complex or conditional relationship. This opposition serves as the foundation for our research, which aims to investigate the conditions under which business innovation operates. The study aims to find the mixed effects of innovation on performance from at least two points of view: first, it will act as a bridge between innovation and performance; second, it will find the factors that affect the relationship between innovation and performance.

H₂: Innovativeness has a positive significant impact on the business performance of small business owners in Malaysia.

2.3.5. Risk-Taking

Sharma, Dave, Aggarwal, and Sharma (2023) assert that risk-taking is an important dimension of entrepreneurial orientation and that it has a greater impact on business performance than innovativeness and proactiveness. A business will take the riskiest actions in uncertain environments. However, risk-taking, or the extent to which entrepreneurs make large but risky resource investments in their firms, is a crucial aspect of entrepreneurial orientation (Lumpkin & Dess, 1996).

2.3.6. Correlation between Risk-Taking and Business Performance

According to Coulthard (2007) risk-taking is a rationally pursued process that is necessary to maintain market share and to facilitate growth. While Covin et al. (2006) show that risk-taking is shown to increase profitability and Yang (2006) research in this area is mixed. Musa et al. (2014) also confirmed a significant negative relationship between risk-taking and performance, which suggests that bold risk strategies may shoot high down. Hughes and Morgan (2007) also show similar findings in their study that found no association. This study would like to contrast this with Maldonado-Guzman et al. (2017) and Haider et al. (2017) which calculated risk-taking can lead to better results.

This contradiction indicates that risk-taking is a complex phenomenon that can bring benefits only in specific contexts, like when the industry dynamics are favourable or sufficient resources are available. The goal of this study is to break down these complicated issues and look at the different factors that affect the risk-performance relationship. This will help us figure out when taking risks is a good idea and, just as importantly, when it's not.

H₃: Risk-taking has a significantly positive impact on the business performance of small business owners in Malaysia.

2.3.7. Pro-Activeness

Proactiveness is anticipating future market demands and acting on them ahead of competitors (Madsen, 2007). The other one grants a first mover to rule the market by controlling the distribution channels. According to Sharma et al. (2023) the proactive businesses must take the leadership role, not the follower status. According to Madsen (2007) these businesses are more sustainable as they are fuelled by innovative risk-taking individuals and entrepreneurs.

2.3.8. Correlation between Pro-Activeness and Business Performance

Rauch, Wiklund, Lumpkin, and Frese (2009) have found that the characteristic of proactivity is another important indicator for predicting organizational performance. An organization that is future-proof knows how to anticipate the future trends and demand so that entrepreneurs can plan ahead and seize upcoming opportunities. More recent research reveals that proactiveness significantly and positively impacts firm performance (Haider et al., 2017; Maldonado-Guzman et al., 2017). These findings inform the theoretically expected correlation in the literature.

H₄: Pro-activeness has a positive significant impact on the business performance of small business owners in Malaysia.

2.3.9. Competitive Aggressiveness

Competitive aggressiveness and proactiveness are the most confused constructs, and each must be clearly defined. In short, competitive aggressiveness describes how a business deals with its competitors and reacts to existing market demand. It includes methods applied by firms to become more successful than competitors in responding to this demand (Chang, Lin, Chang, & Chen, 2007). In general, competitive aggressiveness stands for moving ahead of market competitors as well as gearing up for the competition in the future (Antoncic & Hisrich, 2003). On the other hand, proactiveness has a more factious focus on the foresight of market needs or wants prior to making themselves more visible.

2.3.10. Correlation between Competitive Aggressiveness and Business Performance

The research by Augusto Felício, Rodrigues, and Caldeirinha (2012) found a link between a differentiation strategy, competitive energy, and performance in their study on entrepreneurial orientation. Mason, Floreani, Miani, Beltrame, and Cappelletto (2015) additionally affirmed that competition in the energy sector had a significant and beneficial influence on the performance of small and medium-sized enterprises. Based on previous research, the anticipated correlation is as follows:

H₅: Competitive aggressiveness has a positive significant impact on the business performance of small business owners in Malaysia.

2.3.11. Correlation between Entrepreneurial Orientation and Business Performance

Business performance is positively and significantly correlated with Entrepreneurial orientation. A lot of research has investigated the link between entrepreneurial strategy and business performance and confirms entrepreneurial strategy has a significant positive effect on company performance (Engelen, Gupta, Strenger, &

Brettel, 2015; Gupta & Gupta, 2015; Waibe & Wei Hin, 2017). However, based on empirical literature, we would expect the following relationship.

H₆: Entrepreneurial orientation has a positive significant impact on the business performance of small business owners in Malaysia.

2.4. Entrepreneurial Networking

Carson (1995) described entrepreneurial networking as a process whereby entrepreneurially oriented owners develop and manage personal relationships with key individuals in their environment, including family, friends, government officials, bankers, lawyers, accountants, other entrepreneurs, and more. These relationships are often complex, challenging, and fraught with difficulties in the early stages. Anderson, Jack, and Drakopoulou Dodd (2005) further explained entrepreneurial networking as a multifaceted mix of social and professional connections that embody both emotional and practical elements, driven by trust. Entrepreneurs and their network contacts cultivate trust over time through sustained interactions. O'Donnell (2004) on the other hand, viewed entrepreneurial networking as a method for studying entrepreneurial business practices.

The significance of entrepreneurial networking is unquestionable, particularly for accessing necessary business resources. Havnes and Senneseth (2001) noted the advantages of such networks for entrepreneurs. Ostgaard and Birley (1994) acknowledged the vital role of entrepreneurs' networks, especially crucial during the initial stages of business development when resources are scarce. Johannisson (1986) supported this point in his research, stating that in such times, entrepreneurs and their organizations heavily rely on support from their networks.

Moreover, Jarillo (1989) and Zhao and Aram (1995) discovered that entrepreneurial networking enables organizations to acquire diverse resources essential for growth. MacMillan (1982) found that networking can also reduce risks faced by entrepreneurs and their enterprises. Similarly, Starr and MacMillan (1990) observed that entrepreneurs could secure resources at below-market prices through strong relationships with their suppliers, aligning with the perspective adopted by Premaratna (2002) in this study.

2.4.1. Entrepreneurial Networking as Mediating

The mediating role of entrepreneurial networking means that the connections you make through networking are very important for turning your entrepreneurial spirit into real improvements in your business's performance. These connections often result in the acquisition of resources, knowledge sharing, collaborative ventures, and enhanced market visibility. Essentially, entrepreneurial networking serves as a bridge that transforms an entrepreneurial mindset and activities into successful business outcomes. This type of environment fosters creative thinking, shared risk, and proactive planning. Zhang, Li, and Gao (2015) analyzed the mediating role of entrepreneur networking behavior in the relationship between entrepreneur orientation and business performance in small business owners. Their results demonstrate the necessity of networking for SMEs in increasing the impact of entrepreneurial orientation on performance. In a parallel manner, Patzelt and Shepherd (2011) developed a framework to examine the relationship between the attitudes of entrepreneurs and venture performance, which they argued is mediated by the networking behaviors of entrepreneurs. The study highlighted the necessity of personal networking to transform an individual's entrepreneurial mindset into tangible business success. In these discussions, we propose the following hypothesis.

