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Micro-enterprise development training and entrepreneurial competencies among low-income households in Malaysia

Abdullah Al Mamun
Universiti Malaysia Kelantan, Kota Bharu, Malaysia

Rajennd Muniady
New Era University College, Kajang, Malaysia

Syed Ali Fazal
International University of Business Agriculture and Technology, Dhaka, Bangladesh, and

C.A. Malarvizhi
Multimedia University, Cyberjaya, Malaysia

Abstract

Purpose – Low-income households form a significant portion of the Malaysian population. To improve the socio-economic condition of low-income households, development organizations in Malaysia offer a wide range of development trainings, discussions and group or center meetings. This study aims to examine the impact of enterprise development training programs on entrepreneurial competencies among Peninsular Malaysia microentrepreneurs.

Design/methodology/approach – Adopting a cross-sectional design, the authors collected data from 300 randomly selected microentrepreneurs from the list of microentrepreneurs provided by eKasih (the National Poverty Data Bank), across four states of Peninsular Malaysia. Quantitative data were collected through structured interviews with the respondents from October to November 2017.

Findings – The findings revealed that enterprise development training programs significantly affected three of six entrepreneurial competencies (i.e. opportunity recognition competency, organizing competency and relationship competency). These findings highlight the importance of enterprise development training programs towards microentrepreneurs in increasing their competencies.

Originality/value – Through its insights, the study enriches the understanding of low-income communities in emerging economies, while offering significant practical implications. Based on findings, it is recommended that development organizations should therefore continue the current microenterprise

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development training programs. With improved entrepreneurial competencies, microentrepreneurs can thrive amidst competition yet sustaining business performance.

Keywords Entrepreneurship, Training, Competencies

Paper type Research paper

Introduction

Poverty and inequality are longstanding issues prevalent in developing countries. Sizable populations of most developing countries have been experiencing high levels of material deprivation and disproportionate individual well-being. Understandably, developing countries prioritize alleviation of poverty and reduction in income inequalities over and above the other millennium development goals (MDGs) of the United Nations. As future poverty concept and scenarios continue to be vastly discussed, the events of international economic shock, such as back-to-back global economic crises unfortunately, spiked the rates of both poverty and hardcore poverty adversely affecting millions worldwide (Heltberg *et al.*, 2015). In Malaysia, the reported reduction rates in both poverty (income range at RM451-RM720 or less than poverty line income) and hardcore poverty (income less than RM450 or below half of poverty line) were determined based on the quantitative money-metric measures in terms of Poverty Line Income (Al Mamun and Mazumder, 2015; Ahmed *et al.*, 2016); the persistence of income inequality and socio-economic vulnerability continue to threaten low-income households, as experienced by other developing countries (Nair and Sagaran, 2015).

Within the Malaysian context, poverty befalls upon those who live below the poverty line income (PLI) which is RM930, RM1,170 and RM990 for Peninsular Malaysia, Sabah and Labuan, and Sarawak respectively (EPU - Economic Planning Unit, 2017). It is noteworthy to mention that Malaysia has achieved remarkable poverty alleviation targets among households below the PLI: a substantial reduction from 50 per cent (1970) to less than 1 per cent (2014) in just a span of four decades (EPU, 2017). In essence, Malaysia has successfully eradicated extreme poverty and hunger, which has been one of the MDGs. Nevertheless, poverty has always remained a major concern (Nair, 2010) primarily due to the stubborn pockets of poverty among certain groups and areas, particularly amidst urban slums and remote areas with limited accessibility, among female household heads, less educated household heads, workers in the informal sectors, unresolved issues linked with income distribution, and new emerging forms of poverty, wherein each demand pressing attention (Nair and Sagaran, 2015).

