Entrepreneurial knowledge, skills, competencies and performance

A study of micro-enterprises in Kelantan, Malaysia

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Abstract

Purpose – This study aims to examine the effect of entrepreneurial skills, market orientation, sales orientations and networking on entrepreneurial competency and performance of micro-enterprises in Kelantan, Malaysia.

Design/methodology/approach – Adopting a cross-sectional design, this paper collected data through structured interviews from 403 micro-entrepreneurs from "Majlis Amanah Rakyat," Kelantan and "Majlis Agama Islam dan Adat Istiadat," Kelantan.

Findings – The findings reveal that entrepreneurial skills, market orientation and networking have a positive effect on entrepreneurial competency. Then, entrepreneurial competency, entrepreneurial skills and networking have a positive effect on enterprise performance. The findings show a significant mediation effect of entrepreneurial competency on the relationships between entrepreneurial skills, market orientation and networking and enterprise performance.

Originality/value – Addressing the understudied "human factor" in entrepreneurship, this paper extends the resource-based view and enriches the existing entrepreneurship literature in Malaysia. It provides useful insights into the improvement of micro-enterprise performance, which is crucial for promoting entrepreneurial activities and for enhancing socio-economic conditions among low-income households in Malaysia. Thus, the government and developmental organizations should focus on the development of entrepreneurial skills, market-oriented approach, networking traits and entrepreneurial competencies and subsequently encourage poor households to perform entrepreneurial activities.

Keywords Performance, Skills, Market orientation, Networking, Sales orientation

Paper type Research paper

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Introduction

Entrepreneurial activities in both formal and informal sectors are immensely significant for economic growth and national development (Al-Mamun *et al.*, 2016). Specifically, micro and small enterprises, as the drivers of indigenous entrepreneurship, play a key role in developing the global economy by improving technological capability building, diffusion of innovations and capital mobilization (Nabiswa and Mukwa, 2017). At the same time, firms at the global level are facing many challenges in the forms of market uncertainty, human and financial capital and increase in both local and international competitors (Raghuvanshi and Garg, 2018). This is why OECD and its participating countries emphasize on entrepreneurship, not only by increasing the number of entrepreneurs but also by creating more enterprises and employment growth for a social safety net. Al-Mamun *et al.* (2016) highlighted that economic activities of micro-enterprises can facilitate national development of Malaysia, with nearly 1.3 million individuals (9.7 per cent of the total workforce) actively engaged in micro-economic operations. Aziz *et al.* (2017) also indicated that micro-enterprises in Malaysia are small businesses with less than five full-time employees and an annual turnover of less than RM 300,000. Normally, these businesses have small-scale operations, such as food stalls, night market vendors, grocery stalls, construction and service contractors. Wahid *et al.* (2017) noted that micro-enterprises represented 75 per cent of the small to medium enterprises (SMEs) in Malaysia.

Entrepreneurial competencies, on the other hand, refer to a specific set of competencies for operationalizing entrepreneurship in a new enterprise (Mitchelmore and Rowley, 2010). According to Al-Mamun *et al.* (2016), entrepreneurial competencies are defined as the abilities to use resources for improving micro-enterprise performance. Bird (1995) revealed that entrepreneurial competencies had a relationship with the start-up, growth and sustainability of an enterprise. Similarly, Lewis and Churchill (1983) indicated that entrepreneurial competencies can determine successful business. Besides, an individual's competencies can boost his or her personal strength in managing an enterprise efficiently (Man *et al.*, 2002). Gerli *et al.* (2011) asserted that it is important for entrepreneurs to enhance certain competencies that can facilitate firm performance. Mitchelmore and Rowley (2013) claimed that entrepreneurial competencies can improve enterprise performance, growth and economic development.

Although the role of an entrepreneur on firm outcome is well documented, it is interesting to explore the influence of entrepreneurial competencies on firm performance (Gerli *et al.*, 2011). Mitchelmore and Rowley (2010) stressed that although entrepreneurial competencies are used as a catalyst for business success and economic development, it is possible to look into their core concept, measurement and association with entrepreneurial performance and enterprise success. As stated by Andrews *et al.* (2011), it is crucial to identify the factors of entrepreneurial competencies that predict business success. However, inadequate human competencies are the main challenges micro-enterprises need to overcome to survive (Wahid *et al.*, 2017). Thus, it is important to understand the key factors that affect entrepreneurial competencies and enterprise performance of low-income households who have limited qualifications, skills and access to working capital and enterprise training (Al-Mamun *et al.*, 2016). To address the gaps in the literature, this study examined factors (i.e. entrepreneurial skills, market and sales orientations and networking) that influenced entrepreneurial competencies and micro-enterprise performance in Kelantan, Malaysia. This study was crucial for suggesting possible ways to improve the socio-economic conditions of low-income households through micro-enterprise performance.

Literature review

Resource-based view, entrepreneurial competency and enterprise performance

Resource-based view (RBV) proposes that competitive advantages can be achieved by firms from their unique resources to perform better than their competitors in the same industry

(Amoah-Mensah, 2013; Barney, 1991; Beard and Sumner, 2004; Kraaijenbrink *et al.*, 2010; Nabiswa and Mukwa, 2017; Runyan *et al.*, 2006). When a firm is different from its rivals in terms of resources, it can easily obtain competitive advantage (Barney, 1991). According to the RBV, the process of value creation is strictly linked to the ability of managers to procure, develop and deploy resources (Barney, 1991; Grant, 1991; Tehseen and Ramayah, 2015). In fact, entrepreneurial competencies are related to a manager's knowledge, skills and capabilities as intangible and valuable resources that can contribute to a firm's sustainable competitive advantage (Tehseen and Ramayah, 2015). Undoubtedly, every individual's competencies are unique that are difficult to be imitated by rivals because of the ambiguity regarding their origin and embeddedness with the specific individuals (Gerli *et al.*, 2011; Tehseen and Ramayah, 2015).

