
ENVIRONMENTAL FACTORS AND MEDIATING ROLE OF RISK-TAKING PROPENSITY AMONG SUCCESSFUL WOMEN ENTREPRENEURS IN MALAYSIA

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ABSTRACT

This paper is to addresses the relationship underexplored, but potentially very central issue in entrepreneurship research by investigating the relationship between the risk-taking propensity and environmental factors among successful women entrepreneurs in Malaysia. Risk attitudes of entrepreneurs are well-established drivers of business success but leaving out the role of risk-taking propensity. Structural equation modelling is used to test the direct and indirect effects of environmental factors and the risk-taking propensity of the research hypotheses on a data set of 316 successful women entrepreneurs. Our results show that risk-taking propensity fully mediates the effect of environmental factors of women entrepreneurs to success. These findings lead us to believe that the perceptual framing of a situational context in the women entrepreneurs' thought processes increased and overwhelming the environmental factors concerning either they are risk-seeking or risk-averseness and responsible risk-takers through careful identification of risk reduction strategies. Therefore, the tendency to engage in a risky decision is more psychological and implications of the research are further explored.

Key words: risk-taking propensity; women entrepreneur's success; environmental factors

Cite this Article: Mohd Nor Hakim Yusoff, Zainon Che Mat, Fakhrul Anwar Zainol, Asyraf Afthanorhan and Rooshihan Merican Abdul Rahim Merican, Environmental Factors and Mediating Role of Risk-Taking Propensity among Successful Women Entrepreneurs in Malaysia, *International Journal of Management*, 11(10), 2020, pp. 561-574.
<http://www.iaeme.com/IJM/issues.asp?JType=IJM&VType=11&IType=10>

1. INTRODUCTION

Entrepreneurship plays essential roles in economic development. The government has identified promoting entrepreneurship among women is one of effective initiative to address sustainable economic development issues (Ramadani et al., 2015, FA Zainol, 2013). With the changing global scenario, women entrepreneurship forefront and becoming increasingly prominent in the entrepreneurial landscape. As reported by GEM (2016), the women entrepreneurship activity based on the opportunity was at 88.9% which is slightly higher than men (77.8%), however, the number of business growth is remain low as compared to businesses owned by men is slow at 13.6% (2004) to 13.9% (2007) down to 13.1% in 2008, up to 19.2% in 2010, and only up to 20.3% in 2015. This slow growth has further reinforced the researcher to examine the reason that caused the momentum, specifically on women entrepreneurs.

The growth of women entrepreneurs has shown a steady upward trend even though shown slow growth according to the Malaysian Statistics Department the registered new companies in 2015 had increased to 920,624 in which only 187,264 were owned by women. Entrepreneurship has been defined as an entrepreneurs' creation that covers four different dimensional aspects in the organization, environmental factors, and processes (Chowdhury et al., 2013). These dimensions are believed to incorporate all entrepreneurship activities with the capability of taking on risk as it affects an entrepreneur's success (Agarwal & Lenka, 2016a).

Entrepreneurs are portrayed as people that are 'very passionate about what they do' (Shefsky, 2011) and are 'willing to take risks', however various studies have shown that women entrepreneurs face greater barriers to growing their companies and some were reported to outperform (Coleman & Kariv, 2013). The degree of risk in entrepreneur's work life is always full of different kind of risks and Caliendo and Kritikos (2010) believed that women entrepreneurs who were modest in taking risks or risk-averse will survive in business but on the contrary, Gartner, and Liao (2012) argued that the women entrepreneurs' tendency toward risk-taking does not materially affect the success of business efforts. Although the factors of success, survival, and growth are closely related and used interchangeably the variables that contribute to the business of success remain a black box especially in light of external or environmental factors (Ligthelm, 2010,). Therefore, this study on environmental factors and the mediating role of risk-taking propensity will provide the requirement that may enable women entrepreneurs in Malaysia to succeed. Even though there are studies that have looked at women entrepreneurs, but likely more focused on developed and western countries. Hence, it's a great need to further examine this issue in a developing country (Aldrich & Dubini, 2013; Jennings & Brush, 2013; Terjesen & Lloyd, 2015).

