Entrepreneurial Competencies and Performance of Informal Micro-Enterprises in Malaysia

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Doi:10.5901/mjss.2016.v7n3p273

Abstract

Literature on informal economic activities has identified the significant role of informal micro-enterprises in national development and the role of entrepreneurial competencies in micro-enterprise performance. This study, therefore, examined the role of entrepreneurial competencies, i.e., risk-taking propensity, need for achievement, self-efficacy, and experience in informal micro-enterprise performance in Kelantan, Malaysia. This study used a cross-sectional design and collected quantitative data from 197 informal micro-entrepreneurs. Findings of the path analysis using variance-based structural equation modeling (SEM-PLS) revealed that informal micro-entrepreneurs' risk-taking propensity and self-efficacy have a significant positive effect on micro-entrepreneurs' self-efficacy and ability to take risks in order to take advantage of all the income-generating opportunities available to them, which would ultimately lead to the improvement of the socio-economic condition of low income households in Malaysia.

Keywords: Entrepreneurship; Competencies; Enterprise Performance; Informal Economy

1. Introduction

An informal economy consists of economic activities that occur outside of the formal institutional boundaries but which remain within the informal institutional boundaries for large societal groups, that are engaged in low-paid employment as waged employees (Webb *et al.*, 2013). These persons are labeled as informal entrepreneurs who display entrepreneurial attributes, qualities, and traits (Webb *et al.*, 2013; Williams and Gurtoo, 2011). The informal economy exists in both developing and developed nations, though it is most often connected as an engine of economic dynamism in developing countries. Generally, the examples of the informal economy include workers operating as street vendors, construction workers, and unlicensed taxi drivers. Specifically, this informal economy denotes all unregulated and non-formal economic activities and it is characterized by low entrance requirements in terms of capital and qualified workers, small scale operations, and labor intensive methods of production and technology. Often, informal businesses are small and family-run or run by a single entrepreneur.

There are wide ranges of definitions of informal economic activities. Among them, Tokman (2001) noted that in developing countries, there are often no clear distinctions between formal and informal sectors; large factories and staterun enterprises have informal labor forces working beside their formal counterparts. Meanwhile, Djankov *et al.* (2002) defined informal economy as an activity of an unofficial business (e.g. unreported employees and unregistered businesses) to make it part of the formal sector. In addition, Amurane (2007) defined the informal sector as an area where the people start their businesses (voluntary or involuntary and illegal) and they are, obviously, not registered. In Malaysia, informal traders are not registered with Companies Commission of Malaysia (Suruhanjaya Syarikat Malaysia), as they do not have any permanent business premises. Instead, informal traders registered with the local municipal council (i.e., Majlis Perbandaran, Kota Bharu), where they pay RM20-RM36 per year depends on where they located their

ISSN 2039-2117 (online)	Mediterranean Journal of Social Sciences	Vol 7 No 3
ISSN 2039-9340 (print)	MCSER Publishing, Rome-Italy	May 2016

business. Informal traders in Malaysia also have to pay RM3-RM5 daily to local municipal council for cleaning the business premises.

Earlier studies have noted a significant proportion of workers from low-income households being involved in informal economic activities (Naik, 2009; Sibal, 2007; Department of Statistics Malaysia, 2013). A study by Naik (2009) indicated that the number of informal sector workers in India from 2004 to 2005 was 394.9 million and this figure contributed to 86.3% of total workers there. Nevertheless, Sibal (2007), in the Philippines, reported that the portion of the informal economy had declined from 57.6% in 1980 to 49.6% in 2005. This is due to the new policy where some of the members were offered jobs in the formal sector as non-regular or contractual employees. In Malaysia, the total workforce in 2013 was 13.2 million; among them, 1.3 million (9.7%) were involved in the informal sector (Department of Statistics Malaysia, 2013). Based on a survey conducted by the Department of Statistics Malaysia (2013), people who live in urban areas were recorded as the biggest population to be involved in the informal sector (814,700 people) in 2013, and no gender difference was recorded for those who were involved in the informal sector. However, the numbers in the female group of those involved in the informal sector was higher in 2013 compared to 2012. In terms of the age groups, the 40-44 age group (180,000 person) and the 45-49 age group (178.400 person) were the main group in the informal economy. The report showed that 817, 200 persons with secondary education represented the highest group of those involved in this sector and the own-account worker was the biggest employment group in the informal sector in 2013. Many people were involved in the construction industry followed by wholesale and retail trade, repairing vehicles, manufacturing, and service and sales workers; these were recorded as the main categories of occupation in the informal sector. Among the 15 states in Malaysia, Selangor recorded the highest percentage of employment in the informal sector (15.2%), followed by Johor (11.8%) (Department of Statistics Malaysia 2013).