H₆: Entrepreneurial networking has a positive mediating effect on the relationship between entrepreneurial orientation and the business performance of small business owners in Malaysia.

2.5. Research Framework

Therefore, we put forth the following hypothesis:

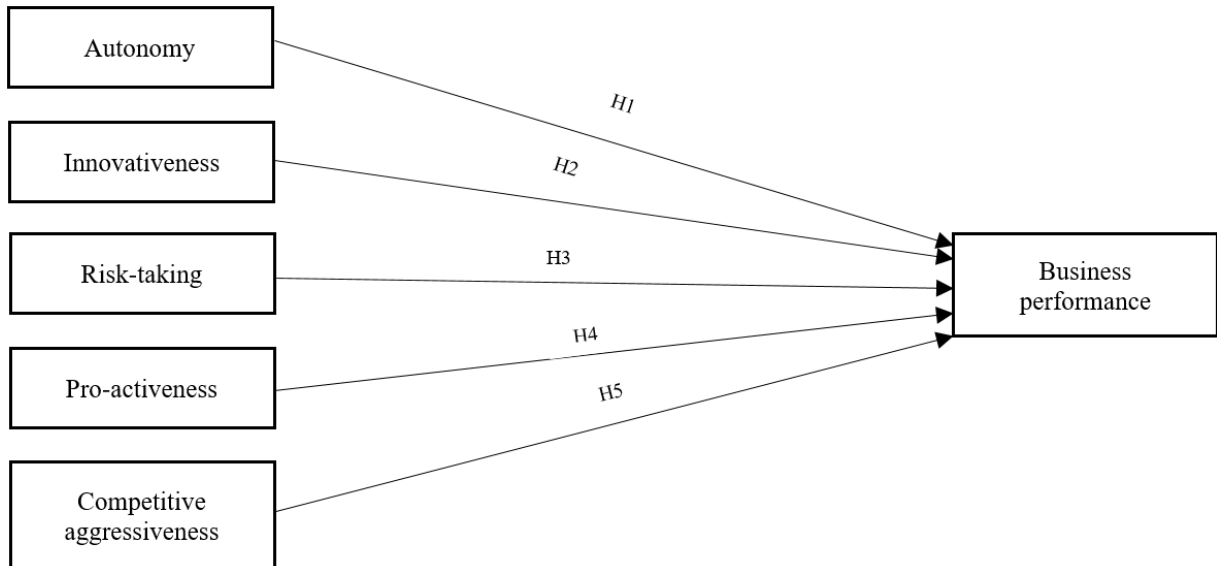


Figure 1. Framework of correlation independent variable to dependent variable.

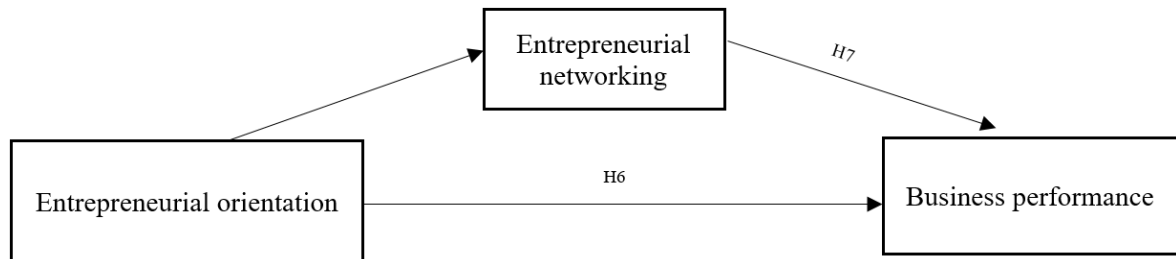


Figure 2. Framework mediating correlation.

Figure 1 illustrates the direct relationships between five dimensions of entrepreneurial orientation (independent variables) focusing on autonomy, innovativeness, risk-taking, proactiveness, competitive aggressiveness, and business performance (dependent variables). Each hypothesis (H1–H5) shows how these factors are thought to directly affect business performance, highlighting the unique ways that each entrepreneurial orientation factor can help a business achieve better results. Figure 2 shows a model in which entrepreneurial networking acts as a link between being entrepreneurial (an independent variable) and business performance (a dependent variable). The first hypothesis (H6) looks at how an entrepreneurial mindset directly affects business performance. The second hypothesis (H7) looks at how entrepreneurial networking affects business performance indirectly, focusing on how networking activities improve or explain the connections between an entrepreneurial mindset and business outcomes.

3. METHODOLOGY

This study employed a quantitative methodology, enabling the generalization of results to the broader population. Data collection involved distributing surveys to small business owners in Malaysia via Google Forms. The primary unit of analysis was the founder who had inherited the business from their family. Only one representative from each participating small business completed the questionnaire to ensure clarity in responses.

The target population for this study is the owners of small businesses in Malaysia in 2022, which is about 1,226,494 (Business Today Editorial, 2022). G*Power 3.1.9.4, a user-friendly statistical tool for social science and behavioral research, was used to determine the sample size (Faul, Erdfelder, Lang, & Buchner, 2007). Accordingly, this software suggested that 146 respondents at minimum would be required for this study, based on a significance level of 0.05 and a power of 0.95 (Figure 3).