2. LITERATURE REVIEW

The concepts of entrepreneurship and risk-taking in business literature are two inseparable terms, and the present study analyzes the environmental factors of women entrepreneurs' success and the mediating role of a risk-taking propensity. Women are reported to be more energized to develop their businesses, to gaining economic independence, as well to be known as a person full of curiosity, with calculated risk tolerance, and who have the skills to solve problems (Orser & Leck 2011). However, based on a study by Roddin, (2012), women entrepreneurs in Malaysia face a variety of problems and challenges, such as a lack of knowledge and technology, especially in marketing . Hence, a study by Usman & Yousaf (2015), further research is needed to explore the importance of specific factors of women entrepreneurs in Malaysia which were likely to affect their success. Frequently, the literature

claims that women are more affected by risk compared to men (Kelley & Patricia., 2011; Weber & Betz, 2002); however, disagreements exist concerning how these risks affect women entrepreneurs' success. In this regard, women entrepreneurs are playing it safe and choosing businesses that are not a high risk which reveals the multiple influences that affect how they think about their own identities as entrepreneurs (Rhouse, 2013).

Referring to environmental factors, Bygrave, (2004), observed that external influences were surrounding the business processes of women entrepreneurs, not usually originating from a single factor but there are many reasons which may reflect these various factors (Hanifa & Sidani, 2011; Barba & Carlos, 2012). Many studies found that the environments, or external factors such as training or knowledge skill and technology which appear to be the main reasons for women to venture into entrepreneurship (Hanifa et al., 2011; Lovely et al., 2012). It was proved by Block and Zhou, (2013) the more spent on technology improvements such as business development, or access to the right technology, was to increased productivity. Also, the necessity of education or skills is to bridge structural processes and transform a social network, with numerous multiplex skills, into an effective network that requires significant education benefit for an entrepreneur's success (Zhouqioqin & Zhang, 2013). Moreover, most of the women entrepreneurs especially in micro and small businesses face obstacles to succeed including, dealing with policy, the skill of technology, and a lower choice of industry (Ibru, 2009). Therefore, the factors of entrepreneurs' success, such as skills of the labor force including technological development as mentioned by Alam & Jani, (2012), who suggested that environmental factors are positively significant to women entrepreneurs' success in business.

In this study, the traits of a 'risk-taking propensity' are a mediator as it involves decision making, that is relevant or not, in exchange for a greater or successful result. Zhao & Lumpkin., (2010), concluded that a risk propensity is the best predictor of successful entrepreneurs. According to Sitkin and Weingart (1995, p. 1575), risk-taking propensity can be defined as "an individual's current tendency to take or avoid risks". Previous studies have stressed risk-taking as a relevant factor in determining business success (Wiklund & Shepherd, 2003, Al Mamun, Kumar, Ibrahim & Bin Yusoff, 2017). However, Rauch & Lumpkin, (2009), on his entrepreneur orientation framework found a weak positive effect of risk-taking on the entrepreneur's success and supported by Zhao & Seibert, (2010), who mentioned that there are no significant effects of risk-taking towards male and women entrepreneurs' success. Thus, according to Kraus & Hosman, (2012), negative perceptions of risk will affect in unstable situations or business success when the environmental factors are unsupportive. Therefore, in the present study, identifying a risk-taking propensity is a key variable as a mediation role among women entrepreneur's success.

2.1. Theories and Concepts

Prior studies have examined the various approaches of the theories which have contributed to the development of a theoretical framework dealing with the involvement of women entrepreneurs and their success. Consequently, this research builds upon elements of existing entrepreneurship theory with theoretical foundations of the research underpinned by social cognitive theory and prospect theory. Social cognitive theory (Bandura 1977, 1986) proposed a framework to predict changes in human behavior. This theory determines the processes that are concerned more with how behavior is initiated, directed, sustained, and attempt to identify the relationship between the dynamic variables, which make up motivation. It also emphasizes how cognitive, behavioral, personal, and environmental factors interact to determine motivation and behavior (Crothers et al., 2008). The prospect theory defined, in its original text, is: "Decision making under risk can be viewed as a choice between prospects or

gambles.” The theory described an irrational tendency to gamble with profits less than with losses. It is based "on the assumptions of the whole decision-maker who is systematically biased in the same way and to the same extent" (Kahneman & Tversky, 1982). Therefore, a perpetual interpretation is needed for the entrepreneur as it plays a pivotal role in women entrepreneur’s success.

2.2. Proposed Framework

The proposed model takes into account several models introduced by Tan KM, 1991, the model by Sefiani, 2013 and Sitkin 1995. As a result of the combination of these models the conceptual model is proposed to place risks as the mediator of women entrepreneurship success and environmental factors (Figure 1).