In the context of this study, RBV was applicable to explain that the survival of micro-enterprises is highly reliant on their human resource endowment and inimitable resources that assist them in seizing opportunities as uncertain micro-enterprises' operations require a capable human resource team to manage (Nabiswa and Mukwa, 2017). RBV also asserts that micro-enterprises are entities that can survive in underprivileged socio-economic environments with their unique skills, market-sales-oriented approaches and networking activities that enhance an entrepreneur's competencies and enterprise performance.

Entrepreneurial skills and entrepreneurial competencies

Entrepreneurial skills refer to the activities or know-how that can establish and operate an enterprise successfully (Liñán and Chen, 2009). On the other hand, entrepreneurial competencies are considered a specific set of quality characteristics that represent the capability of an entrepreneur to perform a job (Man *et al.*, 2002; Mitchelmore and Rowley, 2013). In this study, skills refer to the possibility of learning and adopting exclusive characteristics that are essential for performing entrepreneurial tasks that involve interactions within a social and material environment (Pyysiäinen *et al.*, 2006). Theoretically, RBV was applied to explain the benefits of entrepreneurial competencies on entrepreneurial skills as practices and know-how instigate unique capabilities in the organization, thus gaining competitive advantage from non-replicable and inimitable resources (Barney, 1991; Grant, 1991).

As suggested by Phelan and Sharpley (2012), entrepreneurs require various skills to develop specific competencies to manage an enterprise. Entrepreneurial skills in the form of higher personal attraction and subjective norms foster individuals to feel competent and venture into entrepreneurship (Scherer *et al.*, 1991). Basically, entrepreneurial competencies development requires entrepreneurs to learn a set of skills (Kutzhanova *et al.*, 2009). These skills allow an individual to update his or her beliefs about entrepreneurial aptitude that provide the knowledge about the challenge of starting a project (Entrialgo and Iglesias, 2016). As entrepreneurial skills encompass sensing, seizing and transforming, they are essential traits to develop dynamic capabilities (Teece, 2012). Thus, this study proposes the hypothesis as follows:

H1. Entrepreneurial skills have a positive influence on entrepreneurial competencies among micro-enterprises.

Entrepreneurial skills and enterprise performance

Enterprise performance is a multidimensional construct that includes a firm's operational and financial outcomes (Venkatraman and Ramanujam, 1986). It integrates industry-related

knowledge, management skills and personal motivation (Phelan and Sharpley, 2012). RBV stated that an entrepreneur's capability in terms of valuable knowledge, skills and capabilities can facilitate his or her firm performance (Barney, 1991; Grant, 1991; Tehseen and Ramayah, 2015). According to Linan (2008), entrepreneurship is known for its association with a set of skills and cognitive processes. In small business entrepreneurship research, entrepreneurial skills have been linked with demographic, psychological and behavioral characteristics and technical know-how that have a stronger impact on enterprise performance (Gerli *et al.*, 2011; Mitchelmore and Rowley, 2010). Campbell *et al.* (2012) stated that entrepreneurial skills and beliefs are crucial for firms. Further, Kim *et al.* (2011) confirmed that entrepreneurial skills are essential for determining the use of resources to achieve competitive advantages. Previous studies also showed that entrepreneurial skills can contribute to enterprise performance, growth and profitability (Bird, 1995; Cooper *et al.*, 1994; Lerner and Almor, 2002; Mitchelmore and Rowley, 2010; Chandler and Jansen, 1992). Based on the theories and existing literature, this study proposes the hypothesis as follows:

H2. Entrepreneurial skills have a positive influence on enterprise performance among micro-enterprises.

Market orientation and entrepreneurial competencies

Market orientation is defined as a firm's orientation towards promotion and support for collection, dissemination and responsiveness to market intelligence to fulfill the customer needs that can guarantee a firm's performance (Kohli and Jaworski, 1990). Market orientation reflects an adaptive learning that enables firms to identify and respond to their environmental changes through assumptions about consumers and competitions (Atuahene-Gima and Ko, 2001). Narver and Slater (1990) described market orientation as an organizational culture that improves competencies to create superior value for buyers that determines superior performance. As mentioned in the RBV, entrepreneurial competencies are highly needed in the market orientation culture or activity (Barney, 1991; Grant, 1991). Existing studies indicated that market orientation is an adaptive ability that influences enterprises to respond (can be developing competencies) to changing market conditions (Kohli and Jaworski, 1990; Slater and Narver, 1995). Furthermore, Baker and Sinkula (2009) highlighted that market orientation can affect entrepreneurial competencies to innovate existing products and services, and the firms can develop a marketing mix to target specific customer niches. Based on the theory and existing literature, this study proposes the hypothesis as follows:

H3. Market orientation has a positive influence on entrepreneurial competencies among micro-enterprises.

