The impact of entrepreneurship education on attitude, subjective norm and self-efficacy among undergraduates

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A B S T R A C T
The Malaysian government recognized the importance of entrepreneurship’s role in developing innovation and knowledge as new engines that could help the Malaysia economy to grow. Entrepreneurship education has become popular for developing economies and creating job opportunities in Malaysia. Entrepreneurship contributes significantly to economic growth; it increases job opportunities, nurtures innovation, and organization productivity. Most of the higher education institutions (HEI) in Malaysia are also engaged with the numerous entrepreneurship development programs and training for small business development. Entrepreneurship programs in HEI could also promote an entrepreneurial culture; for the student who is interested in entrepreneurial activities. This research aims to investigate the impact of entrepreneurship education, attitude, self-efficacy, subjective-norm on entrepreneurial intention among undergraduates in private universities in Kuala Lumpur. Likewise, this research has adopted Theory Planned behavior (TPB) as an underpinning theory for its research framework. Based on the distributed questionnaires, the research only received 226 responses. However, only 216 questionnaires were usable for further analysis. The research has used SPSS and Smart-Pls programs to analyze its data. The research found that there is a positive and significant relationship between entrepreneurship education and (attitude, subjective-norm self-efficacy). The research expands the current body of knowledge on TPB from the landscape of undergraduates’ students in private universities in Kuala Lumpur, Malaysia. The research ends with some avenues for future research.

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1. Introduction

Entrepreneurship has been a major wheel in moving a country's economic growth because it increases job opportunities and creates innovation and productivity (Urbano and Aparicio, 2016). Currently, there are many schools, colleges, and universities that offer entrepreneurship programs. However, the efficiency of the entrepreneurship education program cannot be measured based on the number of students who graduated from this program. This is why some scholars have been trying to examine the effectiveness of entrepreneurship education from various perspectives.

Hence, to overcome the issue of entrepreneurship education effectiveness, much research has been done in the past to enhance or enrich the entrepreneurial mindset, attitude, and awareness as a job option (Hulsink and Rauch, 2015). Likewise, Malaysian government agencies are promoting entrepreneurship programs to the youths, especially students, to consider entrepreneurial as a career choice. Ministry of Higher Education in Malaysia put up an expectation that at least 15% of students would engage in entrepreneurship business through entrepreneurship education or programs. Deputy of Higher Education Minister also stated that they want to encourage the student to start earning income by implementing the 'Learn and Earn' concept. Over 60% of students are currently enrolled in a degree program were involved in entrepreneurship activities. Meanwhile, 3% of these students engage in entrepreneurial activities while being a student and manage to create a job opportunity for themselves (Lee, 2019). The entrepreneurial activity was
defined as the major mechanism of moving economic growth. Moreover, to show support for entrepreneurship development, the Government of Malaysia has invested a lot to promote the development of industry 4.0, RM100 million fund for TEKUN, RM 2 billion soft loans for the Business Loan Guarantee Scheme (Lee, 2019). Likewise, these government initiatives encourage entrepreneurship development among youth and reduce the unemployment rate among graduates in this country (Lee, 2019). However, youths in Malaysia do not grab this opportunity due to deficiency of encouragement and lack of self-confident issues (Lee, 2019). Despite government efforts to create job opportunities in the government and private sectors in Malaysia, there still remains unemployment issues among youths in Malaysia (Nachiappan et al., 2018).

