

The Effect of Business Support from Business Incubator towards the Performance of Entrepreneurs in the Early Start-Up Companies in Malaysia with the Moderating Effect of Risk-taking Propensity

Mohd Noor Hidayat Jimainal

Universiti Malaysia Sabah (UMS), Malaysia

Ramraini Ali Hassan

Universiti Malaysia Sabah (UMS), Malaysia

Khairiah Mazdiah Kalimin

Universiti Teknologi Mara (UiTM), Malaysia

Rudy Ansar

Universiti Malaysia Sabah (UMS), Malaysia

Brahim Chekima

Universiti Malaysia Sabah (UMS), Malaysia

Lim Ming Fook

Universiti Malaysia Sabah (UMS), Malaysia

Received: July 23, 2022

Accepted: August 30, 2022

Published: September 20, 2022

doi:10.5296/jebi.v9i2.20073

URL: <https://doi.org/10.5296/jebi.v9i2.20073>

Abstract

The purpose of this study is to examine how the business support offered by business incubators affects the performance of early start-up entrepreneurs Malaysia with risk-taking propensity as the moderating role. Respondents for this study are among graduated entrepreneurs from business incubators that are located at Sarawak, Sabah, Penang, Johor, Kuala Lumpur, and Selangor. The analysis for this study was done based on 100 questionnaires using the Structural Equation Modelling (SEM) technique using Partial Least Squares (PLS). The findings indicated that business support does have positive significant impact on entrepreneur's performance in the early start-up companies. In contrast, risk-taking propensity as a moderating role does not have significant impact towards entrepreneur's performance in the early start-up companies in Malaysia. The findings of this study may aid to the policymaker and government as a standard while business incubator is able to understand more about entrepreneurs within the business incubator. Furthermore, other scholars can benefit from this study to serve as a guideline for their future research in similar field of study.

Keywords: Business incubator; business support; risk-taking propensity; performance of entrepreneurs; early start-ups

1. Introduction

Early start-up companies have a concerning trend for failure rates in the first five years (Ahmad & Seet, 2009). Government needs to be more attentive towards the alarming percentage of failure rate, 60 percent (Nordin, Hamid & Woon, 2011) (Husin & Ibrahim, 2014). Based on the past research statistics, the increase of failure rate among early start-up is evident. Multiple studies revealed that over the time, the insubstantial nature of early start-up and the probability of error occurring at the early stage may block them from achieving success that eventually factor into the increase of failure rate (Pena, 2004).

As a result, business incubator exists as a contemporary measure to support early start-up (Hackett & Dilts, 2004). Positively, 87 percent of early start-up that graduated from business incubator are still operating their business (National Business Incubation Association, 2007). Furthermore, the surviving entrepreneurs who received resources from business incubator are more than 80 percent, indicating the relevancy of business incubator to early start-up (Abetti, 2004). Company's performance in the industry is highly related to the survival rate during early start-up which is only viewed as high if it reaches 81 percent to 90 percent (Al-Mubarak, Busler, & Aruna, 2013). Companies in Malaysia such as REDtone International Berhad, IRIS Corporation Berhad, Green Packet Berhad, and Tricubes Berhad are among successful early start-up that manage to graduate from business incubator (Santoso, 2019). Through past studies, business incubator is viewed as a relevant form of guideline to early start-up in adding to their survival rate in parallel to their performance in the industry.

Lamentably, early start-ups are also prone to fall out of business and face difficulties to perform well in the industry (Saffar, 2007). Early start-up performance is measured for three years after they graduated from business incubator (Rogova, 2014). Accordingly, early

start-up performance may not be accurately measure due to few components deem as insufficient (Bergek & Norrman, 2008). Due to this, there are concerns arise towards business incubator components whether it attained to promoting early start-ups performance as its mission (Hong & Lu, 2016). Subsequently, previous researchers identified this concern and have started to investigate the most relevant components that business incubator can apply to early start-up (Bergek & Norrman, 2008). Hence, the target respondents for this study are aimed to entrepreneurs that have graduated from business incubator in Malaysia. Consequently, this study is done to have better insight over the situation and determine the effect of business support provided by business incubator towards the performance of entrepreneurs in the early start-up companies in Malaysia.

1.1 Objectives

This paper was thus conducted with the following specific objectives:

1. To investigate if business support have positive impacts toward the performance of entrepreneurs in the early start-up companies in Malaysia.
2. To examine the moderating role of risk-taking propensity on the relationship between business support and the performance of entrepreneurs in the early start-up companies in Malaysia.

