

IEBMC 2017
8th International Economics and Business Management
Conference

**MEDIATING ROLE OF MUNIFICENCE IN THE SMALL
BUSINESS NETWORKING AND SUSTAINABILITY
RELATIONSHIPS**

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Abstract

This study aims to examine the entrepreneurial munificence of the small and micro enterprise technology based rural business entrepreneurs in Malaysia by taking business networking as the antecedent and business sustainability as the precedent. Business networking construct is used to explain the influence of entrepreneurial munificence as a mediator and its' consequences towards small and micro enterprise technology based rural business sustainability. The survey method was employed in this study and the data was analysed using Structural Equation Modelling (SEM) multivariate data analysis. Based on the SEM analysis, it can be concluded that in small and micro enterprise technology based rural business in Malaysia, the relationship between business networking and business sustainability was not mediated by entrepreneurial munificence. However, entrepreneurial munificence and business networking were significant as predictors towards business sustainability. This study provides better understanding of the small and micro enterprise technology based rural business entrepreneurs to develop networking strategies and collaborative efforts with related government agencies, especially those related to the support programmes for the entrepreneurs.

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Keywords: Munificence, business networking, business sustainability, small business, micro enterprise, rural business.



1. Introduction

Gray & Stites (2013) defined sustainability as fulfilling the needs of stakeholders in the society through the enhancement of current and future quality of life while taking care of life ecological cycle. From this definition, small business sustainability can be defined as improving the continuity of small business success while satisfying the needs of the stakeholders involved such as the customers, employees, suppliers, the community and the environment.

Small business owners developed growth strategy by taking advantage of business networking with other businesses to increase opportunities for the improvement of product quality and market expansion (Setya, Djatmika, & Suharto, 2017). As such, small and micro enterprise rural businesses need to get input from their stakeholders such as their customers, suppliers and competitors to improve their products and service quality. Moreover, by working together with local research and higher education institutions, small and micro enterprise rural businesses will also gain opportunities for product improvement and market penetration. According to Felix (2013), business networking will retain competitive advantage of small businesses because they will tend to make strategic planning related to new product development and business processes based on the inputs from their networks.

Another construct which has been studied as very important for the sustainability of small businesses is entrepreneurial munificence. Small business and micro enterprise entrepreneurs need a conducive environment to develop and sustain their business. Studies related to conducive environment for entrepreneurs have led to the research which focused on entrepreneurial munificence or environmental munificence. This pattern of previous studies concentrated on how business environmental factors which encouraged the development of entrepreneurship in certain areas.

2. Problem Statement

As Alemayehu and Vuuren (2017) mentioned in their research, that small businesses are facing challenges in terms of financial access, lack of marketing skills and market access and less munificent environment that support small and micro businesses. These can be related to the entrepreneur's inability to grab the opportunities available in the market. They also lack the ability to compete in the challenging market environment. Although, there are various policies and supports given by the government to help small businesses boost their sales locally and abroad, the development of the small businesses are still slow (Sarma, Septiani, Dewi, & Siregar, 2013).

Various research have discussed the relationships between business networking and business performance and sustainability (Setya, Djatmika, & Suharto, 2017; Carr, Parker, Castleman, & Mason, 2013) which showed that there is a significant relationships between business networking and business sustainability. However, there is a lack of research which have looked into the role of entrepreneurial munificence as an intervening construct between business networking and business sustainability. Since the business environment where businesses operate can affect the business networking activities among small businesses (Gathungu, Aiko, Candidate, & Machuki, (2014)), there is an urgent need to look into the role which entrepreneurial munificence can play to enhance the relationship between business networking and business sustainability.

In order to address these challenges, small and micro enterprises rural businesses in Malaysia need a theoretical framework which consider the sustainability factors for the businesses. This kind of framework is lacking in the literature which are related to the small and micro enterprises rural businesses in Malaysia. Thus, this paper will propose a model which shows the effects of munificent environment and business networking factors towards the sustainability of the small and micro enterprises rural businesses.

