

# Effect of entrepreneurial competencies on micro-enterprises income and assets in Malaysia

Effect of  
entrepreneurial  
competencies

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## Abstract

**Purpose** – This study aims to provide a foundation for the performance-focused micro-entrepreneurship development program; hence, this study is designed to investigate the effect of selected entrepreneurial competencies on micro-enterprise income and assets in Malaysia.

**Design/methodology/approach** – This study adopts the cross-sectional design, and the quantitative data was collected from 300 randomly selected micro-entrepreneurs from the list of participants of several micro-enterprise development programs offered in Peninsular Malaysia.

**Findings** – Findings revealed that micro-entrepreneur's commitment competency and opportunity recognition competency have a significant positive effect on micro-enterprise income, whereas only opportunity recognition competency has a significant positive effect on the net worth of micro-enterprise assets.

**Originality/value** – This study examined the effect of key elements of entrepreneurial competencies on micro-enterprise income and asset, which provides the foundation for a performance-focused micro-entrepreneurship development program designed to enhance the performance of micro-enterprises in Malaysia.

**Keywords** Competencies, Enterprise assets, Enterprise income

**Paper type** Research paper



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## Introduction

Small- and medium-sized enterprises (SMEs) play a crucial role in wealth creation and improving the income distribution in all economies, especially among developing countries (Abdullah and Manan, 2011). SMEs have been an important contributor in any economy by offering a large portion of the production, and they have been considered an economy backbone (Radam *et al.*, 2008). Because of the contribution of SMEs in economic development and poverty eradication, governments in developing countries usually pay special attention to the development of SMEs.

The Malaysian Government, as one of the progressive countries in Southeast Asia, also has focused on SMEs' development as one of the main vehicles for the economy to reach out to a high-income nation in the 2020 mission. Based on the latest Malaysia Economy Development Plan, SMEs contribution to economy should be 41% in GDP, 62% in employment 25% in export. As a result, to achieve the mission of 2020, the Malaysia Government has offered various financial supports to SMEs and, especially, micro-enterprises to stimulate their growth and development. According to the [SME Corporation Malaysia \(2020\)](#), the micro-enterprise refers to the enterprise that has less than RM 300,000 annual sales turnover or employees of not more than 5 people.

Several studies show that relevant competencies of the entrepreneurs help a business become successful and have an advantage to sustainability by creating competitive advantage (Tehseen and Ramayah, 2015). Often the entrepreneurial competency is realized as a significant tool to business success and performance. The entrepreneurial competencies can have a direct impact on enterprise performance, competitiveness (Man *et al.*, 2002), growth, and success of the business (Colombo and Grilli, 2005) which usually leads to increase in income and assets.

Though there are some research that studied the impact of entrepreneurs' competencies on business success and performance (Chandler and Jansen, 1992; Markman *et al.*, 2002; Brinckman, 2008; Tehseen and Ramayah, 2015; Suhaimi *et al.*, 2018), there is little literature on the impact of these competencies on total worth asset of micro-enterprise owners. Therefore, the purpose of this study to explore how the entrepreneurial competencies affect the micro-enterprise income and assets of micro-entrepreneurs in Malaysia.

## Literature review and hypotheses development

Entrepreneurial competencies play a critical part in the performance and success of any enterprise (Hee and Daisy, 2013). It can be challenging for competitors to imitate entrepreneurial competencies than other tangible sources, and as a result they can be a major source for business owners to create the competitive advantage in the market (Tehseen and Ramayah, 2015). Entrepreneurial competencies are abilities that are possessed by an individual who has started a business (Bird, 1995). Merrill *et al.* (2008) highlighted the importance of professional associations that can promote innovativeness among the participants. As stated by Al-Mamun *et al.* (2019), entrepreneurial competencies such as risk-taking propensity and self-efficacy have a positive effect on micro-enterprise performance. The findings of the study conducted by Al-Mamun and Fazal (2018) confirmed the positive effect of autonomy and entrepreneurial competencies. Man and Lau (2000) stated that the entrepreneurial competencies are recognizable in six areas. The six areas of the competencies are as follows:

- (1) conceptual competency (the ability to make a business judgment by utilizing relevant facts, evidences, and information);

- (2) commitment competency (the ability to devote other resources and time for the business achievement);
- (3) opportunity recognition competency (the ability to identify business opportunities and plan to monetize them);
- (4) organizing competency (the ability to plan, execute and monitor business activities);
- (5) relationship competency (the interpersonal ability which can lead to establish the wider business network); and
- (6) strategic competency (the ability to develop business strategy plans).