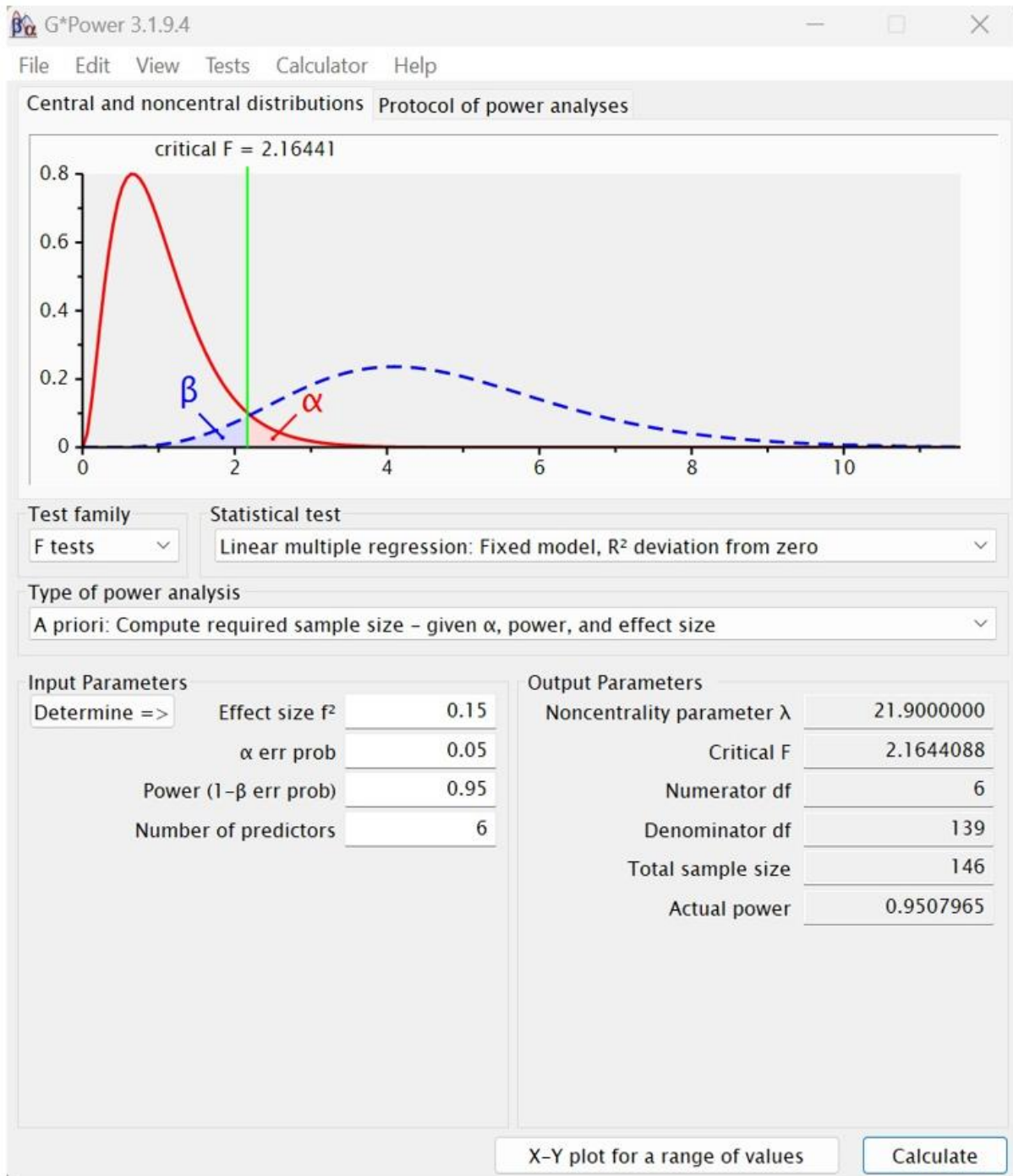


Figure 3. Power analysis with G*Power 3.1.9.4.

This study employed stratified random sampling to identify participants for it. Stratified Random sampling technique segments the population into different groups, called strata, based on similar defining characteristics or traits (Thompson, 2012). This methodology guarantees that the collected sample is depicted from the whole population. According to Sekaran and Bougie (2010) data collection is an essential part of the research, because data are required to obtain relevant information and specific information, without which the research objectives cannot be met and hypotheses cannot be tested.

In order to get the primary data for this research, a survey was conducted among small business owners in Malaysia using a structured questionnaire with closed-ended questions. Due to the broad geographic extent of Malaysia, the questionnaire was disseminated using the Google Form link to ensure that people in different locations could access it. The sample consisted of 155 questionnaires and was sent to a group of small business

owners, representing a balance of male and female respondents, as well as a relatively equal demographic mix. Out of these, 150 responses were available, and 146 were complete and suitable for analysis. This study picked the sampling period based on Malaysia's business cycle. Using this timing option lowers the chance that responses will change when business is busy or slow, making the results more reliable.

This study collected each questionnaire as soon as it was filled to enable immediate verification of responses. Responses were highly standardized on a five-point Likert scale (1 (strongly disagree) to 5 (strongly agree), for a total of six items. The questionnaire was divided into three parts; the first part was the demographic information; contents and aims of other two), parts are described in different parts of the article. Such steps not only mean that subsequent researchers can reproduce the methodology but are also able to consider the rationale behind the choice of sample period.

3.1. Section A

Focusing on entrepreneurial orientation, it utilizes tools derived from Lumpkin and Dess (1996). The measure consists of 20 items distributed across five dimensions: autonomy, innovativeness, risk-taking, proactiveness, and aggressive competitiveness, as shown in Table 2.

Table 2. The Instruments of entrepreneurial orientation.

Variable	Dimension	No of items	Sources
Entrepreneurial orientation	Autonomy	4	Lumpkin and Dess (1996)
	Innovativeness	5	
	Risk-taking	4	
	Pro-activeness	3	
	Competitive aggressiveness	4	

3.2. Section B

The study focuses on entrepreneurial networking and evaluates it using seven items. The study's results suggest that entrepreneurial networking can be characterized as a unidimensional construct (Premaratna, 2002). The questionnaire was adapted from the research conducted by Premaratna (2002) as shown in Table 3.

Table 3. The instruments of entrepreneurial networking.

Variable	Dimension	No of items	Sources
Entrepreneurial networking	Families	1	Premaratna (2002)
	Friends	1	
	Acquaintance	1	
	Government agencies	1	
	Non-government agencies (NGO)	1	
	Small firms	1	
	Financial institutions	1	

3.3. Section C

Evaluation of business performance. Business performance was assessed using four measures. The questionnaire was derived from the research conducted by Vorhies and Morgan (2003) as shown in Table 4.

Table 4. The instruments of business performance.

Variable	Dimension	No. of items	Sources
Business performance	Sales growth rate	1	Vorhies and Morgan (2003)
	Employment growth	1	
	Gross profit growth	1	
	Return on assets (ROA)	1	
	Return on investment (ROI)	1	

The survey data underwent analysis using Smart PLS 4.0.9.3. We initially conducted a pilot test to evaluate the validity and reliability of the instrument. The statistical methods used to achieve the research objectives included Cronbach's alpha.

4. RESULTS

Table 5 shows a summary of the measurement model assessment. Cronbach's alpha for all the constructs was above the acceptable level of 0.65 (Chua, 2011) confirming that all constructs had an acceptable level of internal consistency. To confirm reliability, confirmatory factor analysis was used. The CR and AVE were calculated as advocated by Hair, Black, Babin, and Anderson (2010). Each construct qualifies with CR and AVE values of at least 0.60 and 0.50 (Zainudin, 2012). Moreover, discriminant validity analysis indicated that the correlations among the components remained below 0.85, fulfilling (Kline, 1998) standards.

Table 5. Measurement model evaluation.

Construct	Cronbach's alpha	Construct reliability	Average variance extracted (AVE)
Autonomy	0.932	0.960	0.819
Innovativeness	0.922	0.922	0.762
Risk-taking	0.908	0.911	0.784
Pro-activeness	0.895	0.895	0.826
Competitive aggressiveness	0.854	0.865	0.694
Entrepreneurial orientation	0.939	0.961	0.510
Entrepreneurial networking	0.966	0.980	0.830
Business performance	0.901	0.910	0.717