It is evident that a significant proportion of micro-entrepreneurs in Malaysia are currently operating in the informal economy. Most of the development programs and policies for the socio-economic development of low-income households in Malaysia are focused on formal micro-entrepreneurs. It is difficult for informal micro-entrepreneurs to access working capital and other supportive services. The entrepreneurial competencies of informal micro-entrepreneurs, therefore, can have a significant effect on micro-enterprise performance. Entrepreneurial competency commonly refers to the capability of completing something by using resources. According to Mitchelmore and Rowley (2013), entrepreneurial competencies are referred to a specific group of competencies relevant to the activities of a successful entrepreneurship. The same view was shared by Man *et al.* (2002), who defined entrepreneurial competencies as those involving the roles played by the entrepreneurs successfully. Bird (1995) explained that entrepreneurial competencies are best defined by all the characteristics such as motives, self images, social roles, traits, and specific knowledge that lead to the birth, survival, and growth of the business.

An entrepreneurial competency is a most needed value for an entrepreneur. The entrepreneur should always have personal competencies, which refers to important personal qualities and abilities that help in the building up of personal strength and in enhancing an individual's effectiveness in performing certain challenging tasks such as managing one's own business (Man and Lau, 2000). According to Andrews *et al.* (2011), it is necessary to recognize the characteristics of the entrepreneur in informal activities, in order to explain the business success or failure based on the various characteristics of the entrepreneurs. The characteristics are an interaction with contingency factors of the informal economy in which the entrepreneur operates and chooses the strategy. This study is, therefore, designed to examine the role of entrepreneural competencies, i.e., risk taking propensity, need for achievement, self-efficacy, and experience in informal micro-enterprise performance in Kelantan, Malaysia.

2. Literature Reviews

The informal economy or the informal sector is considered by the International Labor Organization (ILO) as the provision of subsistence to families (Andrews *et al.* 2011), which focuses more on the nature of employment in addition to the characteristics of enterprises, which include informal employment both within and outside the agricultural sector (Gerxhani, 2009). These definitions are largely consistent with Nitcher and Goldmark's (2009) economic activities as those that are unregistered and illegal but yet produce legal products. The informal economy is portrayed by Williams and Gurtoo (2011), as unwilling and unfortunate pawns within an exploitative global economic system in which work is becoming ever more precarious and poorly paid. Entrepreneurial activities are important to the economic growth and development of nations, in which the activities are embedded in informal and formal economies.

In regard to entrepreneurial competencies, Mitchelmore and Rowley (2013) noted that entrepreneurial competencies could lead to a better enterprise performance and growth and also economic development. Churcill and Lewis (1983) suggested that entrepreneurial competencies have the potential to, in turn, drive business growth. Man *et*

ISSN 2039-2117 (online)	Mediterranean Journal of Social Sciences	Vol 7 No 3
ISSN 2039-9340 (print)	MCSER Publishing, Rome-Italy	May 2016

al. (2002) identified ten dimensions of competencies, which are opportunity, relationship, analytical, innovative, operational, human, strategic, commitment, learning, and personalities. All these dimensions are expected to have positive impacts on SME performance. According to Ahmad, Halim and Zainal (2010), entrepreneurs nowadays are responsible for many roles and activities compared to the managers. They need to be engaged in various roles such as in managerial, entrepreneurial as well as functional roles. Many prior scholars focus on entrepreneurial competencies' impact on business performance, specifically, Brinckmann et al., (2011), Man and Lau (2000), and Lerner and Almor (2002) who conducted their studies on entrepreneurial competencies focused on developed economies. A recent study by Mitchelmore and Rowley (2013) examined competencies of female entrepreneurs who are committed to the growth of their businesses. They identified that personal and relationship, business and management, entrepreneurial, and human relation competencies are the four main clusters of competencies. Based on earlier literature on entrepreneurship and SMEs, it is evident that entrepreneurial characteristics play an important role in ensuring business success, such as individual characteristic, personal traits, entrepreneur orientation, and entrepreneur readiness (Islam *et al.*, 2011; Webb *et al.*, 2013). Details about the selected key competencies and how they can affect informal enterprise performance are noted below.