Market orientation and enterprise performance

Drawing on the RBV, effective market-orientated approach can facilitate organizations to perform superbly as they understand their consumers' needs and wants, competitors' strategies and capabilities, distribution channel requirements and developments and broader market environment (Hult and Ketchen, 2001; Jaworski and Kohli, 1993; Morgan *et al.*, 2009). Furthermore, Ali *et al.* (2017) explained market orientation is observable when a firm's capabilities or resources are inimitable, it usually places customer needs in the core of organizational strategy and operation. Morgan *et al.* (2009) also claimed that marketing capabilities and market orientation are complementary resources that can contribute to

enterprise performance. As market orientation is affected by changing market needs and preferences, Boso *et al.* (2013) found that high level of entrepreneurial and market orientation improves firm performance. Baker and Sinkula (2009) echoed that market orientation is one of key elements of organizational success. Based on the RBV and existing literature, this study proposes the hypothesis as follows:

H4. Market orientation has a positive influence on enterprise performance among micro-enterprises.

Sales orientation and entrepreneurial competencies

Sales orientation refers to the entrepreneurs who are involved in selling activities that require "getting the sale" from every customer (Jaramillo *et al.*, 2007). This approach focuses on selling as many as possible whereby customer needs are prioritized within a supportive working environment (Boles *et al.*, 2001). In this context, RBV posits that sales oriented behavior is non-replicable and inimitable resource to prompt entrepreneurial competencies, thus competitive advantage is achievable (Barney, 1991; Grant, 1991). Literature showed that customer needs and complaints can be dealt with a selling-oriented approach to develop specific attributes in terms of entrepreneurial competencies that yield good sales (Saxe and Weitz, 1982; Boles *et al.*, 2001; O'Hara *et al.*, 1991). Wachner *et al.* (2009) asserted that a salesperson's (entrepreneur in a small business) selling skills are associated with higher level of competency (entrepreneurial), subsequently it can guarantee excellent firm performance. After considering the theory and existing literature, this study proposes the following hypothesis:

H5. Sales orientation has a positive influence on entrepreneurial competencies among micro-enterprises.

Sales orientation and enterprise performance

Given that consumer satisfaction and expectations seeking entrepreneurs to build rapport, present their services/products and close the sale in a single meeting, every firm should be engaged in some degree sales-oriented behavior regularly (Boles *et al.*, 2001). As posited by the RBV, sales-oriented behavior is considered as a firm's inimitable capability that can lead to outstanding performance (Barney, 1991). According to Boles *et al.* (2001), a non-supportive working environment increases the use of selling orientation that managers intend to enhance sales performance. Jaramillo *et al.* (2007) noted that sales and customer orientation are important predictors of firm performance at individual level. Particularly, firms that stress on sales-oriented skills perform better. Churchill *et al.* (1985) indicated that selling skills are the most significant determinant of firm performance. Then, Wachner *et al.* (2009) confirmed that sales orientation has a positive impact on performance. In addition, selling skills are strongly and positively related to sales performance. Based on the theory and existing literature, this study proposed the following hypothesis:

H6. Sales orientation has a positive influence on entrepreneurial performance among micro-enterprises.

Networking and entrepreneurial competencies

Network is considered a linkage between social and economic dimensions of human behavior, different types of discipline and methodology or the scholarly community and

world of practice. In this study, networking is defined as the ability to manage networks that comprise a focal character has a direct relationship with other parties who are indirectly introduced by his direct associates to the focal character (Aldrich *et al.*, 1986). From a RBV perspective, inimitable resources can facilitate the development of capabilities that improve firm performance (Barney, 1991; Grant, 1991). This means that networking is a valuable resource that forms specific competencies to grow business. In fact, networking in the form of work contacts can brush up competencies (Bird, 1995; Ahmad *et al.*, 2010). Besides, entrepreneurial network provides a framework with different processes that establish competencies with available opportunities (Johannisson and Mønsted, 1997). Larson (1992) argued that entrepreneurial dyadic ties are the building blocks of networks set upon a history of preconditions for exchange, including both organizational and personal competency along with prior relations. Based on the above discussion, this study proposes the hypothesis as follows:

H7. Networking has a positive influence on entrepreneurial competencies among micro-enterprises.

Networking and enterprise performance

Undoubtedly, networking can deal with a dynamic environment and different conditions of entrepreneurship. Networking has a significant impact on start-up, growth and developmental stage of an enterprise (Anderson *et al.*, 2010). In fact, RBV states that firms from the same industry perform differently as they have their own resource and capabilities (Barney, 1991). In other words, networking is a specific capability that determines firm performance. For instance, effective networking provides entrepreneurs with expertise and various forms of support to benefit firm performance (Ahmad *et al.*, 2010). Basically, developing social networks can improve businesses that enable entrepreneurs to navigate a safer course in a demanding setting (Markman, 2007). Lee and Tsang (2001) contended that networking activities have positive impact on enterprise growth. Being said that, networking can facilitate entrepreneurial competencies and firm profitability (Gerli *et al.*, 2011). In micro and small enterprises, Nabiswa and Mukwa, (2017) pointed out that networking is used to measure a firm's growth. Hence, the following hypothesis is developed:

H8. Networking has a positive influence on enterprise performance among micro-enterprises.