2. Literature Review

2.1 The Performance of Entrepreneurs in the Early Start-up Companies

The dependant variable of this study refers to the performance of entrepreneurs in the early start-up companies in Malaysia. The common concept used in literature for entrepreneur's performance in the early start-up companies are known as either success or failure (Eniola & Entebang, 2015). Entrepreneurs' performance and its effects are measured through their ability to achieve objectives (Mabhungu & Van Der Poll, 2017). Within a preferred timeline, performance is measured as an indication towards early start-up companies' robustness (Eniola & Entebang, 2015). In such, performance has become among the priorities for early start-up companies to achieve (Usama & Yusoff, 2018).

2.2 Business Support

Business support refers to intangible services that business incubators offer, such as coaching or mentoring, entrepreneurial training activities, business development advice, and services pertaining to more general business issues, such as accounting, marketing or advertising, and financial assistance, all of which are intended to support the growth of early start-up companies (Robinson & Stubberud, 2014) (Somsuk & Laosirihongthong, 2014) (Al-Mubarak, Busler, & Aruna, 2013) (Bergek & Norman, 2008) (Aerts, Matthyssens, & Vandenbempt, 2007). Components that are not in physical form such as knowledge, brand, reputation, and experience are referred to intangible resources (Pearce & Robinson, 2000). In such, intangible services that is parallel to business support offered by business incubators employees include consultation and advice (Robinson & Stubberud, 2014). For early start-up, receiving business support in terms of knowledge from experts may aid in their growth for

their company. By providing various programs, business incubator can disseminate their business support to early start-up companies and guide them to successfully handle their business. This is mentioned in previous study where business incubator developed wide selection of services in relation to business such as business tools, networking, and expert's guidance as an effort to aid new emerging small-scale businesses to be prepared for their business activities (Pena, 2004).

Hypothesis 1. (H1): Business support positively impacts the performance of entrepreneurs in the early start-up companies in Malaysia.

2.3 Risk-taking Propensity

The moderating variable to strengthen the relationship between the business support and the performance of entrepreneurs in the early start-up companies is risk-taking propensity. Undeniably, every individual is unique and shape by many factors, one of it is through the individual's characteristics. The risk-taking propensity when viewed towards early-start up entrepreneurs are referred to the ability in undertaking reasonable risk during their business operation typically during decision making process (Salleh & Ibrahim, 2013) (Begley, 1995). Risk-taking propensity varies among individuals whereby certain individuals are able to take higher risk while others do not (Salleh & Ibrahim, 2013). Risk and entrepreneurs are associated since the beginning as it appears as an indicator for the entrepreneur's ability to understand their strength and weaknesses while managing their companies towards success. Linking risk with identifying the amount of money to invest is not the main consideration but recognizing entrepreneur own ability to identify their limitation on handling challenging tasks and managing responsibility is how risk is perceived (Rekha et al., 2014). Previous study proven that entrepreneurs are likely to be more resilient towards risk rather than the general public (Gentry & Hubbard, 2004) (Xu & Ruef, 2004). Entrepreneurs are more collected when they are facing with uncertainties as compared to non-entrepreneurs which resulted to a higher tendency in taking risk with increasing dynamic (Begley & Boyd, 1987). It shows the differences between entrepreneurs and other individuals that are more susceptible to taking risk on matters that is directly affecting the company's performance and direction.

Hypothesis 2. (H2): Risk-taking propensity strengthens the relationship between business support and the performance of entrepreneurs in the early start-up companies in Malaysia.

3. Methodology

3.1 Research Design

This paper employed quantitative and deductive approaches. To identify the relationship between variables, cross-sectional survey design was rendered as a primary data in accordance to systematic sampling under the probability sampling method. To execute the objective aimed for this study, an online survey was conducted as the data collection tool.

3.2 Population and Sampling

For this study, the study sample was collected from various states in Malaysia namely Sarawak, Sabah, Kuala Lumpur, Selangor, Penang, and Johor. These states were chosen

because most of business incubator are located there. Respondents are chosen based on entrepreneurs who have graduated three years from the public business incubator in Malaysia. Representative state are situated in various parts around Malaysia (Sidin, Zawawi, Yee, Busu, & Hamzah, 2004). The categories of respondents are divided into two regions, east and west of Malaysia. The Northern region, located in west Malaysia includes Penang state while Kuala Lumpur and Selangor accounted as the Central region. Additionally, Johor state represents the Southern regions, meanwhile Sabah and Sarawak comprised to East Malaysia. These states were preferred due to its locations and economic development (Sidin et al., 2004). Furthermore, public business incubator in these states is high in number compared to other states in Malaysia (SME Corp. Malaysia, 2022). Hence, respondents from these states represents the general population in Malaysia as it manages to cover the Malaysian population from central, southern, eastern, and northern regions.