Development organizations play a major role in the effort to reduce poverty, inequality and vulnerability among households and communities. The impact of development training programs is a popular research area among academics and practitioners. Despite studies having found the positive effects of these programs, researchers have recently questioned the diversity of findings on impacts that has ranged from positive, negative, and to no impact at all (Angelucci *et al.*, 2013; Ganle *et al.*, 2015). In an attempt to explain the diversity of findings on the impacts of microfinance programs, Armendáriz *et al.* (2005) alluded to differing contextual elements such as financial service providers, enterprise development, population density, group-cohesion, financial literacy, attitudes to debt, among others. In Malaysia, microfinance plays a crucial role in the socio-economic development of low-income households. Earlier studies found that microfinance initiatives can increase microenterprise assets of the hardcore poor households (Al Mamun *et al.*, 2011a) and increase employment and income generating opportunities at community and household levels (Al Mamun *et al.*, 2011a). Researchers also found the positive impact of microfinance

programs on total productive assets and number of gainfully employed (Al Mamun *et al.*, 2011b), and that it is significantly related to performance of medium-sized enterprises (Mahmood and Mohd Rosli, 2013). Another study reported the said programs to have increased entrepreneur income, positively affect business, and able to fulfill the basic needs of entrepreneurs (Hassan and Ibrahim, 2015).

Besides microfinance programs, training programs could be offered by development organizations or any entities, impact business performance. Previous studies found positive effects of business trainings, in the form of private training, e-learning and on-the-job training, on business performance (Jones *et al.*, 2013). Specifically, enterprise development trainings provided by development organizations have played a major role in improving the socio-economic well-being of low-income households and microenterprises. A study comparing the effects of training among micro and small enterprises between two groups of people, distinguished by those who received and those who did not receive training, found that the former had higher level of sales and assets (Kessy and Temu, 2010). It is encouraging that a large number of low-income households, through microcredit programs, has turned into owners of microenterprises (Al Mamun *et al.*, 2011a) with outcomes of improved earning capacity, socio-economic growth and living standards.

As noted by Miranda and Miranda (2018), microenterprises are vital to dispersing new industries to the countryside and stimulating employment. Based on the Organization for Economic Co-operation and Development (OECD) The OECD Policy Briefs (2000), which has been repeatedly cited in recent studies (Kachkar, 2018; Zhou and Ma, 2018), small and microenterprises appear to be more prone to external shocks, in comparison to medium and large firms.

As such, the OECD has suggested firms to further upgrade management skills, information gathering and technology usage. Accordingly, an empirical study focusing on women micro-entrepreneurs in Malaysia by Zainol *et al.* (2017) found that the participants of development programs, who received training apart from financial assistance, have higher level of entrepreneurial competencies. In a more recent study that involved Kelantanese micro-entrepreneurs, Mustapa *et al.* (2018a) discovered that the number of hours spent on training programs positively affected household income, while negatively influenced their level of economic vulnerability. Particularly in light of microenterprises, training sessions, total number of training hours received, and center meetings or discussions attended displayed a significant impact on firm performance (Mustapa *et al.*, 2018b).

Nevertheless, empirical evidences that investigate the integration of enterprise development training programs and entrepreneurial competencies at firm level are scant. Hence, in the attempt to address this gap, this study investigated the impact of enterprise development training programs on entrepreneurial competencies among beneficiaries of various development organizations in Peninsular Malaysia. The outcome has been expected to shed light on the relationship and the subsequent effects of enterprise development training programs and entrepreneurial competencies, along with several significant implications for policymakers, as well as entities involved in the development of microenterprises and micro-entrepreneurs.

Literature review

This study attempts to empirically examine the effect of enterprise development training programs on entrepreneurial competencies. Entrepreneurial competencies is the aggregate ability towards successful job role performance (Man *et al.*, 2002; Bird, 1995; Man *et al.*, 2008). Barazandeh *et al.* (2015) and Al Mamun *et al.* (2016), among others, found that entrepreneurial competencies positively impacts firm performance. This phenomenon can

be explained by the resource-based view (RBV). RBV stipulates that resources, which are owned and managed, can serve to create and implement strategies to improve effectiveness and efficiency (Barney, 1991). In this context, entrepreneurial competencies are the resources (capabilities, traits and skills) inherent within the entrepreneur that are channeled towards increasing firm performance. Furthermore, Barney (1991) suggests that a firm's value creation process solely lies in the owner-manager's ability in acquiring the resources. Therefore, fitting into the Barney's RBV and based on prior studies that focused on micro-entrepreneurship within a similar context, it can be assumed that entrepreneurial competencies of owner-managers of firms that identify and acquire resources can lead to superior firm performance, wherein such required competencies are triggered by relevant training programs (Zainol *et al.*, 2017; Mustapa *et al.*, 2018a, 2018b; Al Mamun *et al.*, 2018).