2.1 Risk Taking Propensity

According to Tull (2009), risk-taking refers to someone who is involved in a certain situation that is either good or harmful, hoping that at the end of it, she/he can get a positive result. However, Landqvist and Stalhandske (2011) believed that the risk-taking propensity should be well conceptualized and well defined as a person's direction towards a decision-making situation. Zhao *et al.* (2010) conducted a study to predict the factors that influenced entrepreneurial intention in doing business. Their finding indicated that risk propensity is the top predictor of entrepreneurial intentions. In contrast, the finding by Zhao *et al.* (2010) indicated that risk taking propensity had no impact on business performance, even though Shepherd (2003) stressed that risk taking is known as a factor that can drive a firm's performance. A recent study by Willebrands, *et al.* (2012) further explained that entrepreneurs should not solely take risks without considering the effects in the future. Informal micro-entrepreneurs' ability to take risks, in order to take advantage of short-term income-generating opportunities can, therefore, lead to a better micro-enterprise performance.

2.2 Experiences

Shepherd *et al.* (2000) noted that experience could be gained when people are directly or indirectly involved in an event, and they can gain knowledge from the event. One of the abilities that entrepreneurs should have is relevant experience. Relevant experience is required in order to manage, formulate, and handle all the processes to ensure that there is business success and growth. Fernald *et al.* (2005) examined separate literatures on entrepreneurship and leadership, and derived a set of similar "characteristics" common to both leaders and entrepreneurs' aims. As noted earlier, most of the informal micro-entrepreneurs lack access to working capital and enterprise development training. For many of them, relevant work experience can be the only way for gathering the necessary skills to manage a micro-enterprise on their own. This study, therefore, examined the effect of relevant work experience on informal micro-enterprise performance in Kelantan, Malaysia.

2.3 Need for Achievement

Among the psychological and behavioral characteristics, the need for achievement is considered as one of the leading motivating factors contributing towards enterprise performance. Need for achievement refers to the expectation of doing something better or faster than anybody else or better than the person's own earlier accomplishments (Hansemark, 2003). The need for achievement was found to be higher among small business owners while assessing their entrepreneurial orientation (Sagie and Elizur, 1999). Different studies conducted on entrepreneurs and non-entrepreneurs show that the need for achievement has a strong relation with entrepreneurship (Hansemark, 1998; Yosof *et al.*, 2007). As for informal micro-entrepreneurs, the motivation to give their best can be directed from their need for achievement. This study, therefore, examined the effect of informal micro-entrepreneurs' 'need for achievement' on micro-enterprise performance in Kelantan, Malaysia.

2.4 Self-Efficacy

Self-efficiency is a useful concept for explaining human behavior as research has found that it is one of the influential roles in determining an individual's choice, level of effort, and perseverance (Chen *et al.*, 2004). Entrepreneurial self-efficacy also refers to the strength of a person's belief that she/he is capable of successfully performing the various roles and tasks of entrepreneurship in either the formal or informal economy sector. As a task oriented behavior, entrepreneurial self-efficacy can be defined as the entrepreneurs' beliefs and confidence in their capabilities to affect the environment and to be successful in implementing entrepreneurial behaviors (Luthans and Ibrayeva, 2006). Man and Lau (2000) stated that personal competencies refer to the physical and mental abilities of an individual in facing challenging tasks. This includes self-efficiency and emotional intelligence (Thompson 1998), self-motivation (Martin and Staines 1994), and self-management (Winterton 2002). It is, therefore, expected that informal micro-entrepreneurs' level of self-efficacy would have a positive impact on micro-enterprise performance in Kelantan, Malaysia.

3. Research Methodology

This study uses a cross-sectional design to examine the effect of entrepreneurial competencies on the performance of micro-enterprises operating in an informal economy in Kelantan, Malaysia. The population definition was based on the definition of an informal micro-enterprise, which is not registered with Companies Commission of Malaysia (*Suruhanjaya Syarikat Malaysia*), as they do not have any permanent business premises. Informal traders registered with the local municipal council (i.e., *Majlis Perbandaran, Kota Bharu*), where they pay RM20-RM36 per year depends on where they located their business. This study used convenience sampling method and collected data from the 'night markets' (*pasar malam*) where most of the informal micro-entrepreneurs operate. Data was collected from 197 selected micro-entrepreneurs.