Entrepreneurial competencies and enterprise performance

In entrepreneurship, competencies are related with an enterprise's start-up, growth and sustainability (Bird, 1995; Baum *et al.*, 2000; Colombo and Grilli, 2005; Mitchelmore and Rowley, 2010). RBV justifies entrepreneurial competencies include valuable knowledge, skills and abilities that can help a firm generate competitive advantage (Barney, 1991; Grant, 1991; Tehseen and Ramayah, 2015). A group of researchers (Man *et al.*, 2002; Gerli *et al.*, 2011) confirmed entrepreneurial competency can influence organizational performance positively. Mitchelmore and Rowley (2013) indicated that personal relationships, business management and entrepreneurial and human relations are types of competencies to ensure business success. Existing literature postulated that distinctive competencies drive higher financial performance in small firms (Baron and Markman, 2003; Gerli *et al.*, 2011). In Malaysia, entrepreneurial competencies are strong determinants of SME business success

(Ahmad *et al.*, 2010). Further, entrepreneurial competencies such as risk-taking propensity and self-efficacy have a positive effect on micro-enterprise performance (Al-Mamun *et al.*, 2016). Based on the theory and existing empirical evidence, this study proposed the hypothesis as follows:

H9. Entrepreneurial competencies have a positive influence on enterprise performance among micro-enterprises.

The mediating effect of entrepreneurial competencies

Given that entrepreneurial skills, market orientation, sales orientation and networking are factors of entrepreneurial competency, it allows enterprise performance to be accomplished. As a result, this study suggests that entrepreneurial competency is expected to have a mediating effect on the relationships between entrepreneurial skills, market orientation, sales orientation, networking and enterprise performance. Reverting to the RBV, entrepreneurial competencies (e.g. skills, market orientation, sales orientation and networking) are valuable and inimitable resources that bring about capabilities (i.e. entrepreneurial competency) to facilitate organizational performance (Barney, 1991; Grant, 1991), Thus, entrepreneurial competencies can be studied as a mediating role. A recent study with RBV as the underlying theory, found that entrepreneurial competency acted as mediator between creativity, innovativeness, autonomy and firm performance (Al Mamun and Fazal, 2018). For instance, Baum and Locke (2004) found an indirect effect of entrepreneurial skills on venture growth. Besides, Narver and Slater (1990) noted that market orientation as part of the organizational cultures that fosters competency to create value for buyers for improving firm performance. Then, Gerli *et al.* (2011) posited that networking can facilitate firm profitability. According to Baron and Kenny (1986), this study tested the indirect effect (apart from the direct effect) of entrepreneurial skills, market orientation, sales orientation and networking on enterprise performance:

HM1. Entrepreneurial competencies mediate the relationship between entrepreneurial skills and enterprise performance among micro-enterprises.

HM2. Entrepreneurial competencies mediate the relationship between market orientation and enterprise performance among micro-enterprises.

HM3. Entrepreneurial competencies mediate the relationship between sales orientation and enterprise performance among micro-enterprises.

HM4. Entrepreneurial competencies mediate the relationship between networking and enterprise performance among micro-enterprises.

Research methodology

This study adopted a cross-sectional design and collected quantitative data through structured interview to measure the effect of entrepreneurial skills, market orientation, sales orientation and networking on entrepreneurial competency and performance of micro-enterprises owned by low-income households in Kelantan, Malaysia (see Figure 1). The sample was micro-entrepreneurs. The list of these registered micro-entrepreneurs was obtained from two governmental organizations that fostered socio-economic development. Particularly, "*Majlis Amanah Rakyat"* provided a list of 2690 micro-entrepreneurs, whereas **"***Majlis Agama Islam dan Adat Istiadat*" provided a list of 105 micro-entrepreneurs. With a

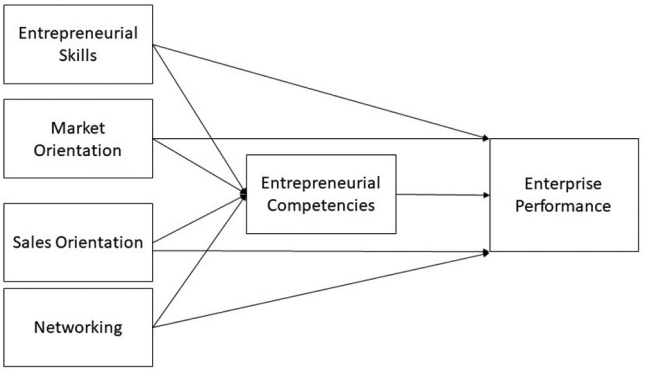

Figure 1.
Research framework

total of 2795 low-income micro-entrepreneurs, 425 of them were randomly selected from nine districts in Kelantan, particularly Tumpat, Bachok, Jeli, Machang, Gua Musang, Kuala Krai, Pasir Puteh, Pasir Mas and Tanah Merah. Prior to data collection, potential respondents were selected to explain the purpose of doing this survey and make an appointment with them for the interview. The data collection started from September to November 2017. A total of 403 respondents allowed researchers to visit their enterprises and collect data from them through structured interview.

Sample size

The sample size was determined through G-Power version 3.1. Based on the power of 0.95 (should be more than 0.80 in social and behavioral science research) with an effect size of 0.15, a sample size of 138 were needed to test the model with five predictors. To use PLS-SEM, the minimum sample is 100 (Reinartz *et al.*, 2009). Therefore, this study collected 403 samples.

Research instrument

Questionnaire items were adapted from the literature with minor revisions (See Appendix). We translated the questionnaire by professional language translator before conducting the interview. Items that measured entrepreneurial skills were adopted from Linan (2008). Items that measured market orientation were adopted from Kohli *et al.* (1993). Next, items that measured sales orientation were derived from Saxe and Weitz (1982). To measure networking, items were adopted from Witt (2004). Moreover, items that measured entrepreneurial competency were derived from Man *et al.* (2008). To measure enterprise performance, items were obtained from Morgan and Strong (2003). A seven-point Likert scale (from "1-Strongly disagree" to "7-Strongly agree") was used to respond to entrepreneurial competency. Similarly, a seven-point Likert scale (from "1-Very poor" to "7-Very good") was used to respond to micro-enterprise performance. On the other hand, a five-point Likert scale (from "1-Strongly disagree" to "5-Strongly agree") was used to respond to all independent variables.