To analyse the sample size of respondents, G*Power 3.1 software package was used to calculate the required minimum sample size (Faul, Erdfelder, Buchner, & Lang, 2009). For this paper, the effect size parameters calculated using G*Power was (0.15) (medium), alpha (α) 0.05 with the power of (1- β) 0.95 (maximum) which involve two predictors (Hair, Ringle, & Sarstedt, 2014). Thus, 89 participants were bound as optimum sample after being calculated with G*Power based on the precursor parameters for entrepreneurs who had graduated three years from the public business incubator in Malaysia.

3.3 Variables Measurement

The Performance of Entrepreneurs in the Early Start-up Companies: For entrepreneurs' performance, the measurement was adapted from Solymossy, (1998). Six items were measured to assess entrepreneurs' performance. However, data for objective performance in majority of the countries are difficult to obtain (Seawright, Bell DeTienne, Preston Bernhisel, & Hoopes Larson, 2008; Wales, Patel, Parida, & Kreiser, 2013). Hence, perceived financial performance is employed to this study as measurement towards the performance of entrepreneurs. Following graduation from the business incubator, entrepreneurs were asked to evaluate the performance of their companies based on subjective measures for the previous one to three years. Following past researchers, it is identified that subjective measure shows high correlation to objective data as a measurement for entrepreneurs' company performance (Dess & Robinson, 1984) (Kellermanns & Eddleston, 2006) (Love, Priem, & Lumpkin, 2002) (Venkatraman & Ramanujam, 1987) (Zacca, Dayan, & Ahrens, 2015).

Business Support: Business support measurement items were employed from Bruneel, Ratinho, Clarysse, & Groen, (2012) and Al-Mubarak, Busler, & Aruna, (2013). Sixteen items were chosen as measurement to assess entrepreneur's perceptions over intangible resources provided by business incubator to the convenience of entrepreneurs during their tenancy period. The result is deemed as high score when entrepreneurs in early start-ups are able to increase their performance after utilising intangible resources from business incubator.

Risk-taking Propensity: Risk-taking propensity's measurement was adapted through the study done by Salleh & Ibrahim, (2011). There are nine items for this measurement and Likert scale was applied. Likert scale ranging from 1 (Strongly disagree), 2 (Disagree), 3

(Neither), 4 (Agree), and 5 (Strongly agree) were employed as an evaluation to identify the level of risk-taking propensity for each item.

3.4 Data Analysis Method

This study employed Statistical Package for the Social Sciences version 22.0 (SPSS 22.0) and Smart Partial Least Squares 2.0 (SmartPLS 2.0) for statistical methods. SPSS 22.0 was measured to identify the frequency for each variable while partial least square structural equation modelling (PLS-SEM) was utilised as a the preferred medium to conduct statistical analysis. In contingent to predict relevant constructs for the research objective, PLS-SEM can be applied (Hair, Hult, Ringle, & Sarstedt, 2016). This is reflective to the objective of this study to predict the components of business incubator that effect entrepreneurs' performance in the early start-up companies in Malaysia. Hence, SmartPLS 2.0 software was employed to implement PLS-SEM techniques to analyse the research model. Measurement model assessment and structural model assessment were used as a two-stage approach (Anderson, & Gerbing, 1988) to report PLS-SEM outcome adequately (Chin, 2010).

4. Results and Discussion

4.1 Profile of Respondent

A total of 100 respondents' profile was presented in Table 1 based on the demographic information in the questionnaires. Approximately 65 percent of the respondents were in the age range of 20 to 29 years old, 31 percent in the age range of 30 to 39 years old, 3 percent in the age range of 40 to 49 years old, and the remaining 1 percent were 50 years old and above. The analysis of the respondents' information reveals that more than half of the respondents were female which were 68 percent while 32 percent of the remaining were male. Next, as for the level of education, 62 percent of the respondents held a Master's Degree, 20 percent qualified a Bachelor's Degree, 15 percent possessed a Ph.D., and 3 percent passed the Upper Secondary.