2. Problem statement

Malaysia’s unemployment rate has declined from 10.78% in 2015 to 10.73% in 2016 (Premand et al., 2016). However, the unemployment rate in Malaysia plummeted to 10.85% in 2017. Likewise, the main reason for the unemployment rate is due to the unemployment rate among youths in Malaysia (Nachiappan et al., 2018; Premand et al., 2016). Ibrahim et al. (2016) suggested that “the unemployment rate among youths has dramatically increased by 1.2% to 10.7%, as compared to the national unemployment rate, which increased only by 0.2% from 2.9% to 3.1%. Thus, the result indicates that unemployment in Malaysia is mostly caused by youths. Similarly, the issue of unemployment has become a sensitive issue to the community, especially among graduates (Nachiappan et al., 2018). Despite that, about 3.5% of these graduates’ youths have remained unemployed for six months after their graduation. According to Lam et al. (2018), “it is important to develop a sustainable curriculum that program (Entrepreneurship Education) that could curb the unemployable issues among the graduates in Malaysia. Entrepreneurship education is widely promoted as a suitable approach for addressing youth unemployment (Dejaeghere and Baxter, 2014). Entrepreneurship education programs could reverse graduate unemployment and embed entrepreneurial skills among students; by setting up their own businesses and encourage self-employment (Ekpoh and Edet, 2011). Entrepreneurship education develops an environment that can enrich the entrepreneurial mindset, skill, and behavior (Nabi et al., 2017). Moreover, entrepreneurship education is one (1) of the best approaches to alleviate the issue of unemployment among youths (Sitoula, 2015). Entrepreneurship education could create individuals that can perform entrepreneurial activities, managing their own career, and lead a life in an entrepreneurial way by being their own bosses (Liñán and Fayolle, 2015). Although unemployment issues could be resolved through entrepreneurship education, youths in Malaysia are least interested in choosing entrepreneurial as their career path (Ibrahim et al., 2016). The present research investigated the entrepreneurial intention among undergraduate students in private universities in Kuala Lumpur. The capital of Malaysia has the highest number of private universities in Malaysia (Ahmad and Buchanan, 2015).

Moreover, the research was mainly focused on students who have taken entrepreneurship courses in their respective universities. Similarly, the present research intends to indulge entrepreneurial intention among students who have taken an entrepreneurship course. Hence, Theory of Planned Behavior by Ajzen (1991), composing three determining factors of behavioral intentions, such as attitude, subjective norm, and perceived behavioral control on students, was used for underpinning the theoretical research model. Nevertheless, the research investigates the impact of entrepreneurship education on attitude, subjective norm, and self-efficacy.

3. Literature review

3.1. The relationship between entrepreneurship education and attitude

Attitude refers to a person’s personal feelings based on the favorableness of stimulus objects (Ajzen, 2011). Attitude results from negative or positive appraisal when a person is absorbed in certain behavior than influenced by psychological emotion (Prabandari and Sholihah, 2015). Entrepreneurship education prepares students with entrepreneurial tools such as attitude, competencies, and skills (Abiah et al., 2017). Past research found that there is a correlation between entrepreneurship education and individual attitude toward entrepreneurship (Mwatsika and Sankhulani, 2016). Hence, attitude plays an important role in increasing entrepreneurial intention (Potishuk and Kratzer, 2017).

Entrepreneurship education act as an exogenous variable that influences entrepreneurial attitudes and intention. As such, a clear understanding of what affects student intention is important in designing the entrepreneurship education policy and effectiveness (Nesse et al., 2015). Entrepreneurship education gives exposure to students of the real entrepreneurial world. Here, they perform and participate in entrepreneur activities in their institute. Practicing entrepreneurial skills will enhance student knowledge, attitude, passion, integrity, and determination and towards entrepreneurial intention (Bybashaija and Katono, 2011). However, Nesse et al. (2015), suggested that more research is needed between entrepreneurship education and attitude. Based on the suggestion. The following hypothesis was proposed:

H1: There is a positive relationship between entrepreneurship education and attitude.
3.2. The relationship between entrepreneurship education and subjective-norm

Entrepreneur education is an important aspect of generating entrepreneurs for the coming future. Entrepreneurship intention is a wish of an individual to start a new business. However, it needs support from people such as family or friends named subjective-norm to start it, which can be developed through entrepreneur education awareness (Utami, 2017). Likewise, efficacy is presumed as a result of entrepreneurial education. Entrepreneurship education molds entrepreneurial behavior and has been an essential factor for entrepreneurship development over the last decade (Bae et al., 2014). Entrepreneurship education able to enrich the proper psychological disposition includes subjective norms that produce an impact on entrepreneurial behavior (Ndofirepi et al., 2018). Individual attributes, family involvement, entrepreneurial education could affect the students' intention to become entrepreneurs positively and significantly (Mustapha and Selvaraju, 2015). Universities have launched entrepreneurship education programs to reverse the trend of graduate unemployment. This program gives students the necessary training and entrepreneurial skills to set up their own businesses. Similarly, the programs also encourage self-employment as a viable career choice (Ekpoh and Edet, 2011). Alharbi et al. (2018) found that student that has taken entrepreneurship education program have a higher intention to become an entrepreneur after graduation. Ismail (2017) stated there is a more positive relationship between entrepreneurship education and self-efficacy. Based on the suggestion. The following hypothesis was proposed:

H3: There is a positive relationship between entrepreneurship education and subjective-norm.