Training and entrepreneurial competency

Commitment competency is the sustained drive or motivation of the entrepreneur to move ahead with the business (Man and Lau, 2000). This competency leads entrepreneurs to set a long-term direction for the firm thus ensuring sustained performance. Researchers noted that entrepreneurs with a high level of commitment competency demonstrate devotion of their time, hard work and commitment to personal beliefs, values and goals (Man and Lau, 2000). As participation in development programs leads to an increase in entrepreneurial competency (Zainol *et al.*, 2017), this study expects enterprise development training programs to improve commitment competency. Thus, the following hypothesis is suggested:

H1. Enterprise development training programs lead to an improvement in commitment competency among the participating microentrepreneurs.

Conceptual competency is the ability to understand different concepts which are reflected in the behaviors of the entrepreneur (Man and Lau, 2000). Accordingly, conceptual competency helps in the formation of the firm's competitive scope. This competency represents a suite of abilities possessed by entrepreneurs such as intuitive thinking, innovativeness, assessment of risks and tackling issues from different angles (Man and Lau, 2000). Following a research that reported participation in development programs improves entrepreneurial competency (Zainol *et al.*, 2017), this study expects enterprise development training programs to improve conceptual competency. Thus, the following hypothesis is suggested:

H2. Enterprise development training programs lead to an improvement in conceptual competency among the participating microentrepreneurs.

Opportunity Recognition Competency is the ability to recognize market opportunities through various means and forms to scope the firm's competitiveness (Man and Lau, 2000). As mentioned by Cho and Lee (2018), to start a business, an entrepreneur should have an ability to identify entrepreneurial opportunities at the beginning. This competency enables entrepreneurs to identify, assess and seek business opportunities. Hence, an entrepreneur that is competent in recognizing opportunities can effectively identify and assess market conditions such as gaps and changes, then respond by seeking new business opportunities through marketing and promotion towards eventual sustained performance (Man and Lau, 2000). Therefore, this study refers to a research that supports the positive link between participation in development programs and an entrepreneurial competency (Zainol *et al.*, 2017). This study seeks to affirm that enterprise development training programs positively affects opportunity recognition competency. Thus, the following hypothesis is suggested:

H3. Enterprise development training programs lead to an improvement in opportunity recognition competency among the participating microentrepreneurs.

Organizing competency is the suite of resource management encompassing internal and external human, physical, financial and technological resources (Man and Lau, 2000) Organizing competency refers to an entrepreneur's ability to plan, organize, lead, motivate, delegate and control the said resources. This competency is crucial for any entrepreneur as it involves managing daily operations such as planning daily operations, acquiring and allocating resources, delegating and establishing rules and regulations, as well as leading and motivating employees. This ensures smooth daily operations and sustained performance (Man and Lau, 2000). This study extends the research that reported participation in development programs contributes towards incremental entrepreneurial competency (Zainol *et al.*, 2017). Therefore, this study proposes that enterprise development training programs lead to an improvement in organizing competency. Thus, the following hypothesis is suggested:

H4. Enterprise development training programs lead to an improvement in organizing competency among the participating microentrepreneurs.

Relationship competency refers to the ability of interacting at one-to-one and individual-to-group levels in a way that enriches organizational capabilities and the competitive scope of firms (Man and Lau, 2000). It means that an entrepreneur that possesses relationship competency has the ability to build and maintain networking relationships with existing and potential stakeholders, and then tap into these networking relationships to acquire and strengthen resources and business opportunities. Additionally, during times of conflict, the entrepreneur would be able to communicate, negotiate and manage issues effectively (Man and Lau, 2000). The importance of this competency underscores the value of good working relationships between the entrepreneur and the existing and potential stakeholders in ensuring long-term performance (Man and Lau, 2000). With reference to the study that participation in development programs leads to an increase in entrepreneurial competency (Zainol *et al.*, 2017), this study formulates the following hypothesis that examines the link between enterprise development training programs and relationship competency, as follows:

H5. Enterprise development training programs lead to an improvement in on relationship competency among the participating microentrepreneurs.