3.1 Research Instrument

The questionnaire was designed using simple and unbiased wordings whereby respondents can easily understand the questions and provide answers based on their own perceptions. Questions were adopted from earlier studies with minor modifications where needed. The five-point Likert scale of 1 to 5 points (strongly disagree, disagree, neutral, agree, and strongly agree) was used for the independent and dependent variables.

3.2 Data Analysis Method

PLS-SEM is a causal modeling approach aimed at maximizing the explained variance of the dependent latent constructs (Hair, Ringle and Sarstedt, 2011). Due to the exploratory nature of this study, together with the relatively low sample size and non-normal data, this study used the variance-based structural equation modeling, i.e., partial least squares (SEM-PLS) estimation with the primary objective of maximising the explanation of variance in the structural equation model's dependent constructs. The findings of this analysis were reported as recommended by Hair, Ringle and Sarstedt (2013) for PLS modeling. These include the (a) indicator reliability (e.g., standardized indicator loadings of 0.70; in exploratory studies, loadings of 0.40 are acceptable); (b) internal consistency reliability (Cronbach's alpha and composite reliability both measures should exceed 0.70); (c) convergent validity (AVE \ge 0.50); (d) discriminant validity (Fornell-Larcker criterion results and/or cross loadings); (e) r^2 (acceptable level depends on the research context); (f) effect size or f^2 (0.02, 0.15, 0.35 for weak, moderate, strong effects); (g) path coefficient estimates; and (h) predictive relevance Q^2 and q^2 ($Q^2 > 0$ is indicative of predictive relevance; q^2 : 0.02, 0.15, 0.35 for weak, moderate, and strong degree of predictive relevance of each effect).

4. Summary of Findings

4.1 Characteristics of Respondents

To measure the effect of key entrepreneurial competencies on micro-enterprise performance, this study collected data from a total of 197 informal micro-entrepreneurs from selected local floating markets. Entrepreneur's demographic characteristics, as noted in Table 1, show that the proportion of male and female micro-entrepreneurs is almost equal. More than 50% of these entrepreneurs are less than 30 years old indicating that a large number of young low-income

ISSN 2039-2117 (online)	Mediterranean Journal of Social Sciences	Vol 7 No 3
ISSN 2039-9340 (print)	MCSER Publishing, Rome-Italy	May 2016

people are currently engaged in informal economic activities in Malaysia. Among the informal micro-entrepreneurs, 60.9% of them are Malay, 30.5% Chinese, 2% Indian, and 6.6% others. Among the respondents, 35% are single, 49.74% married, 7.6% divorced, and 7.6% widowed. Among the respondents, nearly 62% reported to having had previous working experience before starting their micro-enterprises. A total of 92 out of 197 respondents reported that they received financial assistance from development organizations.

4.2 Reliability Analysis

The Cronbach's Alpha values, as presented in Table 2, for need for achievement, self-efficacy, and experience are more than 0.7 and for risk-taking propensity and micro-enterprise performance, it is more than 0.6. As Cronbach's Alpha for all items are more than 0.6, this study considered all items as reliable. Moreover, the composite reliability, which takes into account that the indicators have different loadings for all items, is more than 0.8, which is higher than 0.7 (Hair, Ringle and Sarstedt, 2013), therefore, it is considered as reliable. Convergent validity signifies that a set of indicators represents one and the same underlying construct, which can be demonstrated through their unidimensionality. The average variance extracted (AVE) value for all items is more than 0.5, which indicates sufficient convergent validity.

Table 1: Respondents	Demographic	Characteristics
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Gender	n	%	Aae	n	%
Male	99	50.3%	Below 25 years	66	22.3%
Female	98	49.7%	25 to 29 years	62	31.5%
Total	197	100%	30 – 34 years	44	22.3%
			35 years and above	47	23.9%
Race	n	%	Total	197	100%
Malay	120	60.9%			
Chinese	60	30.5%	Marital Status	n	%
Indian	4	2.0%	Single	69	35.0%
Others	13	6.6%	Married	98	49.74%
Total	197	100%	Divorce	15	7.6%
			Widow	15	7.6%
Work Experience	n	%	Total	197	100%
Yes	122	61.9%			
No	75	38.1	Educational Level	n	%
Total	197	100%	UPSR	13	6.6%
			PMR	35	17.3%
Financial Support	n	%	SPM	103	52.2%
Yes	92	46.7	STPM and above	46	23.4%
No	104	52.8	Total	197	100%
Total	197	100%			