3.3. The relationship between entrepreneurship education and self-efficacy

Entrepreneur education is an important factor in creating successful entrepreneurs. Entrepreneurship education can kindle student determination to start up a new business by taking advantage of opportunities and risks (Utami, 2017). Moreover, entrepreneurship education can increase individual self-efficacy through a learning process that creates taught values, skills, behavior, and determination to overcome obstacles and pursue success (Alharbi et al., 2018). Moreover, entrepreneurship education could increase entrepreneurial intention by increasing self-efficacy skills among individuals (Liñán and Fayolle, 2015). Entrepreneurship education can create a lot of benefits for the students. Entrepreneurship education programs could bring out entrepreneurial traits such as attitudes, feasibility, knowledge's and, at the same evoke the entrepreneurial intention to start a new business (Nabi et al., 2017). Entrepreneurship education can help to develop a student's confidence and encourage self-efficacy (Byabashaija and Katono, 2011).

Entrepreneurship education course content and pedagogical approaches can bring a positive impact on the entrepreneur's intention; because through the learning process that provides practical oriented approach it will enhance the student's self-efficacy belief and boost entrepreneurial intention (Piperopoulos and Dimov, 2015). Entrepreneurship education could also affect the interpersonal or personal traits of an individual in terms of self-esteem, self-efficacy, and wanted for excel of achievement (Izquierdo and Buelens, 2011). Ismail (2017) argued that there is a positive relationship between entrepreneurship education and self-efficacy. Based on the suggestion. The following hypothesis was proposed:

H4: There is a positive relationship between entrepreneurship education and self-efficacy.

3.4. Theory of planned behavior

The theory of Planned Behavior focuses on theoretical constructs relevant to human motivational factors as determinants of the probability of specific behaviors (Ajzen, 1991). Based on TPB theory, the attitudinal factor is related to the entrepreneurial intention such as evasion of workload, seek for financial stability, autonomy, prosperity, and obstacles. Moreover, the components of attitudes in (TPB) social career, workload, and self-realization could lead to the intention of behavior. Entrepreneurial behavior also regarded as planned behavior that refers to the intention which can be influenced by the attitude, self-efficacy and subjective norm as based on the TPB model to the context which these factors are making way for an individual to new venture exploration (Gözükara and Çolakoğlu, 2016).

Pedrini et al. (2017) stated that entrepreneurial intention could be triggered by entrepreneurship education since it has an impact on participants' entrepreneurial self-efficacy, risk propensity, student entrepreneurial knowledge, and networking. Based on the TPB, self-efficacy was found as the strongest predictor of behavior intention (Tolma et al., 2006). Students with strong self-assessed leadership skills are able to accumulate more readily bonding cognitive, social capital, which in turn reinforces their perceptions of the desirability and feasibility of entrepreneurship. Family interactions (subjective norm) are a strong socializing force on the beliefs, attitudes, and behaviors that people adopt during their lives (Carr and Sequeira, 2007). Koropp et al. (2014) argued that in family firms, financial choices are primarily influenced by family norms, mood, perceived behavioral influence, and behavioral intentions. Hamilton and White (2012) suggested that social values affect the entrepreneurial intentions of young-children. Based on TPB, peer pressure influence perceived
behavioral control and behavioral intention (Neuwirth and Frederick, 2004).

3.5. Research framework

In this proposed framework, the independent variable (entrepreneurship education) against the dependent variable relationship (attitude, subjective norm, and self-efficacy) relationship was examined (Fig. 1). Moreover, the research framework was initially established based on Theory Planned Behavior (Ajzen, 2011). However, the research framework was further expended (Nenzhelele, 2014). Although, attitude, subjective norm, and self-efficacy have a positive influence on student entrepreneur intention (Pedrini et al., 2017). Entrepreneurship education has been posited to have a positive influence on attitude, subjective norm, and self-efficacy. Hence, based on the literature review and gap of research, the present research was carried out.