Table 1. Profile of Respondents

Demographic Variables	Categories	Frequency	Percentage (%)
Age	20-29 years old	65	65.0
	30-39 years old	31	31.0
	40-49 years old	3	3.0
	50 years old and above	1	1.0
Gender	Male	32	32.0
	Female	68	68.0
Level of Education	Upper Secondary	3	3.0
	Bachelor's Degree	20	20.0
	Master's Degree	62	62.0
	Ph.D.	15	15.0
Total		100	100.0

4.2 Measurement Model

The first stage of data analysis in PLS-SEM is an analysis of the measurement model. As such, the convergent validity and discriminant validity are assessed in the measurement model (Hair, Hult, Ringle, & Sarstedt, 2016). Convergent validity evaluates by using indicator loadings, composite reliability (CR), and average variance extracted (AVE) (Hair, Hult, Ringle, & Sarstedt, 2016). As recommended by Hair, Hult, Ringle and Sarstedt, (2016) the scores for loading, AVE, and CR must exceed 0.6, 0.5, and 0.7, respectively. Table 2 tabulates that all scores for loading, AVE, and CR exceeded the recommended Figures. Hence, it can be seen that the convergent validity for the measurement model was acceptable. Table 3 displays the square roots of AVE for the constructs along the diagonal, which seemed larger than the correlations shared between the constructs. Thus, discriminant validity was achieved.

Table 2. Loadings, Average Variance Extracted (AVE) and Extracted Composite Reliability (CR) among Constructs

Construct	Measurement Item	Loadings	AVE	CR
Business Support	Business1	0.811	0.686	0.972
	Business10	0.827		
	Business11	0.82		
	Business12	0.878		
	Business13	0.825		
	Business14	0.842		
	Business15	0.842		
	Business16	0.83		
	Business2	0.867		
	Business3	0.816		
	Business4	0.867		
	Business5	0.815		
	Business6	0.8		
	Business7	0.823		
	Business8	0.731		
Business9	0.848			
Performance of Entrepreneurs	Performance1	0.735	0.584	0.893
	Performance2	0.719		
	Performance3	0.627		

	Performance4	0.845		
	Performance5	0.838		
	Performance6	0.796		
Risk-taking	Risk10	0.692	0.511	0.879
Propensity	Risk12	0.735		
	Risk3	0.663		
	Risk5	0.735		
	Risk6	0.781		
	Risk7	0.775		
	Risk9	0.609		

Note: Risk15, Risk14, Risk1, Risk2, Risk13, Risk4, Risk11 and Risk8 were deleted due to low loading of 0.495, 0.511, 0.532, 0.549, 0.578, 0.571, 0.602 and 0.619.

Table 3. Discriminant Validity of Measurement Model

	Business Support	Performance of Entrepreneurs	Risk-taking Propensity
Business Support	0.828		
Performance of Entrepreneurs	0.529	0.764	
Risk- taking Propensity	0.33	0.525	0.715

Note: The diagonals represent the square root of the AVE, while the off-diagonals represent the correlations

4.3 Structural Model Assessment

After determining the measurement model, the next stage of data analysis in PLS-SEM is to examine the structural model. As suggested by Hair et al., (2016) the aspects of beta, T-Value, R2, effect sizes (f2), and predictive relevance (Q2) should be incorporated in order to assess the structural model. Table 4 summarizes the outcomes of the structural model analysis (hypotheses testing). The results showed that business support (H1) ($\beta=0.399$, $p<0.01$) has positively significant effect towards the performance of entrepreneurs in the early start-up companies.

The outcomes presented in Table 4 indicate that the interaction effects of risk-taking propensity strengthen the relationship between business support (H2) toward the performance of entrepreneurs in the early start-up companies were insignificant, thus signifying nil moderating effect being observed.

The R2 increased to 0.019 after the moderator interactions were integrated into the model, which resulted in a change of 41.8 percent. The effect size, f2, of business support toward the performance of entrepreneurs in the early start-up companies appeared to have medium effect (Cohen, 1988). In addition, the predictive relevance of the model was assessed by using the blindfolding procedure. According to Fornell & Cha, (1994) if Q2 values exceed 0, the model is said to have sufficient predictive relevance. In this study, the Q2 value was 0.219, which is greater than 0, and thus, the predictive relevance was confirmed.