Table 2: Descriptive and reliability measures

Number of Itoms		De	escriptive		Reliability		
	Number of items	Mean	S. Deviation	CA	CI	AVE	
RTP	3	3.8680	0.78069	0.673	0.812	0.594	
NFA	3	3.7733	0.76222	0.700	0.832	0.623	
SEF	5	3.5635	0.67573	0.781	0.850	0.531	
EXP	6	4.3477	0.71404	0.895	0.917	0.650	
MEP	3	3.7936	0.75234	0.649	0.802	0.578	

RTP: Risk-Taking Propensity; NFA: Need for Achievement; SEF: Self-Efficacy; EXP: Experience; MEP: Micro-Enterprise Performance; CA: Cronbach's Alpha, CI: Composite Reliability; AVE: Average Variance Extracted

Indicators are assumed to be reliable if the absolute standardized outer (component) loadings are higher than 0.7. As noted in Table 3, all items used to measure risk-taking propensity, need for achievement, self-efficacy, experience, and micro-enterprise performance are more than 0.7, except for the third item of micro-enterprise performance. The cross-loading values are far below the outer loadings, which suggest good discriminant validity. The Fornell–Larcker criterion

assesses the discriminant validity at the construct level. The Fornell–Larcker criterion in Table 3 is largely unable to detect a lack of discriminant validity. Furthermore, the Heterotrait-Monotrait Ratio (HTMT) is an estimate of the correlation between constructs, which parallels the disattenuated construct score creation. Using a value of 0.9 as the threshold, this study concluded that there is no evidence of a lack of discriminant validity.

4.3 Path Coefficients

Verifying the reliability and validity of the outer model allowed an evaluation of the inner path model estimates. The coefficient of determination (r^2) of four endogenous latent variables, i.e., risk-taking propensity, need for achievement, self-efficacy, and experience, as shown in Table 4 are considered weak. This moderate r^2 value is considered as acceptable because this study is not designed to identify which key factor affects micro-enterprise performance; rather, it attempts to identify how risk-taking propensity, need for achievement, self-efficacy, and experience affect micro-enterprise performance.

Table 3. Outer model loading and cross loading

	RTP	NFA	SEF	EXP	MEP
RTP – Q1	0.895	0.118	0.206	0.130	0.298
RTP – Q2	0.693	0.061	0.065	0.176	0.137
RTP – Q3	0.707	0.011	0.094	0.147	0.170
NFA – Q1	0.107	0.788	0.126	0.160	0.117
NFA – Q2	-0.008	0.757	0.043	0.089	0.129
NFA – Q3	0.118	0.822	0.212	0.275	0.156
SEF – Q1	0.085	0.100	0.740	0.129	0.245
SEF – Q2	0.147	0.128	0.729	0.024	0.263
SEF – Q3	0.163	0.102	0.711	0.188	0.196
SEF – Q4	0.140	0.206	0.728	0.045	0.247
SEF – Q5	0.122	0.060	0.736	0.017	0.207
EXP – Q1	0.097	0.135	0.150	0.633	0.044
EXP – Q2	0.164	0.274	0.062	0.872	0.091
EXP – Q3	0.139	0.113	800.0	0.785	0.071
EXP – Q4	0.116	0.148	0.100	0.773	0.048
EXP – Q5	0.154	0.236	0.098	0.870	0.109
EXP – Q6	0.177	0.174	0.113	0.876	0.141
MEP – Q1	0.303	0.202	0.266	0.181	0.834
MEP – Q2	0.178	0.144	0.242	0.002	0.781
MEP – Q3	0.116	-0.015	0.226	0.044	0.653
Fornell-Larcker Crit	erion				
RTP	0.771				
NFA	0.009	0.789			
SEF	0.179	0.168	0.729		
EXP	0.182	0.230	0.106	0.806	
MEP	0.283	0.172	0.321	0.118	0.760
Heterotrait-Monotra	it Ratio (HTMT)				
RTP					
NFA	0.114				
SEF	0.218	0.211			
EXP	0.238	0.138	0.138		
MEP	0.352	0.212	0.444	0.112	

RTP: Risk-Taking Propensity; NFA: Need for Achievement; SEF: Self-Efficacy; EXP: Experience; MEP: Micro-Enterprise Performance