#### *Conceptual competency and micro-enterprise income and assets*

Conceptual competency is referred to the knowledge, skills, and capability of an individual to generate more income (Man and Lau, 2000). On the other hand, the conceptual competency connects to dissimilar conceptual skills that are exposed to the behaviors of the entrepreneurs. Taking a risk, innovativeness and skill to make the decision are dimensions of the entrepreneur's conceptual competencies that are suggested by Man *et al.* (2002). Entrepreneurs are usually facing numerous circumstances that involve them in making fast decisions and therefore have an ability to accept a different point of view and solutions is critical to optimize business performance. Overall, the conceptual competency can be found when the entrepreneurs can understand the environment of the market and/or operation of enterprise from several perspectives and discover a different technique to solve and tackle any problem (Man and Lau, 2000). Therefore, to study the relationship between conceptual competency, a micro-enterprise income, and micro-enterprise assets in Peninsular Malaysia, the following hypotheses are developed:

- H1. Conceptual competency has a positive and significant effect on the micro-enterprise income.
- H7. Conceptual competency has a positive and significant effect on the micro-enterprise assets.

#### *Commitment competency and micro-enterprise income and assets*

A successful entrepreneur has basic characteristics such as diligence, commitment, determination, enthusiasm, initiative, and active orientation (McClelland, 1987). Commitment competencies are one of the basic characteristics of success and achieve business goals to increase micro-entrepreneurs' assets. According to Man and Lau (2000), commitment competencies help micro-entrepreneurs to increase their business. It includes an entrepreneur who can maintain their commitment to their enterprise to maintain and grow the income and subsequently to acquire more assets. Thus, Man and Lau (2000) stated that the entrepreneurs are also able to constrain in long-term objective compared to short-term profits which showed the commitments level of entrepreneurs. Therefore, to study the relationship between commitment competency, a micro-enterprise income, and micro-enterprise assets in Peninsular Malaysia, the following hypotheses are developed:

- H2. Commitment competency has a positive and significant effect on micro-enterprise income.

H8. Commitment competency has a positive and significant effect on the micro-enterprise assets.

*Opportunity recognition competency and micro-enterprise income and assets*

The study by [Al Mamun and Ekpe \(2016\)](#) stated that the most fundamental competency that can affect the micro-enterprise is an opportunity recognition competency. Opportunity competencies are related to the ability of an individual in recognizing the market opportunities and the skill to acknowledge and generate more income ([Man and Lau, 2000](#)). Opportunity recognition competency assists entrepreneurs to recognize customer needs and wants ([Shenure et al., 2016](#)). This also helps the entrepreneurs determine new methods of handling problems and analyze the opportunity by considering the potential risks and benefits ([Skrzeszewski, 2006](#)). As mentioned by [Jawahar and Nigama \(2011\)](#), [Hunter \(2011\)](#), opportunity recognition competency eventually adds value to the entrepreneurs and helps improve their decision-making ability that can generate more income and hopefully, in the long term to accumulate more valuable assets. However, [Mohapatra \(2008\)](#) stated that the lack of opportunity recognition competency could lead to business failure. Therefore, to study the relationship between opportunity recognition competency, a micro-enterprise income, and micro-enterprise assets in Peninsular Malaysia, the following hypotheses are developed:

H3. Opportunity recognition competency has a positive and significant effect on micro-enterprise income.

H9. Opportunity recognition competency has a positive and significant effect on the micro-enterprise assets.

*Organizing competency and micro-enterprise income and assets*

Organizing competency refers to individual's abilities and skills in resources (e.g. financial, production, physical and human capital) allocations to optimize the productivity and efficiency of the business ([Man and Lau, 2000](#)). Therefore, [Man et al. \(2002\)](#), [Kaur and Bains \(2013\)](#) mention that, to successfully manage an enterprise, the owner must have leadership skills, knowledge, and abilities to manage the resources of the enterprise. In addition, an entrepreneur must equip themselves with management skill to plan and organize the operation of an enterprise to generate income that leads to increase the micro-enterprise assets. Overall, an entrepreneur must be an expert in taking responsibility to make decisions that have high impact on micro-enterprise income. An entrepreneur must organize operation and allocate numerous resources and have objectives to increase more income of the enterprise. Hence, it is rational that organizing competency leads to increase in the income of the enterprise ([Zahra and Nambisan, 2012](#)). Therefore, to study the relationship between organizing competency, a micro-enterprise income, and micro-enterprise assets in Peninsular Malaysia, the following hypotheses are developed:

H4. Organizing competency has a positive and significant effect on micro-enterprise income.