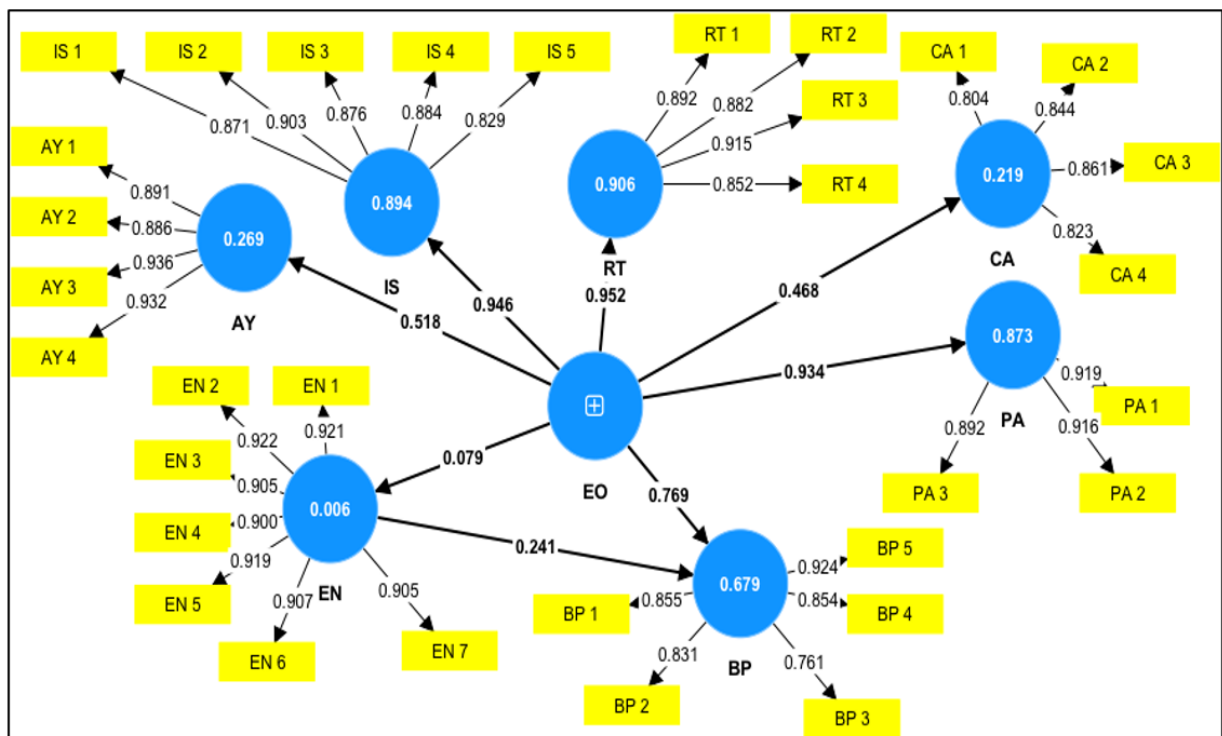


Figure 4. Structural model of mediator regression analyses.

Note: EO (Entrepreneurial orientation), EN (Entrepreneurial networking), BP (Business performance).

The hypotheses propose a positive correlation between business performance and autonomy, innovativeness, risk-taking, proactiveness, and competitive aggressiveness. The data in Table 6 shows that autonomy (p = 0.002), risk-taking (p = 0.001), and competitive aggressiveness (p = 0.000) all had statistically significant positive relationships with business performance. This means that hypotheses H1, H3, and H5 were all true. However, the

study found no significant correlation between innovativeness and business performance ($p = 0.060$) nor between proactiveness and business performance ($p = 0.081$), resulting in the rejection of hypotheses H2 and H4.

Table 6. Outcome of regression analyses conducted on business performance.

Hypothesis	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P-value	Result
H1	-0.160	-0.143	0.055	2.893	0.002	Accepted
H2	0.203	0.213	0.131	1.555	0.060	Rejected
H3	0.435	0.433	0.137	3.177	0.001	Accepted
H4	0.190	0.176	0.135	1.400	0.081	Rejected
H5	0.194	0.199	0.056	3.451	0.000	Accepted

The results show that the direct effect of the independent variable on the dependent variables was statistically significant, as seen in Table 7 and Figure 4. Specifically, entrepreneurial orientation had a significant positive impact on business performance ($p = 0.000$) when not considering any mediators, thus supporting Hypothesis H6. But when a mediator variable was added to the model, the link between being an entrepreneur and how well a business did stopped being significant, and the beta value went down ($p = 0.385$). These findings indicate that entrepreneurial networking does not mediate the relationship between entrepreneurial orientation and business performance, leading to the rejection of Hypothesis H7.

Table 7. Outcome of mediator regression analysis.

Hypothesis	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P-value	Result
Before mediator (Entrepreneurial networking) variable enter the model						
H6	0.769	0.774	0.042	18.485	0.000	Accepted
After mediator (Entrepreneurial networking) variable enter the model						
H7	0.019	0.019	0.022	0.869	0.385	Rejected

5. DISCUSSION

This study indicates that business performance in SMEs is generally positive with a strong EO, but it is clear that there are significant differences in the way each EO dimension influences performance, suggesting that not every aspect provides the same benefits in every context. This complex relationship is consistent with earlier research, including in the works of Shah and Ahmad (2019) and Zehir, Can, and Karaboga (2015) that the relationship between entrepreneurial orientation and performance can be mediated by external contingencies, in particular networking.

5.1. Autonomy

This research provides evidence to support (Cordery, Morrison, Wright, & Wall, 2010) confirming that autonomy has a positive performance effect on the business, and the effect is also statistically significant. Business owners can harness their autonomy, make quick decisions, and thrive in competitive landscapes with agility and growth potential. Our results are similar to those from other studies that found autonomy to be one of the things that helped small businesses do well. However, these results are different from those from studies that were done in well-structured businesses, where autonomy may not have as much of an impact because of set procedures.

5.2. Innovativeness

Unlike expectations of the previous literature, findings indicated that innovativeness does not have a significant relationship with business performance, a finding in line with Raj Gautam (2016). Although innovators are well-known to focus on product and process improvements, for small firms with resource constraints, the influence of

innovativeness could be less significant. This finding stands in line with other studies highlighting the importance of innovativeness in larger firms or high-tech industries, where it might be a crucial means of gaining a competitive edge.

5.3. Risk-Taking

The research indicates a significant positive linkage between risk-taking and business performance, as confirmed by [Maldonado-Guzman et al. \(2017\)](#) and [Belgacem \(2015\)](#). In SMEs, where agility and responsiveness are the key, a higher risk-taking tendency can result in meaningful opportunities for growth. In contrast, cultures or industries with risk-averse tendencies may find risk-seeking behavior less rewarding due to the relatively stable environment and support for conservative strategies.

5.4. Proactiveness

In line with [Kavana and Puspitowati \(2022\)](#) the result of this study also shows that there is no significant effect of proactiveness on business performance. In volatile environments, SMEs may benefit more from a reactive strategy, as proactiveness may not always be beneficial. On the other hand, research in stable markets showing that being proactive can improve performance also suggests that this effect is situational and calls for more research into the best ways to use this behavior.

5.5. Competitive Aggressiveness

The results found that competitive aggressiveness has a positive effect on business performance, which supports [Panjaitan, Cempena, Trihastuti, & Panjaitan, 2021](#)). Competitive aggressiveness can serve as an advantage in sectors heavily focused on market share, providing SMEs with an array of ways to take advantage of openings. This dimension may not make a difference in industries with dominant players or industries where collaboration overcomes competition, however.

Overall, the results support what we already know about how EO affects performance and help us better understand how different EO dimensions work together. Because these dimensions are strong in different ways, the link between EO and business performance depends on how the industry works, the resources available to the company, and cultural factors. This effect of the environment needs to be looked into more in future studies so that we can get a better idea of how EO could be strategically used in a wider range of SME settings.