![Fig. 1: Research framework underpinned by the theory of planned behavior (Ajzen, 1991)](image)

4. Research methodology

The methodology is an important aspect of every research. That depends on the nature of research, such as qualitative, quantitative, and mixed methods. According to Leedy and Ormrod (2012), research methodology is a vital element of any research that provides a blueprint of how the research would proceed and provide an answer to the research questions (Creswell and Creswell, 2017). However, for the present research, a quantitative approach was adopted. Similarly, a five-point Likert scale was used to measure the constructs from Strongly Disagree 1 to Strongly Disagree 5.

4.1. Data collection

The total number of population (N) was 499 students; who are currently undertaking entrepreneurship education courses in the top three (3) private universities in Kuala Lumpur. Universities, where data were collected, include Sunway University, University Kuala Lumpur, and Help University. Likewise, the questionnaires were distributed among the undergraduate level students. Present research utilized Krejcie and Morgan (1970) Table for Determining Sample Size to obtain the sample size. Hence, a total of 220 questionnaires were distributed among the three (3) mentioned universities undergraduate level students. Questionnaires were formed in two types electronically (e. link) and a hard- copy. A two-way data collection process was adopted at the convenience of the students. Before handing over the questionnaire to the respondents, they were taking in confidence and assured about the privacy, and the use of data is exclusively for the research purpose only.

4.2. Measures

Present research considered four (4) constructs and three (3) hypotheses. Constructs include entrepreneurship education, attitude, subjective norm, and self-efficacy. The items for measurements the constructs were taken from the previous studies. Such as the items for entrepreneurship education was adopted from the previous research of Rengiah (2013). Items for self-efficacy was adopted from the previous research of Matsheke (2015). Similarly, the items for subjective-norm was adopted from Gurbuz and Aykol (2008). Finally, items for the attitude was adopted from the research by Rengiah (2013).

4.3. Data analysis

Data analysis was performed using Smart Partial Least Square (PLS) Structural Equation Modelling method. When the sample size is small, less than 250, the PLS method is suitable to be used (Reinartz et al., 2009). Nevertheless, for this research, latent construct scores were used to assess predictive relevance, as suggested by Hair et al. (2011). Likewise, the preliminary assessment was conducted via Smart PLS 3.0 software. Based on Hair et al. (2011) suggestion, the research analysis was conducted by assessing the measurement model followed by the evaluation of the structural model. Besides that, the structural model was further assessed through the reliability and validity test of the instruments. Furthermore, convergent and discriminant were tested by looking at the weight of the loading of each item to generate the latent variable scores.

4.4. Measurement model

The measurement model was assessed through convergent validity and discriminant validity. However, the convergent validity was assessed though Average Variance Extracted (AVE) and reliability test. Meanwhile, the discriminant validity was tested using the Fornell and Larcker (1981) criterion and Heterotrait-Monotrait Ratio of Correlations (HTMT) test.

4.4.1. Convergent validity

According to Fornell and Larcker (1981), convergent validity can be assessed through Average
Variance Extracted (AVE). Therefore, to establish convergent validity, the AVE scores should be greater than 0.50 (Fornell and Larcker, 1981). Based on the results in Table 1, the AVE scores for the construct are all above 0.50, as recommended by Fornell and Larcker (1981).

According to Hair et al. (2014), the construct loadings scores should be greater than 0.70; and at the same time, the Average Variance Extracted (AVE) scores also must greater than 0.50 in order to establish validity. Besides that, the composite reliability scores also must be greater than 0.70 in order to establish questionnaire reliability. Based on the results obtained, convergent validity was established.

### 4.4.2. Discriminant validity

Discriminant validity can be assessed through Fornell and Larcker (1981) criterion and Heterotrait-Monotrait Ratio of Correlations (HTMT) (Henseler et al., 2015). Thus, the Fornell and Larcker (1981) criterion was established through the square root of the AVE correlation results. Nevertheless, the diagonal elements score should be greater than the off-diagonal scores in the corresponding rows and columns. Based on the results displayed in Table 2, the diagonal elements score is greater than the off-diagonal scores in the corresponding rows and columns. Hence the results confer that there are no discriminant validity issues in the research.