Table 4. Results of the Structural Model (Hypotheses Testing)

H	Relationship	Std. Beta	Std. Error	t-value	Decision	f2	Q2	R2
H1	Business Support -> Performance of Entrepreneurs	0.399	0.113	3.518**	Supported	0.243	0.219	0.399
H2	Business Support * Risk-taking Propensity-> Performance of Entrepreneurs	0.012	0.098	0.123*	Not Supported	0.000		0.418
H3	Risk- taking Propensity -> Performance of Entrepreneurs	0.394	0.103	3.818		0.237		

Note: t-values > 1.65*($p<0.05$); t-values > 2.33** ($p<0.01$)

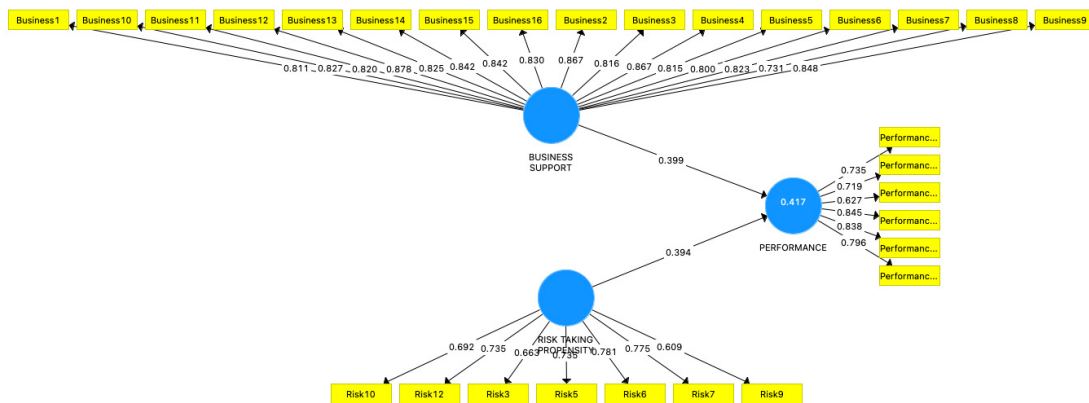


Figure 1. Path Coefficients of Business Support, Risk-taking Propensity and the Performance of Entrepreneurs in the Early Start-up Companies

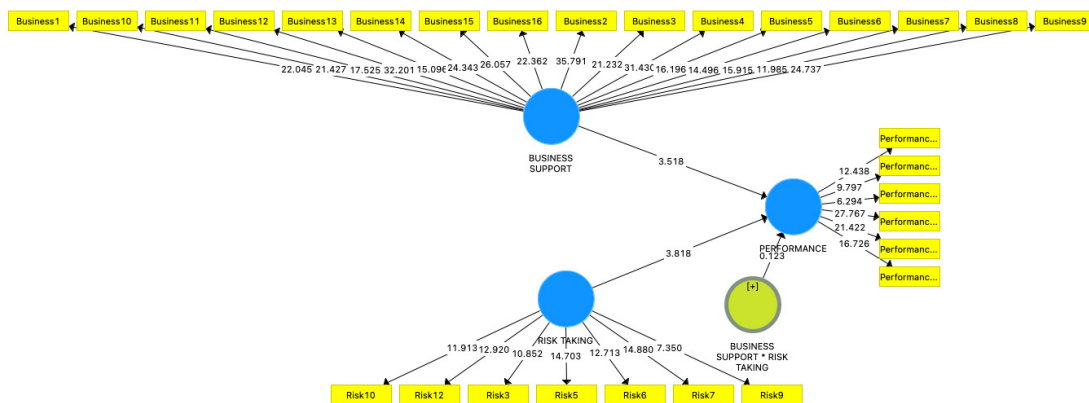


Figure 2. Bootstrapping of path coefficients of coefficients of Business Support, Risk-taking Propensity and the Performance of Entrepreneurs in the Early Start-up Companies

5. Discussion

The findings for this paper shows that H1 is accepted which indicate that there is a positive relationship between business support and entrepreneurs’ performance in the early start-up companies in Malaysia. This study’s finding is in line with previous study that discovers the key to entrepreneurs’ performance in early start-up companies is business support provided by business incubator (Pena, 2004). Accordingly, it is assuming that entrepreneurs who manage to enter business incubator and receive business support has better performance compared to entrepreneurs who did not undergo any process through business incubator.