3. Research Questions

The study will answer the following research questions:

- What are the effects of business networking on entrepreneurial munificence?
- What are the effects entrepreneurial munificence on business sustainability?
- What are the effects of business networking on business sustainability?
- Does entrepreneurial munificence mediate the relationship between entrepreneurial munificence and business sustainability?

3.1. Hypothesis Statement

Four hypotheses have been developed by the author for this research. The hypotheses will be tested for path analysis using SEM AMOS.

Table 01. Hypothesis statement and respective statistical test for the study

Hypothesis Statement	Statistical Test
▪ Ha1: Business Networking has significant effect on Entrepreneurial Munificence	▪ Path analysis in SEM
▪ Ha2: Entrepreneurial Munificence has significant effect on Business Sustainability	▪ Path analysis in SEM
▪ Ha3: Business Networking has significant effect on Business Sustainability	▪ Path Analysis in SEM
▪ Ha4: Entrepreneurial Munificence mediates the relationship between Entrepreneurial Munificence and Business Sustainability	▪ Path Analysis in SEM

3.2. Conceptual framework of the study

The diagram below shows the conceptual framework for the study. In this diagram Business Networking is the independent construct, Entrepreneurial Munificence plays the role of mediating construct while Business Sustainability is the dependent construct.

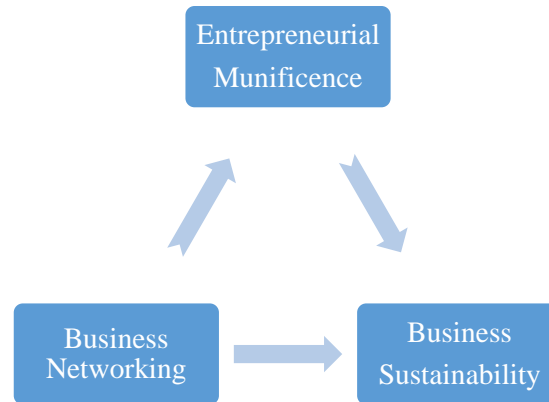


Figure 01. Conceptual Framework for the study

4. Purpose of the Study

The purpose of this paper is to examine the effect of entrepreneurial munificence on business networking and the effect of networking on the business sustainability of small and micro enterprises technology based rural businesses. This study proposes that business networking and entrepreneurial munificence improve business sustainability, performance and growth in small and micro enterprise technology based rural business. The role of entrepreneurial munificence will be analyzed whether it plays the role of mediator in the relationships between business networking and business sustainability.

5. Research Methods

This study will follow the quantitative research methods and procedures.

5.1. The Pre-Testing Procedure

The measuring instruments were adapted from the relevant literature and customized to suit this study. The pre-testing procedure involved the assessment of the content validity and face validity (Awang, 2010; 2016) by eleven mini Rural Transformation Center managers as the panel of experts in a focus group discussion. Assessment of the measurement scale used in the questionnaire and construct validity has been verified by a Professor who is an expert in Quantitative Research Methodology.

Items in the questionnaire were edited following the advice given by the expert after the pre-testing procedure has finished. Consequently, the questionnaires were ready to be distributed and later analysed for Exploratory Factor Analysis (EFA).

5.2. Exploratory Factor Analysis (EFA)

The validated questionnaires were distributed to selected small and micro enterprise technology based rural business in twelve different locations in Melaka. Out of one hundred and fifty questionnaires distributed, one hundred and ten questionnaires were returned back to the researcher. The data from the study was then analysed for the Exploratory Factor Analysis (EFA) to determine the dimensionality of items in the questionnaire.

The Exploratory Factor Analysis using extraction method of Principal Component with Varimax (Variation Maximization) Rotation was performed on the 11 items measuring Business Sustainability (BS) construct, 8 items measuring Entrepreneurial Munificence (EM) construct and 11 items measuring Business Networking (BN) construct. The results indicated that the Bartlett's Test of Sphericity is significant (P-Value < 0.05) for all constructs. Furthermore, the measure of sampling adequacy by Kaiser-Meyer-Olkin (KMO) is excellent at 0.915 for BS, .885 for EM and .905 for BN, which are all exceeded the required value of 0.6 (Awang,2010,2012). These two results; the Bartlett's Test is significant and KMO > 0.6, indicate that the data is adequate to proceed further with the data reduction procedure (Awang,2010;2012).