5.6. Entrepreneurial Orientation

There is a strong positive relationship between entrepreneurial orientation and business performance. Many studies have continuously studied this relationship, revealing the positive and substantial influence of entrepreneurial orientation on firms overall performance [\(Engelen et al., 2015; Gupta & Gupta, 2015\)](#). Several empirical pieces of literature have shaped the expected nature of the relationship.

5.7. Entrepreneurial Networking as Mediating

In this case, the outcome showed that entrepreneurial networking did not play a role in the relationship between entrepreneurial orientation and business performance. This result is in line with the findings from [Setyawati, Suroso, and Adi \(2020\)](#). The goal of a previous study by [Setyawati et al. \(2020\)](#) was to find mediating variables that hang between entrepreneurial orientation and performance.

6. CONCLUSION

The objective of this paper is to investigate the influence of entrepreneurial orientation and its four specific dimensions on the operational performance characteristics of small business owners in Malaysia. It further

examines the potential mediation of this relationship through entrepreneurial networking. Cross-sectional data was collected from 146 small manufacturing business owners using a questionnaire and stratified random sampling, while the analysis was conducted using Smart PLS.

The finding shows the positive impact of entrepreneurial orientation, i.e., autonomy, risk-taking, and competitive aggressiveness, on the business performance of small business owners in Malaysia. This is in consonance with the principle of the RBV encouraging an entrepreneurial strategic mindset that leads to positive outcomes. On the contrary, innovativeness and proactiveness did not display significant influences on business performance; hence there is evidence that not all dimensions of the RBV are always valid. The results of the study indicate that even if a high level of entrepreneurial orientation can be a positive driver of performance, the importance of the individual dimensions might differ.

In contrast to Western perceptions, in which innovativeness is perceived as critical, in the Malaysian context, it was found to have a negative relationship with performance. This emphasizes the need for Malaysian small business owners to allocate funds for research and development (R&D) and training to instill innovation. We didn't accept the first part of the hypothesis that entrepreneurial networking mediates the link between being entrepreneurial and business performance. This is because the unexpected desire for openness makes networking better but doesn't always lead to better performance. The findings draw upon literature by providing a new understanding of the types of responses each dimension of entrepreneurial orientation has on business performance and expand knowledge on the mediating roles of entrepreneurial networking, which does not corroborate the yoke. These insights are broader than the Malaysian market and apply to small businesses in similar emerging economies.

To make policy suggestions more useful in real life, specific and detailed suggestions based on the current study's findings can help small businesses in ways that are related to their growth and ability to bounce back from setbacks. Firstly, increased autonomy for SMEs, coupled with streamlined regulatory processes and specific grants for projects that yield broader societal benefits, could significantly empower business owners across the board. Policymakers should remove unnecessary bureaucratic obstacles so that SMEs have more room in decision-making, where it is one of the keys to growing and adapting in a very competitive market.

Allocating resources to support innovativeness is also indispensable. Innovation grants, tax incentives, and joint university partnerships could lower the cost of accessing research and development and advanced technology resources for SMEs. With this support, small businesses could freely explore innovative options and gain competitive advantages over their large competitors without incurring significant costs. Similarly, targeted policies aimed at encouraging more responsible risk-taking could likewise go a long way. SMEs must engage in high-betas and high-risk with their business and lives, but risk-taking must be informed—introducing low-interest loans, risk-sharing, and workshops on financial literacy will ensure they take calculated risks. With such backing, they can assess risks and take controlled steps toward growth that enhance performance.

Stable sectors can specifically encourage proactiveness, as trend prediction and proactive strategies can yield significant advantages. With market research and trend analysis resources from government agencies, SMEs will be able to identify and respond to new opportunities and stay ahead of gaps in the industry. One way to nurture competitive aggressiveness is to provide business development training and networking opportunities, especially in growth sectors. Focusing on competitive positioning and differentiation would enable SMEs to enhance their market identity and engage in back-and-forth competition.

Finally, it is crucial to establish strong networks of entrepreneurs. Policymakers may promote local clusters and support establishments by offering relevant services so that SMEs will be able to enter collaboration with large firms and enter a network including resources, mentoring, etc. Such a network-based approach would reinforce the positive effects of entrepreneurial orientation on business results. Such specific policies will help SMEs grow their stronger entrepreneurial capabilities and create a more effective and vibrant sector for economic stability and development.

7. DIRECTIONS FOR FUTURE RESEARCH

This study investigates how entrepreneurial orientation impacts the performance of small businesses in Malaysia. However, the limited sample size necessitates caution, suggesting that future researchers should confirm these findings using larger and more diverse participant pools from different regions across Malaysia. Furthermore, since entrepreneurial networks did not act as a bridge between an entrepreneurial mindset and business performance, other possible bridges might be studied in the future. For instance, the role of marketing innovation or perceptions of environmental uncertainty could provide valuable insights into the dynamics of this relationship. This approach could enhance our understanding of how different factors influence the effectiveness of entrepreneurial orientation in improving business outcomes.

Funding: This study received no specific financial support.

Institutional Review Board Statement: The Ethical Committee of the INTI International University, Malaysia has granted approval for this study on 5 May 2023 (Ref. No. INTI/ UEC/ 2023/ 011).

Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

Data Availability Statement: The corresponding author can provide the supporting data of this study upon a reasonable request.

Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

REFERENCES

- Adam, A., Hassan, R., & Abdullah, H. (2021). Maintaining the survival of Malaysian SMEs during Covid-19 outbreak: Challenges and suggestion for management. *ASEAN Entrepreneurship Journal*, 7(1), 27-33.
- Adomako, S., Amankwah-Amoah, J., Donbesuur, F., Ahsan, M., Danso, A., & Uddin, M. (2022). Strategic agility of SMEs in emerging economies: Antecedents, consequences and boundary conditions. *International Business Review*, 31(6), 102032. <https://doi.org/10.1016/j.ibusrev.2022.102032>
- Aguilera, R. V., De Massis, A., Fini, R., & Vismara, S. (2024). Organizational goals, outcomes, and the assessment of performance: Reconceptualizing success in management studies. *Journal of Management Studies*, 61(1), 1-36. <https://doi.org/10.1111/joms.12994>
- Akpa, V. O., Asikhia, O. U., & Nneji, N. E. (2021). Organizational culture and organizational performance: A review of literature. *International Journal of Advances in Engineering and Management*, 3(1), 361-372.
- Al-Mamary, Y. H., & Alshallaqi, M. (2022). Impact of autonomy, innovativeness, risk-taking, proactiveness, and competitive aggressiveness on students' intention to start a new venture. *Journal of Innovation & Knowledge*, 7(4), 100239. <https://doi.org/10.1016/j.jik.2022.100239>
- Anderson, A. R., Jack, S. L., & Drakopoulou Dodd, S. (2005). The role of family members in entrepreneurial networks: Beyond the boundaries of the family firm. *Family Business Review*, 18(2), 135-154. <https://doi.org/10.1111/j.1741-6248.2005.00037.x>
- Anisul Huq, F., Stevenson, M., & Zorzini, M. (2014). Social sustainability in developing country suppliers: An exploratory study in the ready made garments industry of Bangladesh. *International Journal of Operations & Production Management*, 34(5), 610-638. <https://doi.org/10.1108/ijopm-10-2012-0467>
- Antonicic, B., & Hisrich, R. D. (2003). Clarifying the intrapreneurship concept. *Journal of Small Business and Enterprise Development*, 10(1), 7-24. <https://doi.org/10.1108/14626000310461187>
- Asim, Z., Shamsi, I. R. A., Wahaj, M., Raza, A., Abul Hasan, S., Siddiqui, S. A., . . . Seng Teck, T. (2022). Significance of sustainable packaging: A case-study from a supply chain perspective. *Applied System Innovation*, 5(6), 117.
- Augusto Felício, J., Rodrigues, R., & Caldeirinha, V. R. (2012). The effect of intrapreneurship on corporate performance. *Management Decision*, 50(10), 1717-1738. <https://doi.org/10.1108/00251741211279567>

- Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of Management*, 27(6), 643-650. <https://doi.org/10.1177/014920630102700602>
- Basu, A., & Virick, M. (2008). *Assessing entrepreneurial intentions amongst students: A comparative study*. Paper presented at the In VentureWell. Proceedings of Open, the Annual Conference (p. 79). National Collegiate Inventors & Innovators Alliance.
- Belgacem, B. (2015). *Entrepreneurial orientation and firms' performance: The case of tunisian companies*. Retrieved from <https://api.semanticscholar.org/CorpusID:167387979>
- Business Today Editorial. (2022). *SME's set to spearhead the Malaysian economy*. Retrieved from <https://www.businesstoday.com.my/2022/07/06/smes-set-to-spearhead-the-malaysian-economy/>
- Carson, D. (1995). *Marketing and entrepreneurship in SMEs: An innovative approach*. Retrieved from <https://api.semanticscholar.org/CorpusID:166500061>
- Carter, T. (2021). *The true failure rate of small business*. *Entrepreneur*. Retrieved from <https://www.entrepreneur.com/starting-a-business/the-true-failure-rate-of-small-businesses/361350>
- Casillas, J. C., Moreno, A. M., & Barbero, J. L. (2010). A configurational approach of the relationship between entrepreneurial orientation and growth of family firms. *Family Business Review*, 23(1), 27-44. <https://doi.org/10.1177/0894486509345159>
- Chang, S. C., Lin, R. J., Chang, F. J., & Chen, R. H. (2007). Achieving manufacturing flexibility through entrepreneurial orientation. *Industrial Management & Data Systems*, 107(7), 997-1017. <https://doi.org/10.1108/02635570710816711>
- Chaudhuri, R., Chatterjee, S., Vrontis, D., & Thrassou, A. (2024). Adoption of robust business analytics for product innovation and organizational performance: The mediating role of organizational data-driven culture. *Annals of Operations Research*, 339(3), 1757-1791. <https://doi.org/10.1007/s10479-021-04407-3>
- Chua, Y. P. (2011). *Research methods and statistics: Research methods*. Kuala Lumpur: Mcgraw-Hill Education.
- Cordery, J. L., Morrison, D., Wright, B. M., & Wall, T. D. (2010). The impact of autonomy and task uncertainty on team performance: A longitudinal field study. *Journal of Organizational Behavior*, 31(2-3), 240-258. <https://doi.org/https://doi.org/10.1002/job.657>
- Coulthard, M. (2007). The role of entrepreneurial orientation on firm performance and the potential influence of relational dynamism. *Journal of Global Business and Technology*, 3(1), 29-39.
- Covin, J. G., Green, K. M., & Slevin, D. P. (2006). Strategic process effects on the entrepreneurial orientation–sales growth rate relationship. *Entrepreneurship Theory and Practice*, 30(1), 57-81. <https://doi.org/10.1111/j.1540-6520.2006.00110.x>
- Darling, J., Gabrielsson, M., & Seristö, H. (2007). Enhancing contemporary entrepreneurship: A focus on management leadership. *European Business Review*, 19(1), 4-22. <https://doi.org/10.1108/09555340710714126>
- Dess, G. G., & Beard, D. W. (1984). Dimensions of organizational task environments. *Administrative Science Quarterly*, 29(1), 52-73. <https://doi.org/10.2307/2393080>
- Development Bank, A. (2021). ADB Financial Report 2021: Management's Discussion and Analysis and Annual Financial Statements.
- Economic Census. (2022). *The Malaysian economy in figures 2022*. Retrieved from <http://economiccensus.dosm.gov.my/ec2/index.php/en/info-banci-ekonomi/mengenai-banci-ekonomi>
- Engelen, A., Gupta, V., Strenger, L., & Brettel, M. (2015). Entrepreneurial orientation, firm performance, and the moderating role of transformational leadership behaviors. *Journal of Management*, 41(4), 1069-1097. <https://doi.org/10.1177/0149206312455244>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G* power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175-191. <https://doi.org/10.3758/bf03193146>