In terms of the moderating role, risk-taking propensity, there is no relationship between business support (H2) and the performance of entrepreneurs in early start-up companies in Malaysia. The findings is contradicting to previous studies where it show significant relationship between risk-taking propensity and business incubator components (Smilor, 1987) (Akcomak & Taymaz, 2004) (Salleh & Ibrahim, 2013) (Begley, 1995). Therefore, in this study, entrepreneurs who receive business support from business incubator show low

risk-taking propensity when faced with decision making process over their business activities.

6. Recommendations

In light to the current study findings, it is suggested entrepreneurs should take into consideration of business support provided by business incubator to aid their information need as well as educating entrepreneurs in their early start-up business. Policymakers as well as the Malaysian government agencies can benefit through this study by employing it as guideline to construct action that will aid to entrepreneur's priority and improve business incubator components. In addition, the result of this study may enforce confidence from the government and public onto business incubator. This is crucial since funds injected to business incubator is from public taxation. Hence, having knowledge of the benefits gained from business incubator by entrepreneurs would mitigate the government and public. Moreover, future researchers may further expand this study by investigating other areas of business incubator components such as graduation policy and infrastructure. Further study will unfold other effective components relevant to entrepreneurs' performance in early start-up companies in Malaysia.

7. Conclusion

This study is done to investigate business incubator components specifically business support and its impact to entrepreneurs' performance in early start-up companies in Malaysia (Kuala Lumpur, Selangor, Sabah, Sarawak, Johor, and Penang) with risk-taking propensity as the moderating effect. The result of this study indicate that business support have positive significant effect on the performance of entrepreneurs in early start-up companies in Malaysia. In contrast, risk-taking propensity as a moderating role between business support and entrepreneurs' performance does not affect entrepreneurs in early start-up companies in Malaysia. Furthermore, the outcome of this study aids to the body of knowledge by contributing insight to academic literatures relating to business incubator. The body of knowledge comprise of enhancing business incubator components as it is crucial to the performance of entrepreneurs in early start-up companies and instrumental for the business environment in Malaysia. Other than that, future researchers may intend to perform more studies based on this subject in Malaysia.

Acknowledgments

This work was carried out in collaboration between all authors. All authors have read and approved the final manuscript. The authors would like to thank all participants for their time and contributions.

References

Abetti, P. A. (2004). Government-Supported Incubators in the Helsinki Region, Finland: Infrastructure, Results, and Best Practices. *The Journal of Technology Transfer*, 29(1),19-40. <https://doi.org/10.1023/B:JOTT.0000011179.47666.55>

- Aerts, K., Matthyssens, P., & Vandenbempt, K. (2007). Critical Role and Screening Practices of European Business Incubators. *Technovation*, 27(5), 254-267. <https://doi.org/10.1016/j.technovation.2006.12.002>
- Ahmad, N. H., & Seet, P. (2009). Dissecting Behaviours Associated with Business Failure: A Qualitative Study of SME Owners in Malaysia and Australia. *Asian Social Science*, 5(9). <https://doi.org/10.5539/ass.v5n9p98>
- Akçomak, I. S., & Taymaz, E. (2004). Assessing the Effectiveness of Incubators: The Case of Turkey. *ERC Working Papers in Economics*, 15.
- Al-Mubarak, H. M., Busler, M., & Aruna, M. (2013). Towards a New Vision for Sustainability of Incubator Best Practices Model in the Years to Come. *Journal of Economics and Sustainable Development*, 4(1), 114-128.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach. *Psychological Bulletin*, 103(3), 411-423. <https://doi.org/10.1037/0033-2909.103.3.411>
- Begley, T. M. (1995). Using Founder Status, Age of Firm, and Company Growth Rate as the Basis for Distinguishing Entrepreneurs from Managers of Smaller Businesses. *Journal of Business Venturing*, 10(3), 249-263. [https://doi.org/10.1016/0883-9026\(94\)00023-N](https://doi.org/10.1016/0883-9026(94)00023-N)
- Begley, T. M., & Boyd, D. P. (1987). Psychological Characteristics Associated with Performance in Entrepreneurial Firms and Smaller Businesses. *Journal of Business Venturing*, 2, 79-93. [https://doi.org/10.1016/0883-9026\(87\)90020-6](https://doi.org/10.1016/0883-9026(87)90020-6)
- Bergek, A., & Norrman, C. (2008). Incubator Best Practice: A framework. *Technovation*, 28(1-2), 20-28. <https://doi.org/10.1016/j.technovation.2007.07.008>
- Bruneel, J., Ratinho, T., Clarysse, B., & Groen, A. (2012). The Evolution of Business Incubators: Comparing Demand and Supply of Business Incubation Services Across Different Incubator Generations. *Technovation*, 32(2), 110-121. <https://doi.org/10.1016/j.technovation.2011.11.003>
- Chin, W. W. (1998). The Partial Least Squares Approach to Structural Equation Modeling. *Modern Methods for Business Research*, 295(2), 295-336.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioural Science*. New Jersey: Erlbaum.
- Dess, G. G., & Robinson, R. B. (1984). Measuring Organizational Performance in the Absence of Objective Measures: The Case of the Privately Held Firm and Conglomerate Business Unit. *Strategic Management Journal*, 5(3): 265-273. <https://doi.org/10.1002/smj.4250050306>
- Eniola, A. A., & Entebang, H. (2015). SME Firm Performance-Financial Innovation and Challenges. *Procedia - Social and Behavioral Sciences*, 195, 334-342. <https://doi.org/10.1016/j.sbspro.2015.06.361>

- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.G. (2009). Statistical Power Analyses Using G*Power 3.1: Tests for Correlation and Regression Analyses. *Behavior Research Methods*, 41(4), 1149-1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Fornell, C., & Cha, J. (1994). Partial Least Squares. In Bagozzi, R. P. (Ed.), *Advanced Methods of Marketing Research*. Blackwell Publisher.
- Gentry, W. M., & Hubbard, R. G. (2004). Entrepreneurship and Household Saving. *Advances in Economic Analysis & Policy*, 4(1), 1-55. <https://doi.org/10.3386/w7894>
- Hackett, S. M., & Dilts, D. M. (2004). A Systematic Review of Business Incubation Research. *Journal of Technology Transfer*, 29(1), 55-82. <https://doi.org/10.1023/B:JOTT.0000011181.11952.0f>
- Hair, J. F., Hult, G. T., Ringle, C., Sarstedt, M. (2016). *A primer on partial least squares structural equation modelling (PLS-Sem)* (2nd ed.). Thousand Oaks: Sage Publication.
- Hair, J. F., Jr., G. T. M. H., Ringle, C., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. SAGE Publications. Inc.
- Hong, J., Lu, J., Hong, J., & Lu, J. (2016). Assessing the Effectiveness of Business Incubators in Fostering SMEs: Evidence from China. *International Journal of Entrepreneurship and Innovation Management*, 20(12), 45-60. <https://doi.org/10.1504/IJEIM.2016.075298>
- Husin, M. A., & Ibrahim, M. D. (2014). The Role of Accounting Services and Impact on Small Medium Enterprises (SMEs) Performance in Manufacturing Sector from East Coast Region of Malaysia: A Conceptual Paper. *Procedia-Social and Behavioral Sciences*, 115, 54-67. <https://doi.org/10.1016/j.sbspro.2014.02.415>
- Kellermanns, F. W., & Eddleston, K. A. (2006). Corporate Entrepreneurship in Family Firms: A Family Perspective. *Entrepreneurship Theory and Practice*, 30(6), 809-830. <https://doi.org/10.1111/j.1540-6520.2006.00153.x>
- Love, L. G., Priem, R. L., & Lumpkin, G. T. (2002). Explicitly Articulated Strategy and Firm Performance Under Alternative Levels of Centralization. *Journal of Management*, 28(5), 611-627. <https://doi.org/10.1177/014920630202800503>
- Mabhungu, I., & Van Der Poll, B. (2017). A Review of Critical Success Factors Which Drives the Performance of Micro, Small and Medium Enterprises. *International Journal of Business and Management*, 12(6), 151-164. <https://doi.org/10.5539/ijbm.v12n6p151>
- Mohd. Nordin, N. A., Abdul Hamid, A. H., & Chong, C. W. (2011). Factors Affecting Profitability of Women Entrepreneurs Business in Malaysia. *Annual Summit on Business and Entrepreneurial Studies (ASBES 2011) Proceeding*, 972-985.
- National Business Incubation Association (NBIA). (2007). Business Incubation FAQ. [Online] Available: http://www.nbia.org/resource_center/bus_inc_facts/index.php.
- Pearce, J. & Robinson, R. (2000). *Strategic Management: Formulation, Implementation, and Control*. (12th ed.). McGraw Hill.