H10. Organizing competency has a positive and significant effect on micro-enterprise assets.

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*Relationship competency and micro-enterprise income and assets*

Relationship competencies are related to individual skills and abilities to build, maintain, and use his/her network. Having a high level of relationship competency by entrepreneurs can boost the level of confidence among all stakeholders, including investors, bankers, employees, consumers, partners, dealers, families and/or partners (Man and Lau, 2000; Suhaimi *et al.*, 2018). As the resources of any small business are limited, one of the ways that a micro-enterprise can be successful is the ability of an entrepreneur to leverage his/her own network, which can reduce the cost of operation (e.g. such as longer credit terms, discount or reasonable price of materials) and in the long term, hopefully, the assets accumulation (Zainol *et al.*, 2017). Therefore, to study the relationship between relationship competency, a micro-enterprise income, and micro-enterprise assets in Peninsular Malaysia, the following hypotheses are developed:

- H5. Relationship competency has a positive and significant effect on micro-enterprise income.
- H11. Relationship competency has a positive and significant effect on micro-enterprise assets.

*Strategic competency and micro-enterprise income and assets*

Strategic competencies are individual abilities and skills to evaluate, set and implement the developed business plan for the company firm to increase the income and assets of the enterprise (Man and Lau, 2000). Stonehouse and Pemberton (2002) defined a strategic competency as strategic thinking that reflects all the micro-entrepreneurs abilities to improve vision and tactical achievement, which requires them to consider the time to time operation. In fact, strategic competencies are the entrepreneur's ability to develop feasible and viable vision and goals for the firm and use his/her other competencies to implement developed strategies that can hopefully lead to generate more income and asset accumulation for a micro-enterprise (Man and Lau, 2000). Therefore, to study the relationship between strategic competency, a micro-enterprise income, and micro-enterprise assets in Peninsular Malaysia, the following hypotheses are developed:

- H6. Strategic competency has a positive and significant effect on micro-enterprise income.
- H12. Strategic competency has a positive and significant effect on the micro-enterprise assets.

All associations hypothesized above are presented in [Figure 1](#).

**Methodology**

To assess the impact of entrepreneurial competencies on micro-enterprise income and assets in Peninsular Malaysia, this study adopted a cross-sectional design and collected quantitative data from Malaysian micro-entrepreneurs. A list of 400 micro-entrepreneurs from 4 states in Peninsular Malaysia (including Kelantan, Terengganu, Kedah, and Perlis) was selected randomly from the list of participants of various development programs, listed in eKasih (National Poverty Database) National Poverty Data Bank, Malaysia. Before embarking on data collection, the research team contacted the selected households to explain the research and survey purpose and thereafter securing interview appointments.

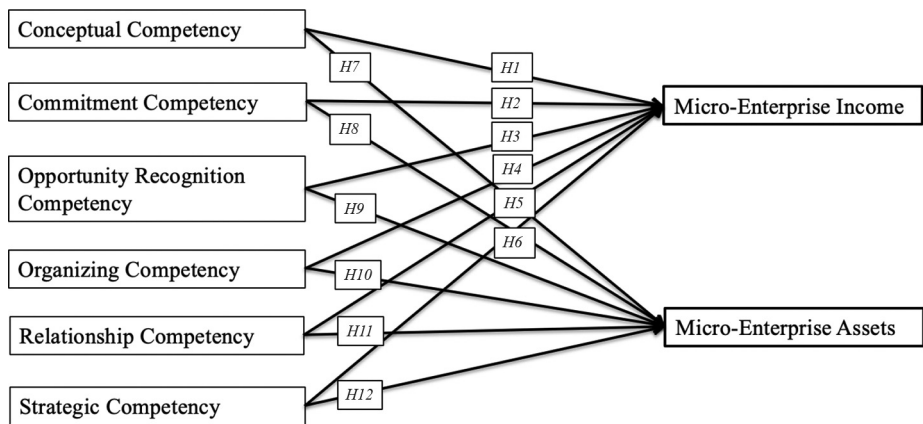


Figure 1.  
Research framework

Ultimately, 300 respondents agreed to participate in the research survey and consented the research team to conduct structured interviews in their residents.