Common method variance (CMV)

Organizing the items is one of the methods to minimize common method variance (CMV), the respondents were also "*informed that the responses will be evaluated anonymously and there are no right or wrong answers*" (Podsakoff *et al.*, 2003). To identify CMV, Harman's (1976)

one-factor test was used to extract one factor from all constructs to explain the variance for less than 50 per cent. The analysis showed that one component explained 26.32 per cent of the variance. Furthermore, CMV can be detected when the correlation between the constructs is higher than 0.9 (Bagozzi *et al.*, 1991). In this study, the highest correlation between the constructs (the relationship between entrepreneurial competency and micro-enterprise performance) was 0.53, which indicated a minimum CMV.

Multivariate normality

This study used the Web Power online tool to test multivariate normality. Web Power calculated the Mardia's multivariate skewness and kurtosis coefficients. As a result, the *p*-value showed lower than 0.05 and confirmed the existence of multivariate non-normality.

Empirical results

Demographic characteristics

Of 403 micro-entrepreneur respondents, 51.6 per cent were males and the rest were females. The majority of the respondents aged between 20 and 30 (29.5 per cent). Most of them (79.9 per cent) were married. More than half (58.1 per cent) of the respondents completed their secondary school education, followed by 19.9 per cent of them completed their STPM or Diploma. However, 10.2 per cent of the respondents were degree holders, 5.5 per cent of them received their primary school education. Only 1.2 per cent of the respondents never received any level of education. In addition, most respondents were involved in service sector (41.9 per cent). The remaining were involved in retailing (32.5 per cent), manufacturing (16.4 per cent), wholesaling (6.5 per cent), livestock (1.7 per cent), agriculture (0.5 per cent) and poultry (0.5 per cent) (Table I).

Reliability and validity

Table II presents the descriptive statistics and the reliability of the items. The descriptive statistics showed that the mean and standard deviation of the variables (entrepreneurial skills, market orientations, sales orientations, networking, entrepreneurial competency and micro-enterprise performance). As depicted in Table II, the mean value for sales orientation was lower and the standard deviation was relatively higher than other constructs. In other words, some entrepreneurs had different level of sales orientation.

Fundamentally, Cronbach's alpha is used as a conservative measure of internal consistency reliability. The analysis showed that the Cronbach's alpha values for all variables were greater than 0.7. This proved that all items were reliable. Moreover, it is possible to apply another measure of internal consistency reliability, known as composite reliability (Hair *et al.*, 2013). The minimum value for achieving composite reliability is 0.7 (Hair *et al.*, 2011). As shown in Table II, the composite reliability values for all variables were greater than 0.8. Besides, the Dillon-Goldstein *rho* values for all indicators were greater than 0.7. To fulfill convergent validity, the AVE value should be greater than 0.50. The analysis showed that the AVE values for all variables were greater than 0.50, which indicated acceptable convergent validity. Also, variance inflation factors (VIF) was performed to detect multicollinearity and the VIF values for all variables were lower than 3.3. Therefore, there was no multicollinearity issue in this study.

As portrayed in Table III, the values showed that all indicator loadings were higher than 0.7, except three items with more than 0.5. According to Chin (1998), items with standardized loadings for less than 0.7 were retained for subsequent analysis, and those items with loadings greater than 0.5 should be remained. In Table III, the loadings of all indicators were higher than the total cross-loadings. This confirmed the existence of

Demographic characteristics	*n*	(%)
Gender		
Male	208	51.6
Female	195	48.4
Total	403	100.0
Age		
20-30 years old	68	16.9
31-40 years old	119	29.5
41-50 years old	118	29.3
51-60 years old	78	19.4
61 years old and above	20	4.9
Total	403	100.0
Marital status		
Single	53	13.2
Married	322	79.9
Divorced	13	3.2
Widowed	15	3.7
Total	403	100.0
Education		
Never attended school	5	1.2
Primary school	22	5.5
Secondary school	234	58.1
STPM/Diploma	80	19.9
Undergraduate degree	41	10.2
Master's degree	3	0.7
Others	18	4.5
Total	403	100.0
Business type		
Manufacturing	66	16.4
Retailing	131	32.5
Wholesaling	26	6.5
Agriculture	2	0.5
Livestock	7	1.7
Poultry	2	0.5
Services	169	41.9
Total	403	100.0

Table I.
Profile of the respondent

Variables	Items	Mean	SD	CA	DG *rho*	CR	AVE	VIF
Entrepreneurial skills	4	4.124	0.4926	0.722	0.725	0.828	0.546	1.476
Market orientations	4	4.178	0.4784	0.749	0.750	0.841	0.570	1.463
Sales orientations	4	3.202	0.9928	0.849	0.716	0.862	0.614	1.037
Networking	6	4.078	0.6637	0.868	0.885	0.901	0.603	1.334
Entrepreneurial competency	4	5.879	0.6777	0.802	0.812	0.870	0.627	1.247
Micro-enterprise performance	5	5.857	0.7398	0.868	0.872	0.905	0.655	–

Table II.
Reliability and validity

Notes: Standard deviation (SD); Cronbach's alpha (CA); Dillon-Goldstein's *rho* (DG *rho*); composite reliability (CR); average variance extracted (AVE); variance inflation factors (VIF)
Source: Author(s) own compilation