Strategic competency encompasses and transcends firm level understanding. This competency is related to the ability of an entrepreneur to set, evaluate and implement the strategies of the firm (Man and Lau, 2000). Also, strategic competency reflects behaviors of goal-setting and proactive action to attain short and long-term goals, all of which are done through forming and creating the firm's competitive scope and organizational capabilities (Man and Lau, 2000). In comparison with the earlier said competencies, this competency is regarded as the most important as it brings together two aspects of entrepreneurial tasks: forming and creating the firm's competitive scope and organizational capabilities (Man and Lau, 2000). Again, this study refers to the research of Zainol *et al.* (2017) that found the positive effect of participation in development programs on entrepreneurial competency. Thus, this study concentrates on the link between enterprise development training programs and strategic competency as follows:

H6. Enterprise development training programs lead to an improvement in on strategic competency among the participating microentrepreneurs.

Research methodology

This study adopted cross-sectional design in the collection of quantitative data. Structured interview was conducted to assess the impact of enterprise development initiatives, in particular those that focused on access to financial services and microenterprise development training programs targeted at low-income households. The respondents were participants of development programs listed in eKasih National Poverty Data Bank. Complete information regarding the development organizations, participants, and list of low-income and poor households were obtained from eKasih National Poverty Data Bank. This process provided a list of 400 randomly selected low-income and poor households from the four states of Kelantan, Terengganu, Kedah, and Perlis. A total of 300 respondents agreed to participate in the research survey and consented the research team to conduct interviews in their residents.

Sample size

The sample size for this study was calculated using G-Power version 3.1. Based on the power of 0.95, effect size of 0.15, the required a sample size of 89 to test the model. However, to avoid any possible complications arising from a small sample size, this study collected data from 300 microentrepreneurs residing in four states in Peninsular Malaysia.

Research instrument

Using questions from Man *et al.* (2008), the instrument measured commitment competency, conceptual competency, organizing competency, opportunity recognition competency, relationship competency and strategic competency. The questionnaire was carefully modified and designed in simple structures with unbiased wording. This is to ease the respondents' understanding towards them providing perceptive answers.

Data analysis method

The *p*-value of Mardia's multivariate kurtosis was less than 0.05, confirming the absence of multivariate normality. The findings of this analysis are reported as recommended by Hair *et al.* (2014) for PLS modeling, includes reliability, convergent validity, discriminant validity, average variance extracted (AVE) and path coefficients. The models in PLS-SEM are tested using two stages in which Cronbach's alpha (α) and composite reliability (CR) are used to report the intern consistency of the constructs. The recommended scores for α and CR are 0.70 or above (Chin, 2010). However the CR is considered a good indicator of the internal reliability than α. The AVE value must be 0.50 or above for every construct (Hair *et al.*, 2014). The variance inflation factor (VIF) represents the inflation of variance due to the presence of multicollinearity within the constructs (Chin, 2010). The discriminant validity in PLS-SEM is verified using cross-loading, Fornell–Larcker and heterotrait–monotrait ratio (HTMT). The Fornell–Larcker criterion needs to be above 0.700 to provide evidence of discriminate validity. However, a new test of HTMT is suggested for the discriminate validity and the values must be less than 0.90. The measurement model is represented with r^2 that denotes the explanation power of endogenous variables with exogenous variables. The effect size (f^2) and Q^2 are the estimates of the measurement model. The effect size (f^2)

signifies the effect of each exogenous variable on the endogenous variable. Cohen (1988) offered the guidelines to means the (f^2). The effect sizes of 0.30, 0.15, and 0.02 represent large, medium, and small effects respectively. The Q^2 values of 0.02, 0.15, and 0.35 indicate small, medium, and large predictive relevancy of the model respectively (Hair *et al.*, 2014).

Summary of findings

Demographic characteristics

The demographic characteristics of the respondents were presented in Table I. The data for this study had been gathered from 300 low-income households residing in Kelantan, Terengganu, Kedah and Perlis, Malaysia with most of the respondents (53.7 per cent) being males. A total of 111 (37.0 per cent) of the respondents were in the age range of 31 to 40 years old, followed by 85 (28.3 per cent) within the age range of 41 to 50 years old, and 66 (22.0 per cent) in the age range between 51 and 60 years old. Nevertheless, only 10 (3.3 per cent) respondents were between 20 and 30 years old. As for marital status, 243 (81.0 per cent) of the respondents were married, while the remaining were widowed (7 per cent) and separated from their partners (1.3 per cent). As for the number of full time employees, a total of 170 (56.7 per cent) micro-enterprises has no full time employee, 105 (35 per cent) micro-enterprises has