- Pena, I. (2004). Business Incubation Centers and New Firm Growth in the Basque Country. *Small Business Economics*, 22(3/4), 223-236. <https://doi.org/10.1023/B:SBEJ.0000022221.03667.82>
- Rekha, S. K., Ramesh, S., & Jaya Bharathi, S. (2014). Empirical Study on the Relationship Between Entrepreneurial Mindset and the Factors Affecting Intrapreneurship: A Study in Indian Context. *International Journal of Entrepreneurship*, 18, 69-75.
- Robinson, S., & Stubberud, H. A. (2014). Business Incubators: What Services Do Business Owners Really Use? *International Journal of Entrepreneurship*, 18, 29-39.
- Rogova, E. (2014). The Effectiveness of Business Incubators as the Element of the Universities' Spin-Off Strategy in Russia. *International Journal of Technology Management and Sustainable Development*, 13(3), 265-281. https://doi.org/10.1386/tmsd.13.3.265_1
- Saffar, M. A. (2007). *Innovation and Entrepreneurship Policy Framework: The Malaysian Experience in Building Sustainable Incubation Industry (Movement)*. Asia Regional Workshop. Hanoi, Vietnam. pp. 3-6
- Salleh, F., & Ibrahim, M. D. (2011). Demographic Characteristics Differences of Risk-Taking Propensity among Micro and Small Business Owners in Malaysia. *International Journal of Business and Social Science*, 2(9), 149-153.
- Salleh, F., & Ibrahim, M. D. (2013). The Relationship between Risk-Taking Propensity and Demographic Characteristics among MSEs in Malaysia. *Journal for Global Business Advancement*, 6(1), 38-49. <https://doi.org/10.1504/JGBA.2013.053477>
- Santoso, B. (2019). Week 7 Product Development. [Online] Available: <https://slideplayer.com/slide/14356382/>
- Seawright, K. K., Bell DeTienne, K., Preston Bernhisel, M., & Hoopes Larson, C. L. (2008). An Empirical Examination of Service Recovery Design. *Marketing Intelligence & Planning*, 26(3). <https://doi.org/10.1108/02634500810871320>
- Sidin, S. M., Zawawi, D., Yee, W. F., Busu, R., & Hamzah, Z. L. (2004). The Effects of Sex Role Orientation on Family Purchase Decision Making in Malaysia. *Journal of Consumer Marketing*, 21(6), 381–390. <https://doi.org/10.1108/07363760410558654>
- SME Corp. Malaysia. (2022). Business Incubators. [Online] Available: <https://www.smeCorp.gov.my/index.php/en/component/content/article/9uncategorised/383-starting?highlight=WYjpbmN1YmF0b3liXQ==&Itemid=763>
- Smilor, R. W. (1987). Managing the Incubator System: Critical Success. *IEEE Transactions on Engineering Management*, EM-34(3), 146-155. <https://doi.org/10.1109/TEM.1987.6498875>
- Solymossy, E. (1998). *Entrepreneurial Dimensions: The Relationship of Individual, Venture, and Environmental Factors to Success*. Doctor of Philosophy Thesis, Case Western Reserve University.

Somsuk, N., & Laosirihongthong, T. (2014). A Fuzzy AHP to Prioritize Enabling Factors for Strategic Management of University Business Incubators: Resource-Based View. *Technological Forecasting and Social Change*, 85, 198-210. <https://doi.org/10.1016/j.techfore.2013.08.007>

Usama, K. M. & Yusoff, W. F. W. (2018). The Relationship between Entrepreneurs' Financial Literacy and Business Performance among Entrepreneurs of Bauchi State Nigeria. *Angewandte Chemie International Edition*, 6(11), 951-952.

Venkatraman, N., & Ramanujam, V. (1987). Measurement of Business Economic Performance: An Examination of Method Convergence. *Journal of Management*, 13(1), 109-122. <https://doi.org/10.1177/014920638701300109>

Wales, W. J., Patel, P. C., Parida, V., & Kreiser, P. M. (2013). Nonlinear Effects of Entrepreneurial Orientation on Small Firm Performance: The Moderating Role of Resource Orchestration Capabilities. *Strategic Entrepreneurship Journal*, 7(2), 93-121. <https://doi.org/10.1002/sej.1153>

Xu, H., & Ruef, M. (2004). The Myth of the Risk-Tolerant Entrepreneur. *Strategic Organization*, 2(4), 331-355. <https://doi.org/10.1177/1476127004047617>

Zacca, R., Dayan, M., & Ahrens, T. (2015). Impact of Network Capability on Small Business Performance. *Management Decision*, 53(1), 2-23. <https://doi.org/10.1108/MD-11-2013-0587>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>)