- Ferreira, J., Coelho, A., & Moutinho, L. (2020). Dynamic capabilities, creativity and innovation capability and their impact on competitive advantage and firm performance: The moderating role of entrepreneurial orientation. *Technovation*, 92, 102061. <https://doi.org/10.1016/j.technovation.2018.11.004>
- Gupta, V., & Gupta, A. (2015). The concept of entrepreneurial orientation. *Foundations and Trends® in Entrepreneurship*, 11(2), 55-137. <https://doi.org/10.1561/03000000054>
- Haider, S. H., Asad, M., & Fatima, M. (2017). Entrepreneurial orientation and business performance of manufacturing sector small and medium scale enterprises of Punjab Pakistan. *European Business and Management*, 3(2), 21-28. <https://doi.org/10.11648/j.ebm.20170302.12>
- Hair, J., Black, W., Babin, B., & Anderson, R. (2010). *Multivariate data analysis* (7th ed.). New York: Pearson.
- Havnes, P.-A., & Senneseth, K. (2001). A panel study of firm growth among SMEs in networks. *Small Business Economics*, 16(4), 293-302. <https://doi.org/10.1023/A:1011100510643>
- Hoo, W. C., Loy, C. K., Cheng, A. Y., Sigar, D. T., Zulkifli, Z. K. B., & Jomitol, J. (2023). Impact of search engine optimization dimensions on SME companies using online promotion in Malaysia. *WSEAS Transactions on Business and Economics*, 20, 998-1007. <https://doi.org/10.37394/23207.2023.20.92>
- Hughes, M., & Morgan, R. E. (2007). Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. *Industrial Marketing Management*, 36(5), 651-661. <https://doi.org/https://doi.org/10.1016/j.indmarman.2006.04.003>
- Idham, B. M., Yusof, M., & Ariffin, M. (2020). *A journey towards sustainability: A review on sustainable development implementation in Malaysia*. Paper presented at the IOP Conference Series: Earth and Environmental Science, 494(1). <https://doi.org/10.1088/1755-1315/494/1/012011>.
- Jarillo, J. C. (1989). Entrepreneurship and growth: The strategic use of external resources. *Journal of Business Venturing*, 4(2), 133-147. [https://doi.org/https://doi.org/10.1016/0883-9026\(89\)90027-X](https://doi.org/https://doi.org/10.1016/0883-9026(89)90027-X)
- Johannisson, B. (1986). Network strategies: Management technology for entrepreneurship and change. *International Small Business Journal*, 5(1), 19-30. <https://doi.org/10.1177/026624268600500102>
- Kavana, H., & Puspitowati, I. (2022). *The effect of proactive action, innovation and risk taking on business performance*. Paper presented at the In Tenth International Conference on Entrepreneurship and Business Management 2021 (ICEBM 2021) (pp. 284-289). Atlantis Press.
- Khalil, M. I., Haque, R., bin S Senathirajah, A. R., Chowdhury, B., & Ahmed, S. (2022). Modeling factors affecting SME performance in Malaysia. *International Journal of Operations and Quantitative Management*, 28(2), 506-524. <https://doi.org/10.53730/ijhs.v6ns5.10879>
- Kibui, A. W., Gachunga, H., & Namusonge, G. (2014). Role of talent management on employees retention in Kenya: A survey of state corporations in Kenya: Empirical review. *International Journal of Science and Research*, 3(2), 414-424.
- Kline, R. B. (1998). *Principles and practice of structural equation modeling in principles and practice of structural equation modeling*. New York: Guilford Press.
- Kolyaka, T. (2021). *Financial bootstrapping as relational contract: Linking resource needs, bootstrapping behaviors, and outcomes of bootstrapping exchanges*. Doctoral Dissertation, Lund University School of Economics and Management. Lund University, Media-Tryck.
- Kowo, S. A., & Akanmu, P. M. (2021). The efficacy of entrepreneurship orientation on SMEs' performance. *Journal of Islamic Economic and Business Research*, 1(1), 40-58. <https://doi.org/10.18196/jiebr.v1i1.11616>
- Kuratko, D. F., & Audretsch, D. B. (2009). Strategic entrepreneurship: Exploring different perspectives of an emerging concept. *Entrepreneurship Theory and Practice*, 33(1), 1-17. <https://doi.org/10.1111/j.1540-6520.2008.00278.x>
- Lichtenstein, B. B. (2011). Levels and degrees of emergence: Toward a matrix of complexity in entrepreneurship. *International Journal of Complexity in Leadership and Management*, 1(3), 252-274. <https://doi.org/10.1504/ijclm.2011.042548>

- Lisboa, A., Skarmeas, D., & Lages, C. (2011). Entrepreneurial orientation, exploitative and explorative capabilities, and performance outcomes in export markets: A resource-based approach. *Industrial Marketing Management*, 40(8), 1274-1284. <https://doi.org/10.5465/AMR.1996.9602161568>
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135-172.
- MacMillan, I. C. (1982). Seizing competitive initiative. *Journal of Business Strategy*, 2(4), 43-57.
- Madsen, E. L. (2007). The significance of sustained entrepreneurial orientation on performance of firms—A longitudinal analysis. *Entrepreneurship and Regional Development*, 19(2), 185-204. <https://doi.org/10.1080/08985620601136812>
- Maldonado-Guzman, G., Martinez-Serna, M. D. C., & Pinzón-Castro, S. Y. (2017). Entrepreneurial orientation and growth in Mexican small business. *Journal of Management and Sustainability*, 7, 94. <https://doi.org/10.5539/jms.v7n1p94>
- Mason, M. C., Floreani, J., Miani, S., Beltrame, F., & Cappelletto, R. (2015). Understanding the impact of entrepreneurial orientation on SMEs' performance. The role of the financing structure. *Procedia Economics and Finance*, 23, 1649-1661. [https://doi.org/10.1016/s2212-5671\(15\)00470-0](https://doi.org/10.1016/s2212-5671(15)00470-0)
- Midor, K., Sujová, E., Cierna, H., Zarebinska, D., & Kaniak, W. (2020). Key performance indicators (KPIS) as a tool to improve product quality. *New Trends in Production Engineering*, 3(1), 347-354.
- Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science*, 29(7), 770-791. <https://doi.org/10.1287/mnsc.29.7.770>
- Mohamad, A., Mohd Rizal, A., Kamarudin, S., & Sahimi, M. (2022). Exploring the co-creation of small and medium enterprises, and service providers enabled by digital interactive platforms for internationalization: A case study in Malaysia. *Sustainability*, 14(23), 16119. <https://doi.org/10.3390/su142316119>
- Mojikon, M., Abdullah, A., & Shamsuddin, S. (2016). Entrepreneurial orientation and effects on firm performance on SMEs in Sabah manufacturing sector. *ASEAN Entrepreneurship Journal*, 2(1), 119-129.
- Monsen, E., & Wayne Boss, R. (2009). The impact of strategic entrepreneurship inside the organization: Examining job stress and employee retention. *Entrepreneurship Theory and Practice*, 33(1), 71-104. <https://doi.org/10.1111/j.1540-6520.2008.00281.x>
- Mubarak, M. F., Petraite, M., Rasli, A., & Shabbir, M. (2023). Capability framework to support supply chain open innovation networks in blockchain driven supply chain management: A multi-dimensional perspective. In (pp. 119-134). Singapore: Springer Nature Singapore.
- Muhmad, S. N., Ismail, W. N. S. W., Rahim, N. A. A. A., & Ahmad, S. N. (2020). Islamic financing for small medium enterprises: Challenges and opportunities. *Global Business Management Review*, 12(2), 50-64.
- Musa, D., Ghani, A. A., & Ahmad, S. (2014). Linking entrepreneurial orientation and business performance: The examination toward performance of cooperatives firms in Northern Region of Peninsular Malaysia. *International Journal of Business and Technopreneurship*, 4(2), 247-264.
- News Straits Time Business. (2021). *Majority of SMEs expect recovery in 2021: Mastercard report*. Retrieved from <https://www.nst.com.my/business/2021/03/678225/majority-smes-expect-recovery-2021-mastercard-report>
- O'Donnell, A. (2004). The nature of networking in small firms. *Qualitative Market Research: An International Journal*, 7(3), 206-217. <https://doi.org/10.1108/13522750410540218>
- Okeyo, W. O., Gathungu, J. M., & K'Obonyo, P. (2016). Entrepreneurial orientation, business development services, business environment, and performance: A critical literature review. *European Scientific Journal*, 12(28). <https://doi.org/10.19044/esj.2016.v12n28p188>
- Ostgaard, T. A., & Birley, S. (1994). Personal networks and firm competitive strategy—a strategic or coincidental match? *Journal of Business Venturing*, 9(4), 281-305. [https://doi.org/https://doi.org/10.1016/0883-9026\(94\)90009-4](https://doi.org/https://doi.org/10.1016/0883-9026(94)90009-4)
- Panjaitan, H., Cempena, I. B., Trihastuti, A., & Panjaitan, F. A. B. (2021). The effect of competitive aggressiveness on business performance: A case study of private universities in Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(4), 875-884. <https://doi.org/10.13106/jafeb.2021.vol8.no4.0875>