Categories	*n*	(%)	Categories	*n*	(%)
Gender			*Number of gainfully employed members/household*		
Male	161	53.7	One	69	23.0
Female	139	46.3	Two	200	66.7
Total	300	100.0	Three	30	10.0
			Four	1	0.3
Age			Total	300	100.0
20 to 30 years	10	3.3			
31 to 40 years	111	37.0	*Business type*		
41 to 50 years	85	28.3	Manufacturing	31	10.3
51 to 60 years	66	22.0	Retailing	89	29.7
61 years and above	28	9.3	Wholesales	29	9.7
Total	300	100.0	Agricultural	53	17.7
			Livestock	26	8.7
Marital status			Poultry	25	8.3
Married	243	81.0	Service	47	15.7
Single	16	5.3	Total	300	100.0
Separated	4	1.3			
Divorced	16	5.3	*Firm established*		
Widowed	21	7.0	1 to 5 years	39	13.0
Total	300	100.0	6 to 10 years	159	53.0
			11 to 15 years	44	14.7
Number of full time employees			16 to 20 years	33	11.0
None	170	56.7	More than 20 years	25	8.3
One	105	35.0	Total	300	100.0
Two	23	7.7			
Three	2	0.7	*Number of part-time employees*		
Total	300	100.0	None	216	72.0
			One	81	27.0
			Two	3	1.0
			Total	300	100.0

Source: Author (s) own compilation

Table I.
Profile of the respondent

one full time employee and 25 (8.4 per cent) micro-enterprises has more than one employees. As for the number of part time employees, a total of 216 (72 per cent) micro-enterprises has no part time employee, 81 (27 per cent) micro-enterprises has one part time employee and 3 (1 per cent) micro-enterprises has more than one part time employees. In respect of number of gainfully employed member per households, around 77 per cent households has at least two gainfully employed members in their household. As for the type of micro-enterprises, highest proportion of households (29.7 per cent) engaged in retailing, followed by agriculture (17.7 per cent), service (15.7 per cent), manufacturing (10.3 per cent), wholesales (9.7 per cent), livestock (8.7 per cent), and poultry (8.3 per cent). Among the 300 micro-enterprises owned and/or managed by respondents, highest proportion of micro-enterprises (53 per cent) established 6 to 10 years ago; followed by 11 to 15 years (14.7 per cent), 1 to 5 years (13 per cent), 16 to 20 years (11 per cent) and more than 20 years (8.3 per cent).

Reliability and validity

The mean and standard deviation of all the variables are presented in Table II. The mean value for all the variables is considered high with low standard deviation. The mean value for enterprise development training program is 40.48 with standard deviation of 26.76. This means, on average, the microentrepreneurs, as respondents in this study, received 40 hours of training. The Cronbach's alpha reliability analysis shows that all variables have values of more than 0.7, indicating that all the items are reliable. The composite reliability values for all variables are more than 0.75, indicating reliability. The Dillon–Goldstein *rho* values for all indicators are more than 0.65, confirming the items' reliability. Finally, the AVE values for all constructs are higher than 0.50, which indicate acceptable convergent validity. Looking at the cross-loadings in Table III, all indicators' loadings are higher than the total cross-loadings, confirming discriminant validity. Moreover, the Fornell–Larcker test was used to assess the discriminant validity at the construct level. The Fornell–Larcker criterion in Table III did not detect any lack of discriminant validity. The heterotrait–monotrait ratio (HTMT) value of 0.9 was usedthe threshold, and this study confirmed that there was no lack of discriminant validity.

Path analysis

The first two hypotheses reported negative effects. The path coefficients, as noted in Table IV, show that the coefficient value for enterprise development training programs on conceptual competency (*H1*) is −0.096, with a *p*-value of 0.208. This indicates that enterprise development

Variables	Items	Mean	SD	CA	DG *rho*	CR	AVE
CONC	4	4.236	0.604	0.888	0.964	0.915	0.730
COMC	3	3.877	0.697	0.832	0.850	0.859	0.674
OPPC	4	3.863	0.692	0.847	0.960	0.881	0.654
ORGC	3	3.746	0.791	0.839	0.840	0.903	0.756
RELC	3	4.032	0.650	0.861	0.884	0.914	0.780
STRC	3	4.122	0.468	0.704	0.828	0.826	0.615
EDTP	1	40.48	26.76	–	1.000	–	–