The results have shown that only one component emerged from EFA procedure based on the computed Eigenvalue greater than 1.0 for BS and EM while two components emerged for BN. The eigenvalue for BS component is 6.9 and EM is 4.826. The eigenvalue for the first component of BN is 6.381 and the eigenvalue for the second component of BN is 1.197. The variance explained for the BS and EM components are 63.110% and 60.323%, while the variance explained for the first and second components of BN are 58.007% and 10.880 respectively. Thus all the components and their respective items are excellent in measuring the BS, EM and BN constructs since their total variance explained exceeded 60% (Awang, (2010); (2016)).

The factor loading for every item in BS and EM are greater than 0.6. Thus, no item should be deleted since they achieved the minimum requirement for factor loading of 0.6 (Awang, 2010;2014;2016). In other words, all items are useful to measure the latent constructs. However, one item needs to be deleted in BN construct which is BN5 because the item was cross loading in the first and second component of BN.

The Cronbach's Alpha for the component measuring BS construct is .940, the Cronbach's Alpha for EM is .904, while the Cronbach's Alpha for BN is .925 Thus the items in all three components have achieved the required Internal Reliability since the Cronbach's value which is greater than 0.7 (Awang, 2010; 2016).

5.3. Confirmatory Factor Analysis (CFA) for the study

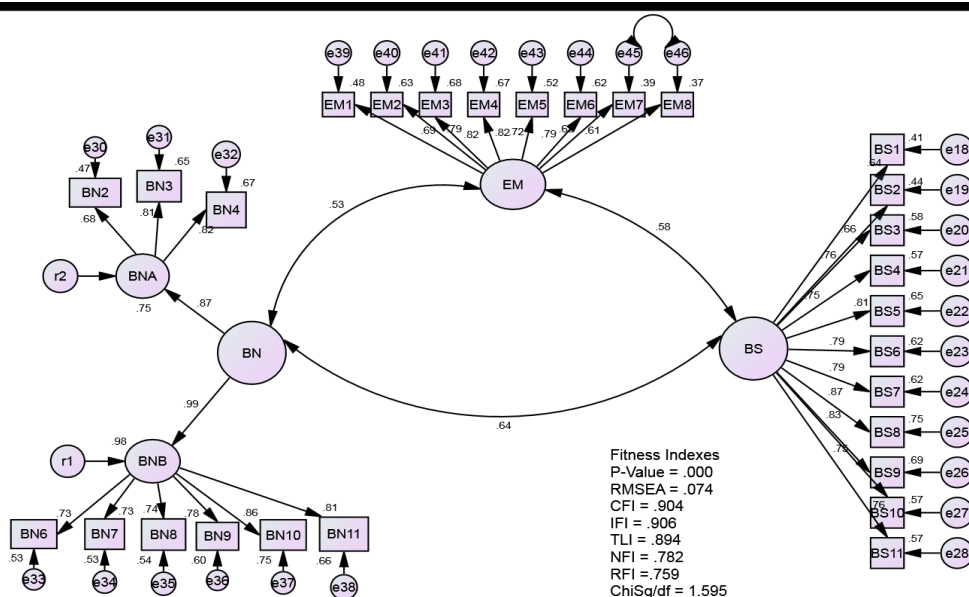


Figure 02. CFA Diagram for the study

Table 02. Reliability measurement: CFA results for EM, BN and BS

	EM (Entrepreneurial Munificence)	BN (Business Networking)	BS (Business Sustainability)
Average Variance Extracted (AVE)	0.543	0.589	0.869
Composite Reliability (CR)	0.904	0.940	0.929

The convergent validity for the measurement model has been achieved because all values of Average Variance Extracted (AVE) exceeded 0.50. The results of AVE calculated was .869 for BN, 0.589 for BS and .543 for EM. The Composite Reliability was also achieved because all CR values exceed 0.60.