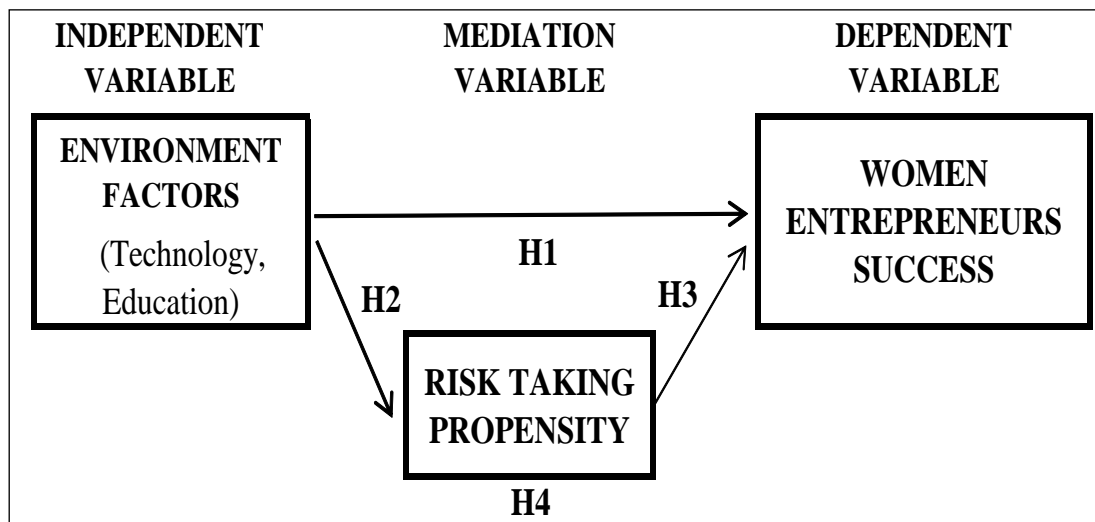


Figure 1 Women Entrepreneur’s Success Model

2.2.1. Relationship between Environmental factors of women entrepreneurs to success

A woman, who decides to start a business, will give full effort and commitment while struggling to succeed. The host of environmental factors, such as skill and financial support (Chowdhury & Amin, 2011), limited knowledge on business (Keh & Ng, 2007) and technology (Gundry & Welsch, 2002; Gibbons & O’Connor, 2003) have been found to impede the success of entrepreneurs, especially of small and medium businesses in developing countries.

Previous studies show positive correlations between the environmental factors in terms of the important role of technology has been discussed on how to sustain business success globally and industrial competitiveness, in predicting the long-term firm survival, and also in determining firm success (Lau et al., 2010; Zainol et al., 2019). Besides that, government support which covers financial and non-financial services were to help improve women entrepreneurs’ success (Hambali, 2011). While Mitchelmore and Rowley (2013) found that due to a lack of knowledge, most women entrepreneurs faced problems in handling their business finance and development. Shastri & Sinha, (2010), mentioned that there is scarcely any literature to review business environment factors’ effect on women entrepreneur’s activities, therefore, we hypothesize;

H1. The environmental factors significantly influence the entrepreneur’s success

2.2.2. The relationship between environmental factors of women entrepreneurs and risk-taking propensity

Women entrepreneurs full of visions and according to Frese and Gielnik, (2014), they should be capable of demonstrating the ability to act as investors, technologists, and many more, because they expect to become successful entrepreneurs. Entrepreneurs making decisions especially women entrepreneurs are unique and undeniable processes of opportunity, therefore, risk recognition in decision making for success is subject to the other variables including technology and knowledge (Liu & Miao, 2010). Another study by Zaki, (2012), recommended that a diversity of knowledge and experience will create innovative entrepreneur cultures and reasonable risk calculated through other environmental factors women entrepreneurs may succeed. If they discuss ideas, they are risks averse, responsible, and look for solutions (Gomezelj & Kušce, 2013). Therefore, the characteristics of women entrepreneurs of micro and small businesses, especially concerning risk adoption, are also capable of taking deliberate risks with specific environmental factors that would contribute to business success.

H2: The environmental factors significantly influence the risk-taking propensity.