The sample size was calculated by using G-Power version 3.1. Based on the power of 0.95 with an effect size of 0.15, the required sample size is 146 to test the model with six predictors. Furthermore, [Reinartz et al. \(2009\)](#) proposed a minimum threshold of 100 samples for structural equation modeling via partial least squares (PLS-SEM). To avoid any possible complications arising from a small sample size, this study collected data from 300 micro-entrepreneurs residing in Kelantan, Terengganu, Kedah, and Perlis.

Using questions from [Man et al. \(2008\)](#), the instrument measured the six competencies. The questionnaire was carefully modified and designed in simple structures with unbiased wording. This is to ease the respondents' understanding toward them providing perceptive answers.

Multivariate normality was tested using the Web Power online tool. Web Power calculated Mardia's multivariate skewness, kurtosis coefficients, and  $p$ -values, whereby the  $p$ -value of Mardia's multivariate kurtosis was less than 0.05, confirming the absence of multivariate normality.

## Results

### *Demographic characteristics*

Findings of these data were collected from the 300 low-income households, and most of the respondents (53.7%) were males. A total of 111 (37%) respondents were in the age range 31–40, followed by 85 (28.3%) respondents between 41 and 50 years of age, and 66 (22%) within the range 51–60 years of age. However, only 10 (3.3%) respondents were between 20 and 30 years of age. In terms of marital status, 243 (81.0%) respondents were married. The remaining respondents were either widowed (7%) or separated from their partners (1.3%). With respect to educational background, most respondents (31.7%) achieved primary school education, while 81 (27%) completed secondary school education. Surprisingly, only 2 (0.7%) respondents attained a master's degree. The rest (17%) never attended school. With regard to employment status, 200 (66.7%) households had two gainfully employed members, 69 (23%) had one employed member, 30 (10%) had 3 employed members, while only 1 (0.3%) had 4 employed members. As for the number of household income sources, most of the respondents (72%) relied on one source of household income, 76 (25.3%)

households relied on 2 sources of income, and the remaining 8 households (2.7%) relied on 3 sources of income.

#### *Reliability and validity*

Table 1 presents the descriptive statistic and the criteria used to evaluate the item of reliability in this study. The mean and standard deviation of the six competencies can be found in Table 1. In Table 1, it shows that the mean value varies between 3.7342 for organizing competency and 4.2100 for conceptual competency. The highest mean value is found in conceptual competency indicators and the lowest in organizing competency indicators. As for the standard deviation, it varies between 0.436 for strategic competency and 0.781 for organizing competency. Organizing competencies are the ones that showed the highest standard deviation, and the indicators of strategic competency are the ones with the lowest variability.

We examined the reliability and validity measure for all items in Table 1. All Cronbach's alpha values exceed 0.7 thresholds (Nunnally, 1978), indicating that all the items are reliable. Without exception, all composite reliabilities value exceeds 0.7 (Hair et al., 2011), showing a high internal consistency of indicators measuring each item and thus confirming the construct reliability. Moreover, the Dillon–Goldstein *rho* was used to evaluate the construct reliability. The Dillon–Goldstein *rho* values for all indicators more than 0.70, confirming the item's reliability. As for convergent validity, we examined the average variance extracted (AVE), and the value is 0.50 (Hair et al., 2011). Table 1 shows the AVE values for all constructs are higher than 0.5, which indicating that acceptable convergent validity. Finally, to determine redundancy, we examined the multicollinearity issues by calculating the variance inflation factor (VIF). Table 1 presents the VIF values are less than 5 for all variables (Hair et al., 2011), indicating the absence of multicollinearity issues between variables.