The construct validity for the measurement model has also been achieved because all Fitness Indexes met the required level as follows; the absolute fit calculation for RMSEA is .074, the incremental fit for CFI is .904 and parsimonious fit for Chisq/df is 1.595.

The discriminant validity index for the model is as follows:

Table 03. Discriminant validity index

Construct	BS	BN	EM
BS (Business Sustainability)	.77		
BN (Business Networking)	.64	.93	
EM (Entrepreneurial Munificence)	.58	.53	.74

From the above table, the values in bold are the square root of AVE of the constructs while the other values are the direct relations between BS, EM and BN constructs. The discriminant validity for all constructs has been achieved because the values in bold are higher than the values in its row and column.

The requirement for the normality of data distribution has been achieved. The absolute value of skewness of 1.0 or lower shown in the output indicates that data is normally distributed for this study.

6. Findings

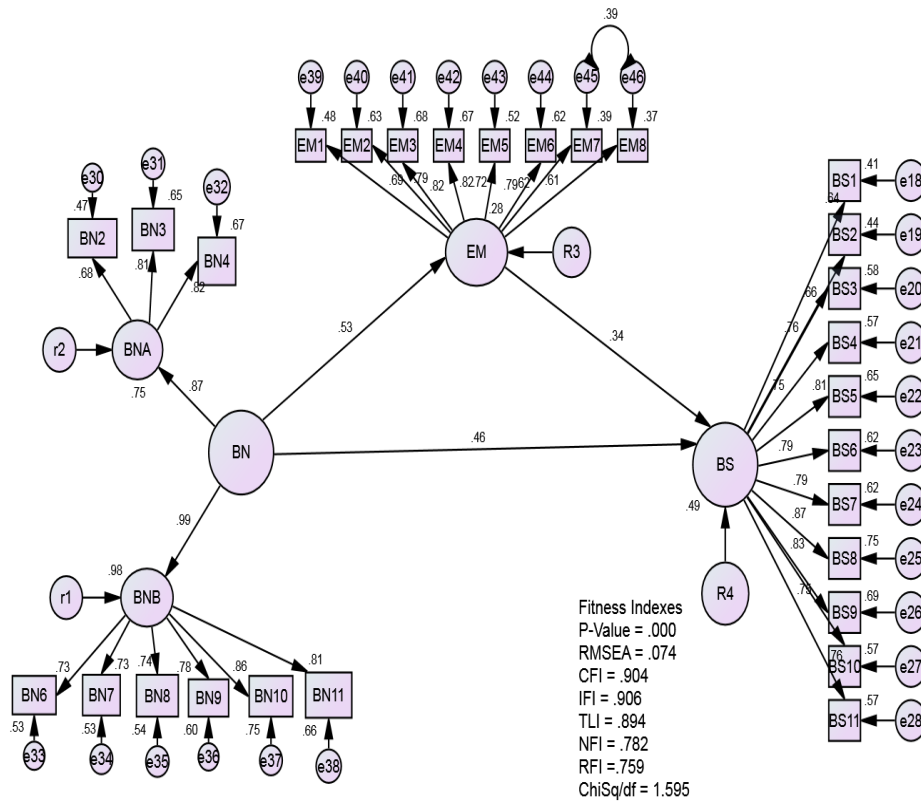


Figure 03. SEM Diagram for the study

Figure 3 above illustrated the Structural Equation Model results for the study.

The standardized regression weights and its significance for each path in the model are as follows.

Table 04. The Regression Path Coefficients and its significance based on p-value < 0.05

Construct	Path	Construct	Standardized Estimate	P-value	Result
Entrepreneurial Munificence	←	Business Networking	.53	0.001	Significant. Therefore Ha1 is supported.
Business Sustainability	←	Entrepreneurial Munificence	.34	0.001	Significant. Therefore. Ha2 is supported.
Business Sustainability	←	Business Networking	.46	0.001	Significant. Therefore Ha3 is supported.