### Table 1: Measurement model

| Constructs | Cronbach’s Alpha | Composite Reliability | (AVE) |
|------------|------------------|-----------------------|-------|
| ATT        | 0.779            | 0.83                  | 0.567 |
| EE         | 0.753            | 0.734                 | 0.587 |
| SE         | 0.769            | 0.736                 | 0.592 |
| SN         | 0.832            | 0.869                 | 0.553 |

### Table 2: Heterotrait-Monotrait ratio correlations (HTMT)

|       | ATT | EE  | SE  | SN  |
|-------|-----|-----|-----|-----|
| ATT   | 0.753 |     |     |     |
| EE    | 0.246 | 0.663 |     |     |
| SE    | 0.732 | 0.393 | 0.672 |     |
| SN    | -0.451 | -0.148 | -0.261 | 0.537 |

Another method to measure discriminant validity is the HTMT ratio of correlation (Henseler et al., 2015).

Moreover, through the Monte Carlo simulation research, the authors found that HTMT is able to achieve higher specificity and sensitivity rates (97% to 99%) compared to the cross-loadings criterion (0.00%) and Fornell-Larcker (20.82%). However, when HTMT is higher than this threshold of 0.85 (Kline, 2011) or 0.90 (Gold et al., 2001), there is evidence of a lack of discriminant validity. Henseler et al. (2015) suggested that HTMT values close to 1, indicates there is a lack of discriminant validity. Based on the results obtained in Table 3, the HTMT correlation scores obtained are less than 0.85 as per the threshold recommended by Kline (2011). Based on the test results obtained, there is no discriminant validity issue for the research.

### Table 3: Fornell-Larcker criterion

|       | ATT | EE  | SE  | SN  |
|-------|-----|-----|-----|-----|
| ATT   |     | 0.294 |     |     |
| EE    | 0.792 | 0.448 |     |     |
| SE    | 0.653 | 0.235 | 0.614 |     |

### 4.5. Structural model

The structural model will be assessed through three (3) steps coefficient of determination (R²), Predictive relevance (Q²), and effect size (f²). Table 2 displayed the coefficient of determination (R²) for the direct relationship. Moreover, the bootstrapping procedure (5000) was conducted to detect standard error and generate the t-values. Moreover, Table 4 illustrates the endogenous construct and the path coefficient for the direct relationship.

### 4.5.1. Coefficient of determination (R²)

The coefficient of determination (R²) was used for measuring the predictive accuracy of the models. Ringle et al. (2012) revealed that (R²) is useful in depicting the model's strength to predict and explain the latent dependent variables. (R²) values 0.19, are considered as weak, 0.33 as moderate, and 0.67 as substantial (Chin, 1998). Based on the coefficient of determination results in Table 4. The predictive accuracy of the models is considered weak. The research outer model is illustrated in Fig. 2.

### Table 4: Coefficient of determination (R²)

|       | (R²) | Adjusted (R²) |
|-------|------|---------------|
| ATT   | 0.060 | 0.056         |
| SE    | 0.115 | 0.110         |
| SN    | 0.022 | 0.017         |

### 4.5.2. Effect size (f²)

Urbach and Ahlemann (2010) suggested that the impact of independent variables on dependent variables is measured by its side effect. Cohen (1988) advised that the interpretation of effect size as 0.02<f²≤0.15 for small effect size, 0.15<f²≤0.35 for medium effect size, and f²>0.35 for large effect size. Based on the results obtained in Table 5, the effect...
entrepreneurship education and student attitude. Likewise, the results obtained in the research is similar to research by Mwatsika and Sankhulani (2016) entrepreneurship education creates positives waves that create positive student attitude. Hence, a positive mind and positive would incline graduates to engage in entrepreneurial activity. Personal attitude has a positive relationship with student intention to become an entrepreneur. Similarly, how strong your intention towards entrepreneurship depends on the parameter of attitude (Ambad and Damita, 2016).

### 4.5.3. Results

Based on the results obtained in Table 6 ($\beta=0.07$, t-value=3.512, p-value=0.000). Hence, there is a positive and significant relationship between entrepreneurship education and subjective norm. According to Entrialgo and Iglesias (2016), many past studies have found empirical evidence for subjective norms affecting the attitude toward entrepreneurial behavior and the perceived control over that behavior. Zhang et al. (2019) found a positive and significant interaction effect between entrepreneurial learning and prior exposure to entrepreneurship education and perceived behavior control.