2.2.3. Relationship between the Risk-Taking Propensity and Women Entrepreneur's Success

The majority of literature examines gender differences in determining the willingness to take business risks; it shows that women are more risk-averse and more homogeneous than men (Castillo & Freer, 2018). Therefore this study helps to identify the risk-taking preferences and the reasons that a risk predisposition toward business success that remains lower among women entrepreneurs, as well as how to be successfully capable in dealing with activity related to higher risk tolerance for greater competitiveness and an ability to perceive business opportunities (Ferreiro & Carmen, 2013). Furthermore, a study by Quero and Ventura, (2013), found that attitudes conducive, or averse, for involvement in risky entrepreneurship were more affected by the factors of entrepreneurship in the case of women entrepreneurs. Similar to a study by Belwal and Belwal, (2015), fear of failure and an unwillingness to take risks were the major obstacles facing by women entrepreneurs to succeed. Many empirical results have supported the significant relationship between risk-taking and business success, yet the results are often mixed (Wang & Poutziouris, 2010; Zhao & Lumpkin, 2010). Thus, the results of a risk-taking propensity could be presumed to be one of the major factors towards women entrepreneurs' success in Malaysia. Thus, it is hypothesized that;

H3: The risks taking propensity significantly influence the women entrepreneurs' success.

2.2.4. The mediating role between a risk-taking propensity and environmental factors affecting women entrepreneurs' success

The literature indicated that women entrepreneurs, who decided on lower-risk decisions and underestimated environmental uncertainty towards future business, may have decreased their risk-taking propensity related to business success (Butt et al., 2015; Farsi & Nouri, 2016). The mediating role of a risk-taking propensity on technology is predictable, based on the nature of creative behaviors of entrepreneurs, which has been studied widely with a range of technical approaches, in related literature, such as an entrepreneurial orientation (Covin & Slevin, 1986; Ling et al., 2008; Wu & Knott, 2006), which is derived from the positive effects of an entrepreneur's risky behavior. Hence, the entrepreneurs' education with the ability to approach business risk situations and to identify new opportunities is considered to be a lifetime learning process that occurs over time (Goethner & Cantner, 2012; Liñán & Rodríguez, 2015). Previously, Smith and Lohrke (2008), in their study found that an

entrepreneur, who successfully overcomes risk situations by convincing government resources will have a better chance of acquiring business supporting and success in business. Hence, this study examines the mediating role of a risk-taking propensity and the environment factors such as technology and knowledge to make the following hypothesis;

H4: There is a positive mediation effect between a risk-taking propensity and the environmental factors of women entrepreneurs' success.

3. METHOD AND MATERIALS

The self-administered survey was most suitable tool to collect the study data, whereby the analysis unit of the study is the individual, women entrepreneurs in Malaysia. Used the non-probability sampling design i.e. purposive sampling, to obtain from a specific target group to answer the research question (Churchill, 1995) and also be to obtain a large number of respondents quickly, conveniently and economically (Sekaran, 2003). To achieve an adequate response rate, 600 questionnaires were distributed, only 316 questionnaires of surveys were returned equivalent to 52.67 percent of the response rate. Data were collected via a survey questionnaire designed by the researcher. It contained 51 questions using a five-point Likert scale. The Statistical Package for Social Sciences (SPSS 23.0) and Structural equation modeling (SEM-AMOS) was used to analyse the data.

4. RESULT ANALYSIS

The Confirmatory Factor Analysis (CFA) was conducted to evaluating and validating the measurement model of Risk-Taking Propensity, Environmental and Women Entrepreneur Success. By ensuing this known method, the factor loading and fitness index was determined. According to Hair et al., (2019) and Mohamad et al., (2019), the acceptable value of factor loading is at least 0.60 to imply the item is truly explaining the construct role. In terms of the fitness index, several results of fitness index were shown in the Table 1. The composite reliability and Average Variance Extracted (AVE) also been assessed before testing the hypothesis. In this case, the reliability and AVE applied in the current study are achieved at the minimum threshold value of 0.70 and 0.50 respectively (Baistaman et al., 2020; Majid et al., 2020). Specifically, the value of AVE and CR (in parentheses) for Risk-Taking Propensity, Environmental, and Women Entrepreneur Success are 0.6474 (0.917), 0.9605 (0.980), and 0.5795 (0.873). The discriminant validity also satisfied as the diagonal value (square root AVE) for each construct is higher than the construct correlations (Majid et al., 2019; Bahkia et al., 2019).