Items and Variables	ES	MO	SO	NE	EC	EP
Entrepreneurial Skills – Item 1	*0.720*	0.352	0.115	0.273	0.210	0.294
Entrepreneurial Skills – Item 2	*0.770*	0.338	0.052	0.320	0.298	0.281
Entrepreneurial Skills – Item 3	*0.769*	0.355	0.165	0.318	0.321	0.302
Entrepreneurial Skills – Item 4	*0.694*	0.387	0.060	0.285	0.299	0.275
Market Orientation – Item 1	0.394	*0.755*	0.126	0.346	0.248	0.326
Market Orientation – Item 2	0.322	*0.725*	0.151	0.310	0.248	0.261
Market Orientation – Item 3	0.348	*0.769*	0.072	0.350	0.283	0.258
Market Orientation – Item 4	0.393	*0.769*	0.023	0.278	0.284	0.306
Sales Orientation – Item 1	−0.055	0.044	*0.615*	0.082	0.004	−0.043
Sales Orientation – Item 2	0.086	0.024	*0.822*	0.063	0.095	0.084
Sales Orientation – Item 3	0.134	0.170	*0.894*	0.206	0.122	0.110
Sales Orientation – Item 4	0.044	0.063	*0.778*	0.087	0.043	0.025
Networking – Item 1	0.297	0.340	0.153	*0.677*	0.158	0.141
Networking – Item 2	0.320	0.340	0.109	*0.738*	0.247	0.165
Networking – Item 3	0.328	0.344	0.042	*0.762*	0.205	0.178
Networking – Item 4	0.312	0.339	0.128	*0.846*	0.284	0.248
Networking – Item 5	0.326	0.336	0.161	*0.825*	0.264	0.178
Networking – Item 6	0.320	0.295	0.165	*0.801*	0.199	0.188
Ent. Competency – Item 1	0.300	0.319	0.033	0.179	*0.826*	0.455
Ent. Competency – Item 2	0.248	0.220	0.075	0.184	*0.802*	0.407
Ent. Competency – Item 3	0.311	0.258	0.050	0.309	*0.730*	0.339
Ent. Competency – Item 4	0.352	0.306	0.212	0.271	*0.806*	0.502
Enterprise Performance – Item 1	0.367	0.336	0.049	0.182	0.502	*0.829*
Enterprise Performance – Item 2	0.280	0.318	0.142	0.207	0.464	*0.797*
Enterprise Performance – Item 3	0.251	0.337	0.039	0.122	0.380	*0.799*
Enterprise Performance – Item 4	0.334	0.276	0.103	0.204	0.392	*0.800*
Enterprise Performance – Item 5	0.335	0.280	0.127	0.250	0.449	*0.820*
Fornell-Larcker Criterion						
Entrepreneurial Skills (ES)	0.739					
Market Orientation (MO)	0.484	0.755				
Sales Orientation (SO)	0.134	0.121	0.784			
Networking (NE)	0.406	0.425	0.161	0.777		
Entrepreneurial Competencies (EC)	0.386	0.352	0.125	0.298	0.792	
Enterprise Performance (EP)	0.390	0.383	0.114	0.240	0.545	0.809
Heterotrait–Monotrait Ratio						
Entrepreneurial Skills (ES)	–					
Market Orientation (MO)	0.656	–				
Sales Orientation (SO)	0.148	0.148	–			
Networking (NE)	0.515	0.531	0.164	–		
Entrepreneurial Competencies (EC)	0.497	0.449	0.125	0.349	–	
Enterprise Performance (EP)	0.489	0.472	0.109	0.270	0.639	–

Note: The italic values in the matrix above are the item loadings, and others are cross-loadings
Source: Author's data analysis

Table III.
Loadings and cross-loadings

discriminant validity. Based on the Fornell-Larcker criterion, the AVE for each indicator should be greater than the construct's highest squared correlation with another. As a result, all variables fulfilled this criterion. Besides, the Heterotrait-Monotrait Ratio (HTMT) looks into the correlation between constructs, paralleling the disattenuated construct score. Referring to the threshold value of 0.9, it was concluded that there was no evidence of a lack of discriminant validity.

Path analysis

In Table IV, the coefficient value for the effect of entrepreneurial skills on entrepreneurial competency (*H1*) was 0.246 with the *p*-value of 0.000. This indicated that there was a positive effect of entrepreneurial skills on entrepreneurial competency. However, the f^2 value of 0.054 indicated a small effect of entrepreneurial skills on entrepreneurial competency among micro-entrepreneurs. The coefficient value for the effect of entrepreneurial skills on enterprise performance (*H2*) was 0.149 with the *p*-value of 0.011. This indicated a positive effect of entrepreneurial skills on enterprise performance, with the f^2 value of 0.023.

In addition, the coefficient of market orientation showed a positive ($\beta = 0.178$) (*p*-value of 0.011) effect on entrepreneurial competency (*H3*). The f^2 value of 0.028 indicated a low effect size of market orientation on entrepreneurial competency. Besides, the path coefficient value for the effect of market orientation on enterprise performance (*H4*) was 0.165 with the *p*-value of 0.012. In other words, market orientation had a positive effect on enterprise performance, with the f^2 value of 0.029.

Furthermore, the coefficient for sales orientation showed a positive ($\beta = 0.052$) but statistically not significant (*p*-value of 0.401) effect on entrepreneurial competency (*H5*), with the f^2 value of 0.003. This indicated that there was a very low effect of sales orientation on entrepreneurial competency. Clearly, the path coefficient value for the effect of sales orientation on enterprise performance (*H6*) was 0.024 with the *p*-value of 0.710. Being said that, there was a positive effect of sales orientation on enterprise performance, but was not statistically significant. However, the f^2 value of 0.001 had a nearly zero effect of sales orientation on enterprise performance.