The path coefficient between micro-entrepreneurs' 'risk-taking propensity' has a significant (at 5% level of significance) positive effect on their informal micro-entreprise performance in Malaysia. The informal micro-entrepreneurs' ability to take risks in order to take advantage of short-term income-generating opportunities can therefore be considered as one of the key determinants of their success. Micro-entrepreneurs' need for achievement and experience also has a positive

ISSN 2039-2117 (online)	Mediterranean Journal of Social Sciences	Vol 7 No 3
ISSN 2039-9340 (print)	MCSER Publishing, Rome-Italy	May 2016

effect on micro-enterprise performance. However, the p-values for the coefficients indicate that the effects are not statistically significant. Informal micro-entrepreneurs in Kelantan, Malaysia, share similar economic conditions (from low-income households) and the types of micro-enterprises they own and manage do not require much expertise, which can be the reason for low and insignificant effect of need for achievement and experience on micro-enterprise performance. The coefficient between self-efficacy and micro-enterprise performance is higher than the other three determinants, which indicates that self-efficacy among informal micro-enterpreneurs plays a crucial role in their micro-enterprise performance. The p-value for the path coefficient between self-efficacy and micro-enterprise performance is less than 0.05, indicating that self-efficacy has a significant effect on informal micro-enterprise performance in Malaysia.

Table 4. Path Coefficients

	Path Coefficient	t	р	r ²	f²	Q2	q ²
RTP 🗲 MEP	0.222	3.218	0.001		0.055		0.025
NFA 🗲 MEP	0.101	1.335	0.091		0.011		0.004
SEF 🗲 MEP	0.262	3.619	0.000	0.167	0.078	0.078	0.048
EXP 🗲 MEP	0.027	0.354	0.362		0.001		0.001

RTP: Risk-Taking Propensity; NFA: Need for Achievement; SEF: Self-Efficacy; EXP: Experience; MEP: Micro-Enterprise Performance

The effect size (f^2) is calculated as the increase in r^2 relative to the proportion of variance of the endogenous latent variable that remains unexplained. As shown in Table 4, both significant exogenous latent variables (i.e., risk taking propensity and self-efficacy) have a small effect size, which indicates that besides the selected entrepreneurial competencies, there are other key determinants that affect informal microenterprise performance in Malaysia.

The predominant measure of predictive relevance is Stone-Geisser's Q^2 , which postulates that the model must be able to provide a prediction of the endogenous latent variable's indicators. The Q^2 value of all endogenous latent constructs, i.e., risk-taking propensity and self-efficacy, are more than 0, which is indicative of predictive relevance. Moreover, the q^2 value measures the predictive relevance for exogenous latent variables. As noted in Table 4, the q^2 values reveal a medium predictive relevance of risk taking propensity and self-efficacy on informal micro-enterprise performance; and need for achievement and experience show a low predictive relevance on informal micro-enterprise performance. However, the q^2 value for self-efficacy revealed that it has a higher effect on predicting informal micro-enterprise performance in Malaysia.

5. Conclusion

In today's world of inequality, a significant proportion of low-income households in developing countries are actively involved in informal micro-entrepreneurial activities. In Malaysia, a total of 1.3 million workforce (9.7% of the total workforce) are involved in informal micro-economic activities. These low-income households are characterized as less educated, possess less enterprise development skills, and commonly do not have access to working capital or enterprise development training. These extremely vulnerable low-income households depend on their micro-enterprise income. It is therefore crucial to examine and identify ways to improve informal micro-enterprise performance, in order to improve the socio-economic conditions of the low-income vulnerable households in Malaysia.

Therefore, this study was designed to examine the role of entrepreneurial competencies, i.e., risk-taking propensity, need for achievement, self-efficacy, and experience in informal micro-enterprise performance in Kelantan, Malaysia. Findings of this study revealed that risk-taking propensity, need for achievement, self-efficacy, and experience have a positive effect on informal micro-enterprise performance. However, only two determinants, i.e., risk-taking propensity and self-efficacy have a significant effect on informal micro-enterprise performance. Informal micro-enterpreneurs' self-efficacy and ability to take risks in order to take advantage of short-term income-generating opportunities are the key factors that affect informal micro-enterprise performance. Development programs and policies should, therefore, focus on increasing low-income informal micro-entrepreneurs' self-efficacy and ability to take risks to take advantage of all the income-generating opportunities available to them, which would ultimately lead to an improvement in the socio-economic conditions of low-income households in Malaysia.

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