The methods for assessing the existence of discriminant validity are by examining the cross-loading and the Fornell–Larcker criterion (Hair et al., 2014). Table 2 presents that all the indicator loadings are higher than 0.7, except for conceptual competency (item 5) and relationship competency (item 5), which show a value lower than 0.5, but still, the AVE values are higher than 0.5, thus it is assumed reliable. This is because the AVE value for conceptual competency and relationship competency is higher than 0.5, indicating that it can be acceptable. Looking at the cross-loading presented in Table 2, it shows all the indicators

Variables	Items	Mean	SD	CA	DG <i>rho</i>	CR	AVE	VIF
CONC	7	4.2100	0.539	0.879	1.025	0.901	0.575	1.118
COMC	4	3.8767	0.675	0.879	0.908	0.917	0.733	1.484
OPPC	6	3.8528	0.667	0.907	0.931	0.928	0.682	2.135
ORGC	4	3.7342	0.781	0.941	0.972	0.957	0.848	1.893
RELC	6	4.0250	0.580	0.867	1.055	0.872	0.542	1.195
STRC	5	4.1420	0.436	0.776	0.800	0.847	0.530	1.152
MEI	1	3051	1614					
MEA	1	38723	32304					

**Notes:** Conceptual competency (CONC), Commitment competency (COMC), Opportunity recognition competency (OPPC), Organizing competency (ORGC), Relationship competency (RELC), Strategic competency (STRC), Micro-enterprise income (MEI), Micro-enterprise assets (MEA), Standard deviation (SD); Cronbach's alpha (CA); Dillon–Goldstein's *rho* (DG *rho*); Composite reliability (CR); Average variance extracted (AVE); Variance inflation factors (VIF)

**Table 1.**  
Descriptive,  
reliability and  
validity



Item code	CONC	COMC	OPPC	RELC	ORGC	STRC
CONC – Item 1	0.821	0.028	0.124	-0.042	0.178	0.001
CONC – Item 2	0.629	0.016	0.055	-0.037	0.128	-0.021
CONC – Item 3	0.796	-0.022	0.112	-0.013	0.137	-0.034
CONC – Item 4	0.783	0.019	0.110	-0.031	0.143	0.005
CONC – Item 5	0.447	0.052	0.002	-0.026	0.099	-0.045
CONC – Item 6	0.879	0.029	0.152	0.005	0.137	-0.038
CONC – Item 7	0.857	-0.025	0.158	0.031	0.139	-0.028
COMC – Item 1	0.075	0.792	0.442	0.444	0.017	0.233
COMC – Item 2	0.047	0.858	0.471	0.476	-0.026	0.282
COMC – Item 3	-0.001	0.913	0.433	0.402	-0.079	0.285
COMC – Item 4	-0.051	0.859	0.285	0.299	0.043	0.263
OPPC – Item 1	0.148	0.382	0.868	0.571	-0.190	0.127
OPPC – Item 2	0.110	0.386	0.738	0.541	-0.103	0.170
OPPC – Item 3	0.120	0.413	0.797	0.528	-0.253	0.124
OPPC – Item 4	0.112	0.421	0.827	0.558	-0.223	0.079
OPPC – Item 5	0.132	0.391	0.828	0.506	-0.275	0.061
OPPC – Item 6	0.118	0.402	0.886	0.545	-0.231	0.134
ORGC – Item 1	-0.046	0.483	0.600	0.931	-0.131	0.209
ORGC – Item 2	0.004	0.422	0.599	0.926	-0.099	0.180
ORGC – Item 3	-0.036	0.411	0.573	0.908	-0.119	0.180
ORGC – Item 4	0.018	0.409	0.617	0.918	-0.153	0.205
RELC – Item 1	0.185	-0.039	-0.221	-0.092	0.860	0.085
RELC – Item 2	0.143	-0.016	-0.229	-0.136	0.904	0.160
RELC – Item 3	0.126	-0.001	-0.239	-0.098	0.789	0.112
RELC – Item 4	0.126	-0.006	-0.183	-0.088	0.625	0.046
RELC – Item 5	0.126	-0.047	-0.205	-0.139	0.487	0.080
RELC – Item 6	0.167	-0.066	-0.213	-0.094	0.666	0.070
STRC – Item 1	-0.032	0.287	0.075	0.125	0.089	0.747
STRC – Item 2	-0.006	0.213	0.123	0.147	0.163	0.782
STRC – Item 3	-0.034	0.180	0.024	0.091	0.070	0.539
STRC – Item 4	0.023	0.238	0.169	0.196	0.123	0.735
STRC – Item 5	-0.052	0.216	0.078	0.188	0.073	0.806
<i>Fornell–Larcker criterion</i>						
CONC	0.758					
COMC	0.019	0.856				
OPPC	0.150	0.479	0.826			
ORGC	-0.017	0.472	0.649	0.921		
RELC	0.177	-0.022	-0.265	-0.135	0.736	
STRC	-0.027	0.312	0.135	0.211	0.143	0.728
<i>Heterotrait–monotrait ratio (HTMT)</i>						
CONC	–					
COMC	0.072	–				
OPPC	0.152	0.538	–			
ORGC	0.046	0.516	0.708	–		
RELC	0.225	0.076	0.307	0.154	–	
STRC	0.074	0.376	0.164	0.240	0.151	–