Table 1 The Fitness Index for Structural Model

Name of Category	Name of Index	Index Value	Comments
Absolute Fit	RMSEA	0.071	Satisfied
Incremental Fit	CFI	0.934	Satisfied
Parsimonious Fit	ChiSq/df	2.576	Satisfied

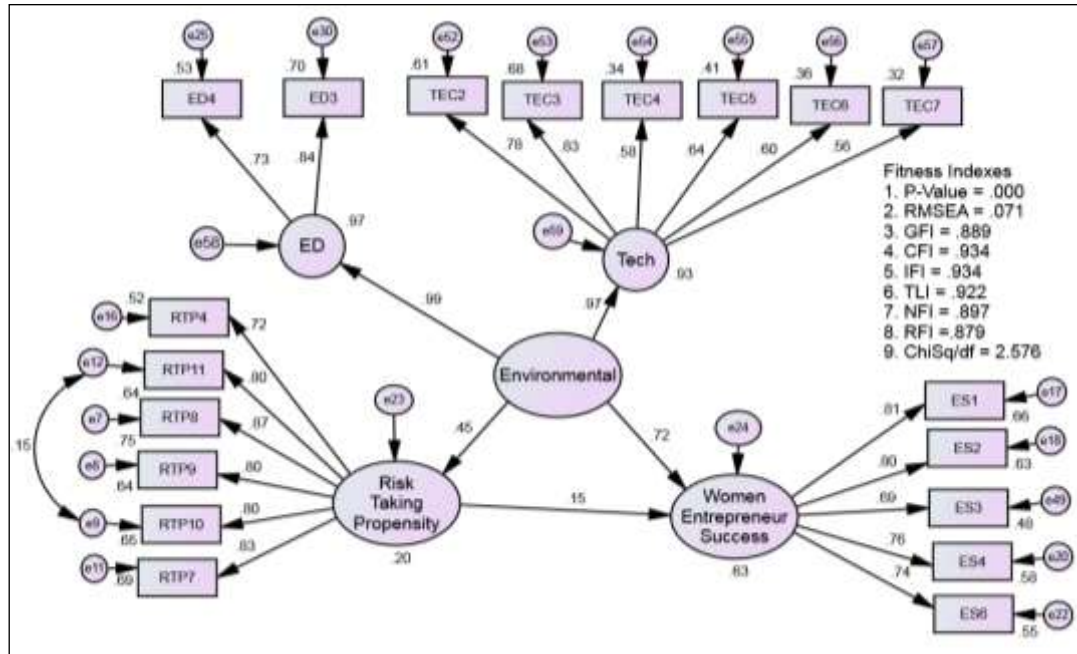


Figure 2 The Regression Path Coefficient in the Structural Model

Table 2 Square Multiple Correlations (R^2) (Standardized Regression Weight)

Construct	Estimate R^2
Entrepreneurial Success	0.63
Risk-taking Propensity	0.20

The value of absolute fit (RMSEA) was 0.071 were close to zero whereby the values less than 0.080 which indicate a good fit for the model study. The values of incremental fit are falling within the range of appropriate values it was greater than 0.90, which is 0.934 and lastly, values of parsimonious fit were 2.576 and recommended acceptable, for the value range of 1 to 3 or should be below than 3.0. Followed by the value of “ r^2 ” shows the variance of the dependent variable is depicted by independent variables of 0.63 and standardized regression weights of the independent variables toward the dependent variable of 0.20 (Table 2). Thus, all the fit indices fall within acceptable ranges and met the model goodness-of-fit requirement.

Table 3 The Relationship between the environmental factors, risk taking propensity and women entrepreneur’s success

Hypothesized Path			Beta Coefficient	S.E	C.R	P-value	Result
Risk-taking Propensity	<--	Environmental	0.840	0.134	6.258	0.000*	Significant
Entrepreneur’s Success	<-	Risk-taking Propensity	0.120	0.043	2.829	0.005*	Significant
Women Entrepreneurs’ Success	<-	Environmental	1.090	0.132	8.282	0.000*	Significant

Note: * $p < 0.05$

Source: Output based on Structural Model

The findings (Table 3) have shown a supportive relationship between environmental factors of women entrepreneurs towards the entrepreneur's success and confirmed the relationship of hypothesis H1, H2, and H3). Hence, to test the mediation effect of the hypothesized, both the effects are direct without the mediation or with the mediation and then the indirect effect was evaluated. The impact of indirect value is the extent to what value of changes in environmental factor produce changes in the women entrepreneur's success through the risk-taking propensity.