Notes: enterprise development training programs (EDTP); conceptual competency (CONC); commitment competency (COMC); opportunity recognition competency (OPPC); organizing competency (ORGC); relationship competency (RELC); strategic competency (STRC); 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 II.
Reliability and validity

	CONC	COMC	OPPC	RELC	ORGC	STRC	EDTP
CONC −1	*0.912*	−0.169	0.070	−0.053	0.155	0.027	−0.108
CONC −2	*0.863*	−0.228	0.040	−0.014	0.150	−0.037	−0.078
CONC −3	*0.813*	−0.158	0.097	−0.041	0.143	−0.023	−0.057
CONC −4	*0.825*	−0.184	0.080	−0.033	0.135	−0.003	−0.011
COMC −1	−0.199	0.953	0.186	0.060	−0.100	0.063	−0.126
COMC −2	−0.193	0.805	0.305	0.047	−0.177	0.111	−0.066
COMC −3	−0.294	0.683	0.273	−0.006	−0.185	0.118	0.006
OPPC −1	0.081	0.170	*0.913*	0.285	0.110	0.423	0.249
OPPC −2	0.069	0.277	*0.749*	0.184	0.052	0.373	0.099
OPPC −3	0.053	0.298	*0.646*	0.246	0.034	0.316	0.038
OPPC −4	0.053	0.221	*0.897*	0.243	−0.011	0.386	0.245
ORGC −1	−0.034	0.074	0.270	*0.854*	0.174	0.253	0.138
ORGC −2	−0.023	0.040	0.262	*0.879*	0.254	0.219	0.134
ORGC −3	−0.053	0.052	0.225	*0.876*	0.218	0.222	0.143
RELC −1	0.193	−0.083	0.026	0.198	*0.853*	0.081	0.088
RELC −2	0.092	−0.097	0.086	0.211	*0.909*	0.118	0.127
RELC −3	0.187	−0.172	0.031	0.243	*0.886*	0.070	0.122
STRC −1	−0.021	0.098	0.387	0.238	0.064	*0.894*	−0.074
STRC −2	−0.005	0.079	0.344	0.215	0.107	*0.738*	−0.031
STRC −3	0.022	0.014	0.351	0.176	0.097	*0.707*	−0.044
EDTP −1	−0.096	−0.120	0.244	0.159	0.130	−0.070	*1.000*
Fornell–Larcker Criterion							
CONC	0.854						
COMC	−0.213	0.821					
OPPC	0.077	0.248	0.809				
ORGC	−0.043	0.064	0.289	0.870			
RELC	0.172	−0.136	0.057	0.247	0.883		
STRC	−0.006	0.086	0.456	0.266	0.103	0.784	
EDTP	−0.096	−0.120	0.244	0.159	0.130	−0.070	–
Heterotrait–monotrait ratio (HTMT)							
CONC	–						
COMC	0.311	–					
OPPC	0.095	0.399	–				
ORGC	0.051	0.067	0.344	–			
RELC	0.200	0.211	0.092	0.289	–		
STRC	0.059	0.135	0.589	0.344	0.145	–	
EDTP	0.078	0.084	0.207	0.173	0.137	0.075	–

Notes: enterprise development training programs (EDTP); conceptual competency (CONC); commitment competency (COMC); opportunity recognition competency (OPPC); organizing competency (ORGC); relationship competency (RELC); strategic competency (STRC). 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 loading

training programs has an insignificant negative effect on microentrepreneur's conceptual competency. For *H2*, the coefficient value for enterprise development training programs on commitment competency is −0.111 with a *p*-value of 0.177, thus indicating that enterprise development training programs has an insignificant negative effect on commitment competency.

However, positive effects were found for the other competencies. The coefficient for enterprise development training programs shows a positive (β = 0.246) and significant

Hypo		Coefficient	CI - Min	CI - Max	*t* value	Sig.	Decision
H1	EDTP → CONC	−0.096	−0.230	0.142	1.596	0.111	*Reject*
H2	EDTP → COMC	−0.120	−0.191	0.091	1.560	0.119	*Reject*
H3	EDTP → OPPC	0.244	0.176	0.349	4.683	0.000	*Accept*
H4	EDTP → ORGC	0.159	0.055	0.288	2.491	0.013	*Accept*
H5	EDTP → RELC	0.130	0.044	0.242	2.384	0.018	*Accept*
H6	EDTP → STRC	−0.070	−0.218	0.133	0.764	0.445	*Reject*