Awang (2014) suggested the procedure for testing mediation in a complex model through multiplying the indirect effects in the model, and then the direct effect is compared with the results of the

multiplication of the indirect effects. If the results of the multiplication of indirect effects is higher than the direct effect, then mediation occurs. Otherwise, mediation does not occur in the model.

As for this research, the procedure to test mediation based of the above table is as follows:

The indirect effect = $0.53 * 0.34 = 0.180$

The direct effect = 0.46

Since the indirect effect < direct effect, mediation does not occurs

All of the indirect and direct effects are significant.

Therefore, the hypothesis statement for testing a mediator for this study: Ha4: Entrepreneurial Munificence mediates the relationship between Business Networking and Business Sustainability was not supported.

From the analysis of mediator effect, the results implied that entrepreneurial munificence in this study does not mediates the relationship between business networking and business sustainability. Thus, entrepreneurial munificence does not enhance the relationships between business networking and business sustainability for small and micro enterprise technology based rural business in this study.

On the other hand, the path analysis results show that business networking has significant effect on entrepreneurial munificence. The relationships between networking and munificence have been discussed in previous studies by Gathungu, Aiko, Candidate & Machuki (2014), Giudici (2013) and Rosenbusch, Rauch, & Bausch (2013). This indicates that business networking creates munificence in entrepreneurship through the availability of resources and opportunities for business development.

Furthermore, the results have shown that entrepreneurial munificence has significant effect on business sustainability. This study supported the findings from previous studies by Wenbin, Sun Joseph M. Price (2016), Carvalho, Rossetto, & Verdinelli (2016), Munoz, Welsh, Chan, & Raven (2014), Behram & Özdemirci (2014), Okeyo (2014) and Battisti, Deakins, & Perry (2013) which have discussed the relationships between munificent environment and business performance and sustainability.

The findings from this study also supported the hypothesis statement that business networking has significant effect on business sustainability. These results are in agreement with those reported by Setya et al. (2017), Chen, Chang & Chang (2015) and Naudé, Najafi Tavani, Neghabi & Zaefarian (2014).

7. Conclusion

The current findings add to a growing body of literature on small and micro enterprise technology based rural business. It analysed the constructs which are relevant to the understanding of business sustainability of the small and micro enterprise technology based rural business. In this study, entrepreneurial munificence was proposed to be the mediating construct between business networking as the exogenous construct and business sustainability as the endogenous construct.

This study has shown that business networking has a positive and significant relationships with entrepreneurial munificence. The findings of this investigation complement those of recent research by Alemayehu & Vuuren (2017) and Long & Dong (2017) who reported that small business will tend to collaborate more in munificence environment when the entrepreneurial resources are in abundance. It is suggested that small and micro enterprise technology based rural business need to develop collaborative

strategies with other firms and relevant governmental agencies to grab the opportunities available in a munificence environment.

One of the more significant findings to emerge from this study is that entrepreneurial munificence does not mediate the relationships between business networking and business sustainability. It can be concluded that in the case of small and micro enterprise technology based business in Malaysia, entrepreneurial munificence does not strengthen the relationships between business networking and business sustainability. However, the relationships between business networking and business sustainability is significant and positive which indicated that business networking effects business sustainability directly without the significant effect of entrepreneurial munificence. Therefore, to gain business sustainability, small and micro enterprise technology based rural business need to strengthen and enhance their business networks disregard whether they are operating in a munificence or hostile entrepreneurial environment.

The limitation of this study is that the samples drawn are limited to the small and micro enterprise technology based rural business from one state in Malaysia. It is recommended that further research to be undertaken by collecting more samples throughout Malaysia. Further studies need to be carried out which would include more exogenous constructs and include other relevant mediators and/or moderators to develop and confirm the sustainability model for small and micro enterprise technology based rural business in Malaysia.

Acknowledgments

The researchers would like to acknowledge UNITEN for this research article funding under UNITEN Research Grant.

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