Apart from that, the coefficient for networking showed a positive ($\beta = 0.114$) (*p*-value of 0.024) effect on entrepreneurial competency (*H7*), with the f^2value of 0.012. This meant that there was a small effect of networking on entrepreneurial competency. In contrast, the path coefficient value for the effect of networking on enterprise performance (*H8*) was (0.024) with the *p*-value of 0.642. This implied there was no significant effect of networking on enterprise performance, with the f^2 value of 0.001. Next, the path coefficient values recorded a positive ($\beta = 0.642$) and significant (*p*-value of 0.000) effect of enterprise competency on enterprise performance (*H9*), with the f^2value of 0.234. This indicated a moderately high effect of entrepreneurial competency on enterprise performance.

In this case, 18.9 per cent of the variation in entrepreneurial competency was explained by entrepreneurial skills, market orientation, sales orientation and networking. Moreover,

Hypothesis		Coefficient	*Sig.*	Decision	r^2	f^2	Q^2
H1	ES → EC	0.246	0.000	*Accept*		0.054	
H3	MO → EC	0.178	0.011	*Accept*		0.028	
H5	SO → EC	0.052	0.401	*Reject*	0.189	0.003	0.111
H7	NE → EC	0.114	0.024	*Accept*		0.012	
H2	ES → EP	0.149	0.011	*Accept*		0.023	
H4	MO → EP	0.165	0.012	*Accept*		0.029	
H6	SO → EP	0.024	0.710	*Reject*	0.355	0.001	0.210
H8	NE → EP	−0.024	0.642	*Reject*		0.001	
H9	EC → EP	0.642	0.000	*Accept*		0.234	

Notes: Entrepreneurial skills (ES); market orientation (MO); sales orientation (SO); networking (NE); entrepreneurial competencies (EC); enterprise performance (EP)
Source: Author(s) own compilation

Table IV.
Path analysis

35.5 per cent of the variation in enterprise performance was explained by entrepreneurial skills, market orientation, sales orientation, networking and entrepreneurial competency. Besides, the Q^2 value of 0.111 indicated that entrepreneurial skills, market orientation, sales orientation and networking had low predictive relevance for entrepreneurial competency. Similarly, the Q^2 value of 0.210 indicated that these factors had a moderate predictive relevance for enterprise performance.

Mediating effects

Regarding the mediating effects of entrepreneurial competency, the study presented the indirect effect coefficients, confidence intervals and *p*-values (see Table V). The result revealed that entrepreneurial skills, market orientation and networking had a (*p*-values less than 0.05) positive indirect effect on enterprise performance among micro-enterprises in Kelantan, Malaysia. However, there was no significant (5 per cent level of significance) effect of entrepreneurial competency on the relationship between sales orientation and enterprise performance.

Discussion and implication

Undeniably, entrepreneurial competencies are crucial for low-income households who rely heavily on their micro-enterprise income. Hence, this study examined entrepreneurial competencies and enterprise performance. The finding of this research revealed that entrepreneur skills had a positive effect on entrepreneurial competencies, which was consistent with past studies (Phelan and Sharpley, 2012; Teece, 2012). In fact, entrepreneurs required various skills to develop specific competencies for managing an enterprise. The finding also revealed a positive effect of entrepreneurial skills on enterprise performance, which was in line with many studies (Bird, 1995; Chandler and Jansen, 1992; Cooper *et al.*, 1994; Lerner and Almor, 2002; Mitchelmore and Rowley, 2010).

In addition, market orientation had a positive effect on entrepreneurial competencies. This finding was congruent with several past studies (Baker and Sinkula, 2009; Kohli and Jaworski, 1990; Narver and Slater, 1990; Slater and Narver, 1995) which confirmed the importance of market orientation in strengthening entrepreneurial competency. Further, market orientation had a positive effect on enterprise performance. This finding agreed with earlier studies (Baker and Sinkula, 2009; Boso *et al.*, 2013; Morgan *et al.*, 2009), which found market orientation increased business performance by creating value for buyers through competitive advantage.

Furthermore, this study found a positive but insignificant effect of sales orientation on entrepreneurial competencies. The results of this study confirmed that sales-oriented approach was not necessarily important for firm, but also for salesperson's performance

Path		Beta	CI-Min	CI-Max	Sig.	Decision
HM1	ES → EC → EP	0.107	0.053	0.152	0.000	Mediation
HM2	MO → EC → EP	0.077	0.016	0.149	0.022	Mediation
HM3	SO → EC → EP	0.022	−0.041	0.067	0.406	No Mediation
HM4	NE → EC → EP	0.049	0.010	0.095	0.020	Mediation

Notes: Entrepreneurial Skills (ES), Market Orientation (MO), Sales Orientation (SO), Networking (NE), Entrepreneurial Competencies (EC), Enterprise Performance (EP)
Source: Author(s) own compilation

Table V.
Mediating effects

(Wachner *et al.*, 2009). Next, the finding showed a positive effect of networking on entrepreneurial competencies, which extended the studies by Bird (1995) and Ahmad *et al.* (2010).