Notes: enterprise development training programs (EDTP), 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 IV.
Path analysis

(p-value of 0.000 < 0.05) effect on opportunity recognition competency (*H3*). For *H4*, the path coefficient value for enterprise development training programs on organizing competency is 0.155 with a p-value of 0.026. This indicates that enterprise development training programs significantly and positively affect organizing competency. For *H5*, the coefficient for enterprise development training programs shows a positive ($\beta = 0.169$) and significant (p-value of 0.001 < 0.05) effect on relationship competency. Inversely, the path coefficient value for enterprise development training programs on strategic competency (*H6*) is −0.068 with a p-value of 0.525, towards an indication that enterprise development training programs has an insignificant negative effect on strategic competency.

Discussion and conclusion

It is widely accepted that microenterprise development programs are recognized to have a major role in increasing enterprise performance and entrepreneurial competencies. These programs are specially designed to help micro entrepreneurs better execute business tasks. The purpose of the present study was to examine the effect of microenterprise development training programs on entrepreneurial competencies among microentrepreneurs. The findings from the study revealed that training programs has a positive and significant effect on opportunity recognition competency, organizing competency, and relationship competency among microentrepreneurs in Malaysia (*H3, H4* and *H5*). This indicates that training programs and initiatives of concerned entities may enhance the ability amongst micro-entrepreneurs to recognize (identify, assess and seek) market opportunities, along with their ability to plan, organize, lead, motivate and delegate resources (e.g. human, physical, financial and technological), as well as their capacity to interact and establish networks both on one-to-one and group bases.

Conversely, the study also found that training programs has an unpredicted negative effect on conceptual competency, commitment competency and strategic competency (*H1, H2* and *H6)*, although not statistically significant. This suggests that training initiatives of developmental organizations, such as micro-credit institutions, are neither required for micro-entrepreneurs' sustained drive for business, for their understanding of business-related concepts, nor for their ability to set, evaluate, and implement goal-setting and proactive actions to attain short- and long-term strategies for their microenterprises. Overall, the findings seem to be in line with the previous findings of Angelucci *et al.* (2013), as well as Ganle *et al.* (2015), where development initiatives and programs reported a diversity of results, ranging from positive, negative, and even to no impact.

Theoretically, this study contributes by partially supporting the existing literature concerning human capital theory by presenting valuable empirical evidence, which explains

that activities such as schooling, training and information acquisition, among others, affect the present and/or future well-being (Becker, 1962). The reason for the insignificant effect on the three dimensions of entrepreneurial competencies remains unanswered. As the hypotheses tested in this study are not found in the literature, the positive effects are worth mentioning given that training remains an important factor in enhancing entrepreneurial competencies. This is crucial enrichment for the existing body of knowledge, advocating specific entrepreneurial competencies as significant factors in determining the success of entrepreneurship and enterprise performance.

Implication wise, this study reveals significant insights for policymakers, entities involved in the development of microenterprises, and micro-entrepreneurs. Based on the findings, it is recommended that developmental organizations, such as TEKUN Nasional or Majlis Amanah Rakyat (MARA), and government agencies (and policymakers) should aggressively promote the competitiveness of microenterprises by making avail effective training programs to wider and diverse audiences, particularly amongst micro-entrepreneurs from the low-income communities in Malaysia (or other emerging nations). In particular, concerned entities should make training programs (e.g. private training, e-learning on-the-job training) a compulsory prerequisite to avail their services, such as micro-credit facilities. It may also be fruitful if the government and the developmental entities offer various incentives for micro-entrepreneurs attending such training programs. These policies and strategies are bound to improve participation amongst poor micro-entrepreneurs in training programs, hence instilling the necessary and crucial competencies among them.

As for the microenterprise owners (micro-entrepreneurs) and managers, operating in the current competitive business world, this study implies that they should find ways to sign up for enterprise development training programs, such development initiatives, discussions and group or center meetings to take their entrepreneurial competencies to the next level. As the present study only investigated the effect of training on entrepreneurial competencies among micro-entrepreneurs, its findings could have limitations and not generalizable completely in case of larger firms. Future researchers should therefore include larger-sized enterprises to confirm if the findings of the present study are being reflected there as well.

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Corresponding author
Abdullah Al Mamun can be contacted at: mamun7793@gmail.com