**Notes:** Conceptual competency (CONC), Commitment competency (COMC), Opportunity recognition competency (OPPC), Organizing competency (ORGC), Relationship competency (RELC), Strategic competency (STRC); The bold italic values in the matrix above are the item loadings and others are cross-loadings  
Source: Author’s data analysis

**Table 2.**  
Loadings and cross-loading



loading are higher than the entire cross-loading, which confirmed the discriminant validity. The second method for verifying discriminant validity is the Fornell–Larcker criterion. This method required the AVE of each construct should be higher than the highest squared correlation with any other construct (Hair *et al.*, 2014). Based on Table 2, all construct managed to meet this criterion. Furthermore, the heterotrait–monotrait Ratio (HTMT) is an estimate of the correlation between constructs, which parallels the disattenuated construct score creation. Using the value of 0.9 as the threshold, this study confirms that there is no evidence of a lack of discriminant validity and all the constructs meet the criteria.

#### *Competencies in micro-enterprise income*

The path coefficient, as revealed in Table 3 show that the coefficient value for conceptual competency on micro-enterprise income (*H1*) is 0.046 with a *p*-value of 0.305. This indicates that the conceptual competency has an insignificant positive effect on micro-enterprise income. Thus, *H1* is rejected. As for the *H2*, the coefficient value for conceptual competency on micro-enterprise income is 0.115 with a *p*-value of 0.042, indicating that the conceptual competency has a significant positive effect on micro-enterprise income. The *H2* is accepted. The same positive effect was found for the opportunity recognition competency. The coefficient value for opportunity recognition competency showed a positive ( $\beta = 0.227$ ) and significant (*p*-value of  $0.001 < 0.005$ ) effect on micro-enterprise income (*H3*). In this study, *H3* was accepted.

However, the negative effect was found in other competencies. For *H4*, the path coefficient value for organizing competency is  $-0.006$ , with a *p*-value of 0.462. This indicates that the organizing competency has a negative and insignificant effect on micro-enterprise income, thus *H4* is rejected. The coefficient value for relationship competency on micro-enterprise income (*H5*) is negative ( $\beta = -0.003$ ) and insignificant value (*p*-values more than 0.05), rejected the *H5*. As for the *H6*, the path coefficient value for the strategic competency on micro-enterprise income is  $-0.308$  with a *p*-value at 5% level of significance, toward an indication that strategic competency has a negative and significant effect on micro-enterprise income, thus, *H6* is rejected.

#### *Competencies in micro-enterprise assets*

As reported in Table 4, the seven hypotheses reported the coefficient value for conceptual competency has a positive ( $\beta = 0.115$ ) and insignificant (*p*-values more than 5% level of significance) effect on micro-enterprise assets. Thus, the *H7* is rejected. As for the *H8*, the coefficient value for commitment competency on micro-enterprise assets is  $-0.224$  with

Hypo		Coefficient	CI – Min	CI – Max	<i>t</i> value	Sig.	Decision
H1	CONC → MEI	0.046	-0.142	0.187	0.509	0.305	Reject
H2	COMC → MEI	0.115	0.015	0.235	1.728	0.042	Accept
H3	OPPC → MEI	0.227	0.085	0.312	3.268	0.001	Accept
H4	ORGC → MEI	-0.006	-0.101	0.111	0.095	0.462	Reject
H5	RELC → MEI	-0.003	-0.173	0.198	0.033	0.487	Reject
H6	STRC → MEI	-0.308	-0.394	-0.239	6.572	0.000	Reject

**Notes:** Micro-enterprise income (MEI), Conceptual competency (CONC), Commitment competency (COMC), Opportunity recognition competency (OPPC), Organizing competency (ORGC), Relationship competency (RELC), Strategic competency (STRC)

**Source:** Author(s) own compilation

**Table 3.**  
Micro-enterprise  
income

a  $p$ -value of  $0.000 < 0.05$ , thus indicating that the commitment competency has a significant negative effect on micro-enterprise assets,  $H8$  is rejected. However, the coefficient for opportunity recognition competency on micro-enterprise assets ( $H9$ ) is 0.123 with a  $p$ -value of 0.028. This indicating that the opportunity recognition competency has a significant positive effect on micro-enterprise assets and  $H9$  is accepted.