Conversely, networking had an insignificant relationship with enterprise performance. Although networking was crucial for developing entrepreneurial competencies, it did not guarantee micro-enterprises performance. Drawing upon the RBV, this study found a positive effect of entrepreneurial competencies on enterprise performance. In a nutshell, entrepreneurial competencies were valuable capabilities that determined organizational performance (Al-Mamun *et al.*, 2016; Ahmad *et al.*, 2010; Barney, 1991; Gerli *et al.*, 2011; Grant, 1991; Mitchelmore and Rowley, 2013; Tehseen and Ramayah, 2015).

Last but not the least, the findings showed a significant indirect effect of entrepreneurial skills, market orientation and networking on enterprise performance. According to the RBV and existing studies, this finding indicated that entrepreneurial skills, market orientation and networking were additional entrepreneurial competency that facilitated micro-enterprise performance (Baum and Locke, 2004; Barney, 1991; Gerli *et al.*, 2011; Grant, 1991; Narver and Slater, 1990).

Conclusion

To address the limitations of the literature (Gerli *et al.*, 2011; Mitchelmore and Rowley, 2010), this study investigated the influence of entrepreneurial competencies on enterprise performance among low-income households. Particularly, this study contributed to the RBV through the relationship between entrepreneurial competencies and enterprise performance. This study also contributed to the literature by examining both direct and indirect effect of entrepreneurial skills, market orientation, sales orientation and networking on enterprise performance. The result of the path analysis and mediation test substantiated that entrepreneurial skills and market orientation were resources of the firms, thereby affecting performance directly and indirectly. Moreover, networking was a unique resource that influenced enterprise performance through entrepreneurial competencies. Although this finding disagrees with the proposed hypothesis, it contributed to the literature of RBV in specific.

In terms of practical implications, the findings provided insights into the improvement of micro-enterprise performance to promote entrepreneurial activities. Policymakers can use the findings as reference to address the economic issues among low-income households. Therefore, the government and socio-economic developmental organizations should enhance the entrepreneurial skills, market-oriented approach, networking traits and entrepreneurial competencies through suitable policies and training programs. Efforts should focus on providing know-how knowledge to carry out business operations. Micro-entrepreneurs strive and put in lots of hard work in order free themselves from the poverty trap, where learning and adopting entrepreneurial skills might be an added burden. Government agencies and development organization should be able to identify and provide specific training programs to increase the survival of these micro-enterprises and entrepreneurs.

Market orientation often involves market intelligence, which might never hear by those micro-entrepreneurs or practiced in the establishments. Again, their circumstances might play a role in it. Without information on environment, businesses fail to respond to changes, where we have seen MNCs closing down as a result of being not responsive to the changes in market. To save guard micro establishments, they have to be introduced on how to identify and respond to their environmental changes. On top of that, the concept of networking should be introduced to give micro-entrepreneurs to provide them

access to better resources. General understanding is that, SMEs and large-scale firms are well connected among them and the formal networks is facilitated through associations. This form of networking platforms is not readily available for micro level players, thus efforts to be placed to the creation of platforms for micro-entrepreneurs to network. Perhaps education institutions promoting entrepreneurship should be involved in these joint efforts, as in enhancing entrepreneurial capabilities, entrepreneurial universities play are major role in knowledge transfer (Afzal *et al.*, 2018). Regarding the limitation of this study, other possible factors were not included to predict enterprise performance. As this study focuses on low-income households in a single state, it reduces the generalizability of the findings. Hence, future researchers can examine entrepreneurial behavior among different income groups across countries to deepen our understanding about its antecedents and consequences.

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Appendix

Code	Items	Sources
ES – Item 1	I consider myself very creative	Linan (2008)
ES – Item 2	I have adequate problem solving skills	
ES – Item 3	I possess high level of leadership	
ES – Item 4	I possess adequate entrepreneurial skill to manage the enterprise	
MO – Item 1	I am quick to detect changes in customers' product preferences	Kohli *et al.* (1993)
MO – Item 2	I will promote a product even if I am not sure whether it is right for the customer	
MO – Item 3	I will paint too rosy a picture of my products to make them sound as good as possible	
MO – Item 4	As the owner of a business, I sell product lines depending on real market needs	
SO – Item 1	I stay alert for weaknesses in a customer's personality so I can use them to put pressure on him/her to buy	Saxe and Weitz (1982)
SO – Item 2	I will promote a product even if I am not sure whether it is right for the customer	
SO – Item 3	I will paint too rosy a picture of my products to make them sound as good as possible	
SO – Item 4	I spend more time trying to persuade a customer to buy than trying to discover his needs	
NE – Item 1	I frequently communicate with actual and potential business network partners	Witt (2004)
NE – Item 2	I have a high number of business network partners	
NE – Item 3	My network is very diverse	
NE – Item 4	My network is very dense	
NE – Item 5	My network partners frequently provide me new information	
NE – Item 6	I receive extensive support from my network partners	
EC – Item 1	I identify goods or services that customers want	Man *et al.* (2008)
EC – Item 2	I develop long-term trusting relationships with others	
EC – Item 3	I negotiate with others	
EC – Item 4	I recognize and work on my own shortcomings	
EP – Item 1	Compared to your major competitors, how is your firm's customer satisfaction?	Morgan and Strong (2003)
EP – Item 2	Compared to your major competitors, how is your firm's competitive position?	
EP – Item 3	Compared to your major competitors, how is your firm's customer retention?	
EP – Item 4	Compared to your major competitors, how is your firm's sales growth?	
EP – Item 5	Compared to your major competitors, how is your firm's return on investment?	

Table AI.
Survey instrument

Notes: Entrepreneurial skills (ES); market orientation (MO); sales orientation (SO); networking (NE); entrepreneurial competencies (EC); enterprise performance (EP)

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