- Patzelt, H., & Shepherd, D. A. (2011). Recognizing opportunities for sustainable development. *Entrepreneurship Theory and Practice*, 35(4), 631-652. <https://doi.org/10.1111/j.1540-6520.2010.00386.x>
- Penrose, E. T. (1959). *The theory of the growth of the firm*. Oxford: Oxford University Press.
- Pertheban, T. R., Thurasamy, R., Marimuthu, A., Venkatachalam, K. R., Annamalah, S., Paraman, P., & Hoo, W. C. (2023). The impact of proactive resilience strategies on organizational performance: Role of ambidextrous and dynamic capabilities of SMEs in manufacturing sector. *Sustainability*, 15(16), 12665. <https://doi.org/10.3390/su151612665>
- Premaratna, S. (2002). *Entrepreneurial networks and small business development: The case of small enterprises in Sri Lanka*. Doctoral Dissertation, Eindhoven University of Technology. Technische Universiteit Eindhoven.
- Raj Gautam, P. (2016). Entrepreneurial orientation and business performance of handicraft industry: A study of Nepalese handicraft enterprises. *International Journal of Small Business and Entrepreneurship Research*, 4(2), 48-63.
- Ratnasari, R. T., Gunawan, S., Pitchay, A. A., & Mohd Salleh, M. C. (2022). Sustainable medical tourism: Investigating health-care travel in Indonesia and Malaysia. *International Journal of Healthcare Management*, 15(3), 220-229. <https://doi.org/10.1080/20479700.2020.1870365>
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, 33(3), 761-787. <https://doi.org/10.1111/j.1540-6520.2009.00308.x>
- Robledo, S., Vasquez, J. E., Duque-Méndez, N. D., & Duque-Urbe, V. (2023). Networking as an entrepreneurial marketing tool: The link between effectuation and word of mouth. *Journal of Research in Marketing and Entrepreneurship*, 25(2), 270-285. <https://doi.org/10.1108/jrme-08-2020-0112>
- Saad, M. H., Hagelaar, G., Van Der Velde, G., & Omta, S. (2021). Conceptualization of SMEs' business resilience: A systematic literature review. *Cogent Business & Management*, 8(1), 1938347. <https://doi.org/10.1080/23311975.2021.1938347>
- Sekaran, U., & Bougie, R. (2010). *Research methods for business a skill building approach* (5th ed.). UK: John Willey.
- Setyawati, H., Suroso, A., & Adi, P. (2020). Examining the impact of entrepreneurial orientation on marketing performance: The mediating role of entrepreneurial networking and innovation capability. *International Journal of Scientific and Technology Research*, 9(2), 1895-1904.
- Shah, S. Z. A., & Ahmad, M. (2019). Entrepreneurial orientation and performance of small and medium-sized enterprises: Mediating effects of differentiation strategy. *Competitiveness Review: An International Business Journal*, 29(5), 551-572. <https://doi.org/10.1108/CR-06-2018-0038>
- Shahriari, M., & Mahmoudi-Mesineh, M. (2021). High-performance work systems, entrepreneurial orientation, and innovation strategy in developing countries. *International Journal of Innovation Management*, 25(08), 2150090. <https://doi.org/10.1142/s1363919621500900>
- Sharma, V. M., Dave, D. S., Aggarwal, A. K., & Sharma, K. S. (2023). Mitigation of high consequence supply chain disruptive effects on stores and consumers. *International Journal of Logistics Systems and Management*, 45(3), 397-413.
- Shirokova, G., Galieva, N., White, J. V., & Doktorova, D. (2024). Narcissism, workaholism, family support and new venture performance: A moderated mediation model. *Small Business Economics*, 63(1), 379-419. <https://doi.org/10.1007/s11187-023-00831-w>
- Starr, J. A., & MacMillan, I. C. (1990). Resource cooptation via social contracting: Resource acquisition strategies for new ventures. *Strategic Management Journal*, 11(4), 79-92.
- Thompson, S. K. (2012). *Sampling*. New York: Wiley.
- Tsuruta, D. (2020). SME policies as a barrier to growth of SMEs. *Small Business Economics*, 54(4), 1067-1106. <https://doi.org/10.1007/s11187-018-0119-0>
- Valdez-Juárez, L. E., & Pérez-de-Lema, D. G. (2023). Creativity and the family environment, facilitators of self-efficacy for entrepreneurial intentions in university students: Case ITSON Mexico. *The International Journal of Management Education*, 21(1), 100764. <https://doi.org/10.1016/j.ijme.2023.100764>

- Venkatraman, N., & Ramanujam, V. (1986). Measurement of business performance in strategy research: A comparison of approaches. *Academy of Management Review*, 11(4), 801-814. <https://doi.org/10.2307/258398>
- Vorhies, D. W., & Morgan, N. A. (2003). A configuration theory assessment of marketing organization fit with business strategy and its relationship with marketing performance. *Journal of Marketing*, 67(1), 100-115. <https://doi.org/10.1509/jmkg.67.1.100.18588>
- Waibe, S., & Wei Hin, C. (2017). Entrepreneurial orientation, learning orientation, technology orientation, access to debt finance & firm performance. *International Business Management*, 11, 444-453.
- Xu, S., Wu, X., He, J., Zhu, R., Morrison, A. M., & Xie, C. (2024). Turning entrepreneurial networks into business model innovation for start-ups. *Management Decision*, 62(4), 1395-1423. <https://doi.org/10.1108/md-04-2023-0558>
- Yang, C. (2006). *The effect of leadership and entrepreneurial orientation of small and medium enterprises on business performance in Taiwan*. Retrieved from <https://api.semanticscholar.org/CorpusID:8860790>
- Zainudin, A. (2012). *A handbook on SEM: Structural equation modeling using amos graphics* (4th ed.). Kelantan: University Technology MARA Press.
- Zeebaree, M. R. Y., & Siron, R. B. (2017). The impact of entrepreneurial orientation on competitive advantage moderated by financing support in SMEs. *International Review of Management and Marketing*, 7(1), 43-52.
- 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/https://doi.org/10.1016/j.sbspro.2015.11.381>
- Zhang, T., Li, X., & Gao, H. (2015). Fracture of graphene: A review. *International Journal of Fracture*, 196, 1-31. <https://doi.org/10.1007/s10704-015-0039-9>
- Zhao, L., & Aram, J. D. (1995). Networking and growth of young technology-intensive ventures in China. *Journal of Business Venturing*, 10(5), 349-370. [https://doi.org/https://doi.org/10.1016/0883-9026\(95\)00039-B](https://doi.org/https://doi.org/10.1016/0883-9026(95)00039-B)
- Zhe, B. O. M., & Hamid, N. A. (2021). The impact of digital technology, digital capability and digital innovation on small business performance. *Research in Management of Technology and Business*, 2(1), 499-509. <https://doi.org/10.30880/rmtb.2021.02.01.036>
- Zighan, S., Abualqumboz, M., Dwaikat, N., & Alkalha, Z. (2022). The role of entrepreneurial orientation in developing SMEs resilience capabilities throughout COVID-19. *The International Journal of Entrepreneurship and Innovation*, 23(4), 227-239. <https://doi.org/10.1177/14657503211046849>

Views and opinions expressed in this article are the views and opinions of the author(s), Asian Economic and Financial Review shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.