As for the  $H10$ , the coefficient value for organizing competency on micro-enterprise assets is 0.025 with  $p$ -value of 0.381, indicating that the organizing competency have a positive and insignificant effect on micro-enterprise assets. Thus, the  $H10$  is rejected. For the  $H11$ , the coefficient value for relationship competency on micro-enterprise asset is  $-0.007$  with a  $p$ -value is 0.471, thus indicating that the relationship competency has an insignificant negative effect on micro-enterprise assets. Thus,  $H11$  is rejected. However, the negative effect was found in strategic competency. The coefficient value for strategic competency shows a negative ( $\beta = -0.315$ ) effect on micro-enterprise assets ( $H12$ ). Hence, the  $H12$  is rejected.

**Discussion and conclusion**

The findings of this study revealed that commitment competency has a significant and positive effect on micro-enterprise income. The findings of this study supported the  $H2$ , and the result was consistent with the finding [Man and Lau \(2000\)](#). As for the  $H3$ , the results indicate the opportunity recognition competency is one of the competencies that affect the micro-enterprise income. Therefore, the  $H3$  accepted, and the result is constant with the outcomes of [Shenure et al. \(2016\)](#), [Jawahar and Nigama \(2011\)](#); [Hunter \(2011\)](#), [Skrzeszewski \(2006\)](#); [Man and Lau \(2000\)](#). For the  $H9$ , the result showed that the opportunity recognition competency has a significant and positive effect on the micro-enterprise assets. Therefore, the  $H9$  is accepted. Thus, the result was consistent with the findings from [Al Mamun and Ekpe \(2016\)](#), [Shenure et al. \(2016\)](#), [Skrzeszewski \(2006\)](#), [Man and Lau \(2000\)](#).

The results are confirmed that the commitment competency and opportunity recognition competency have a positive and significant effect on the micro-enterprise income, whereas only opportunity recognition competency has a positive and significant effect on net-worth of micro-enterprise assets in Malaysia. Micro-entrepreneurs in Malaysia need to focus on improving their competencies to increase income and asset accumulation. Generally, entrepreneurs need to acquire and enhance their business knowledge and skills and improve their interpersonal skills, which can help them to expand their business network. The contribution of this study acknowledges the government or non-government development to expand the ideas and comprehension of the entrepreneurial competencies and at the same

Hypo		Coefficient	CI – Min	CI – Max	t value	Sig.	Decision
H7	CONC → MEA	0.115	-0.032	0.222	1.597	0.055	Reject
H8	COMC → MEA	-0.224	-0.301	-0.168	4.941	0.000	Reject
H9	OPPC → MEA	0.123	0.032	0.232	1.912	0.028	Accept
H10	ORGC → MEA	0.025	-0.110	0.151	0.304	0.381	Reject
H11	RELC → MEA	-0.007	-0.166	0.157	0.074	0.471	Reject
H12	STRC → MEA	-0.315	-0.389	-0.258	7.687	0.000	Reject

**Notes:** Micro-enterprise assets (MEA), Conceptual competency (CONC), Commitment competency (COMC), Opportunity recognition competency (OPPC), Organizing competency (ORGC), Relationship competency (RELC), Strategic competency (STRC)

**Source:** Author(s) own compilation

**Table 4.**  
Micro-enterprise  
asset

time understand its effects on increasing income and assets of the micro-enterprise among the micro-entrepreneurs in Malaysia. This will acknowledge the entrepreneurs and/or business owners to distributing the concepts, information and experience, which can develop the overall knowledge and competencies among the micro-entrepreneurs in related industries. Finally, the entrepreneurial competencies, which are truthfully related to the income and assets, were expected to improve the net wealth assets of micro-entrepreneurs. The development organization would consequently focus on reformatting their policies and program to generate more income and assets for the micro-entrepreneurs in Malaysia.

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