The study of analysis has confirmed the relationship of hypothesis H4 between the environmental factors of women entrepreneurs and entrepreneur's success is partially mediated by risk-taking propensity as the direct effect is significant and was not significant for the indirect effect based on Bootstrapping result. The environmental factors of women entrepreneurs towards the entrepreneur's success in table 4 indicate that mediation occurs between risk-taking propensity in the relation of environmental factors and entrepreneurs' success. Therefore, it confirms that the women entrepreneurs in Malaysia fully mediate the value of the risk-taking propensity of the relationship between their environmental and entrepreneur's success.

Table 4 Summary of the Significance Value; Direct and Indirect Effects of the environmental factor of women entrepreneurs

	Direct Effect	Indirect Effect
Bootstrapping P-value Result	0.002 Significant	0.031 Significant
Type of Mediation	Partial Mediation	

5. DISCUSSION AND CONCLUSION

This present study is one of the first empirical studies on the partial mediating role of risk propensity in the relationship between environmental factors and the success of women entrepreneurs in Malaysian. The study of environmental factors of women entrepreneurs has a significant influence and positively related to women entrepreneur's success with as large ($\beta=1.090$, $p < 0.000$) (table 3), and the model has met goodness-of-fit requirement. Results also revealed that risk-taking propensity has a positive relationship between environmental factors of women entrepreneurs, followed by risk-taking propensity and women entrepreneur's success with the standardized path coefficient of the final structural model was ($\beta=0.120$, $p < 0.005$). Hence, this study stated that risk-taking propensity has allowed women, entrepreneurs, to make risky decisions. In this light, women entrepreneurs are more likely to understand that being successful is a desirable behavior as an entrepreneur, therefore they feel is necessary to create positive justification and development on environmental factors such as technology and education knowledge that will make them a risk-taker and saved them from business failure. This is similar to the study by Douglas and Shepherd (2002) which reported that entrepreneurs' work ethics are predominantly influenced by their knowledge or technology involvement that is responsible for business development. Furthermore, Macko and Tyszka (2009) stated that the risk involved during business development is related to the knowledge skills of an entrepreneur. In this regard, the H1, H2, H3 research hypotheses are accepted as managing environmental factors and higher awareness towards risk-taking propensity will help the women entrepreneurs to achieve long-term business success.

The findings also indicate that risk-taking propensity mediates the relationship between environmental factors and women entrepreneur's success. The result after applying the bootstrapping method indicates that environmental factors have fully mediated by risk-taking propensity (Table 4) as the direct effect ($p < 0.002$) is significant and ($p < 0.131$) was not

significant for the indirect effect. Therefore, risk-taking propensity plays a significant mediating role in the relationship between environmental factors of women entrepreneurs' success. This is supported the study by Macko and Tyszka (2009) which demonstrated the impact the knowledge of risk analysis in investment decision and to justify the finding of Wang and Poutziouris (2010) and Zhao et al., (2010) which stated, there is a mixed result of risk-taking propensity towards individual performance. Furthermore, in regards to risk-taking, Hisrich and Petters (2002) argued that there is yet to be any empirically conclusive causal relationship in regards to risk-taking and entrepreneur success. Also, entrepreneurs' risk-taking propensity is consistently viewed by many scholars, such as Lammers et. al, (2017), yet there is little empirical evidence supporting the robust relationship between risk-taking propensity environmental factors and the success of women entrepreneurs. It is also claimed that the link between entrepreneurs' environmental factors and mediation of risk-taking propensity has not been highlighted in many studies. Most previous studies have focused on risk-taking at the firm level and in the context of developing countries (Boso et al., 2013). In this regard, this study attempts to fill the existing knowledge gap by focusing on the success of Malaysian women entrepreneurs, and this study's findings also indicate that risk-taking propensity helps women entrepreneurs to navigate environmental factors and may be a key to developing successful women entrepreneurs in Malaysia. So, the forth (H4) research hypotheses are accepted.

The primary objective of this study is to provide empirical evidence on the relationship between environmental factors of women entrepreneur's success, as well as the mediating role of risk-taking propensity in the relationship. Therefore, the findings will add more values to the existing body of knowledge of the aforementioned variables. The research findings have revealed that environmental factors (education and technology) have a significant effect on the success of women entrepreneurs in Malaysia and risk-taking propensity tends to mediate the relationship between environmental factors and women entrepreneur's success. Hence, the findings will provide useful information on the environmental factors linked to the success of women entrepreneurs in Malaysian context and hoped this study can provide some insights into factors leading to women entrepreneurs' success, also a guide for implementation of programs and policies to increase the number of women entrepreneur's success in Malaysia.

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