Based on the results obtained in Table 6 ($\beta=0.195$, t-value=0.759, p-value=0.001). Hence, there is a positive and significant relationship between entrepreneurship education and self-efficacy. The result is similar to the previous research that was found that through entrepreneurial education, the learning process that provides practical oriented approach will enhance the student's self-efficacy belief and thus booster the entrepreneurial intention (Piperopoulos and Dimov, 2015). This finding is in contrast to another research by Choi et al. (2019), who found that entrepreneurship education, did not have a significant effect on achievement desire and self-efficacy. Traditional universities have been used as a career path to advance into society (Ahn et al., 2017). However, lately, universities have shifted their paradigm by introducing university education that emphasizes entrepreneurial as a career aspect. Students can learn and get insight into how real-life business working by providing experiential learning methods that eventually will help to build the students' confidence (Chang and Rieple, 2013).

According to Jahanii et al. (2018), one of many key factors in the development of entrepreneurship in education.

According to Liñán and Fayolle (2015); an individual that has robust self-belief and self-confidence, will perform entrepreneurial action with low-risk acuity and will increase willingness to create new business. Based on the results of the present research and past empirical findings, the key observation is that entrepreneurship education has a positive and significant impact on attitude, subject norm, and self-efficacy relationships. Entrepreneurship education plays a vital role in molding a positive attitude in people. Meanwhile, through entrepreneurship education, people connected to family, friends, and peers appear to be stronger. Despite that, entrepreneurship education also increases self-efficacy.

### 5. Research implication

#### 5.1. Theoretical implication

This research expanded the current body of knowledge in entrepreneurship by looking at entrepreneurship education influence over attitude, self-efficacy, and subjective norm among undergraduates' students in private universities in Malaysia. The present research has used Theory Planned Behaviour (Ajzen, 1991) to support its theoretical framework. The theoretical framework proposed there is a positive relationship between entrepreneurship education against attitude, subjective norms, and self-efficacy. The research found that there is a positive relationship between entrepreneurship education and (attitude, subjective norms, and self-efficacy). The present research findings concur that entrepreneurship education, changes in individuals’ attitudes, perceptions of subjective norm, and perceived behavioral control (Fayolle and Degeorge, 2006).

#### 5.2. Managerial implications

Entrepreneurship education is very important to develop a student's interest in engaging in entrepreneurial activities when they graduate. As such, higher education institutions and instructors play an important role in facilitating the student learning process, especially business-oriented courses. Moreover, a good academic environment...
that is conducive to business development would also generate the interest of students towards entrepreneurial activities. In addition, the teaching and learning experience of higher education institutions plays an important role in changing student attitudes towards becoming an entrepreneur. Despite that, the teaching and learning material used in the lecture must be revised from time to time to cater to the industry needs. Moreover, industry champions could be appointed as alma meters to facilitate learning experience through real-life experiences. Likewise, higher education institution management should monitor and facilitate educator teaching to meet the increasing education standard that is evolving.

5.3. Policy implication

Ministry of Higher Education (MOHE) and other public and private education agencies must strive to come up with futuristic education blueprints that would help to develop a futuristic entrepreneur role. Despite that, preliminary research is needed to get the general opinion of industry and students alike about the difference between past and present and entrepreneurship education in a higher education institution and a way forward future entrepreneurship education. In addition, it is also possible that the government agencies in Malaysia come up with dynamic education programs that could support the social and cultural aspects of people from being employed by other people to a self-creating enterprise that boosts the national economy. Moreover, the government agencies can also look at education strategies of some world top business schools and adopt similar strategies so our higher education institution could become close, at par, or even better than them.

6. Conclusion

There are some limitations to this research. The research findings must be interpreted with caution and cannot be generalized to the entire higher education institution in Malaysia. This was cross-sectional research that analyzes data for specific people and a short point in time. First, this research only conducted in private universities in Kuala Lumpur, and the current sample only used final year students of entrepreneurship education, meaning the result may not represent the entire student population.

Despite that, the research found that entrepreneurship education has a direct impact on (attitude, self-efficacy, and subjective-norm). Likewise, the research found the results from a different perspective, such as private universities in Kuala Lumpur. Based on the analyses, the students feel that entrepreneurship education could significantly affect their (attitude, self-efficacy, and subjective-norm). As such, higher education institution, in Malaysia must ensure their education program is properly tailored and useful so that the interest of the students in education are well maintained. In addition, it is a joint effort by government agencies, higher education institutions, and social support groups, which will ensure the sustainability of entrepreneurial activities in Malaysia. Nevertheless, future research could expand the present theoretical framework by including other factors that could directly impact (attitude, subjective norms, and self-efficacy). Meanwhile, future research could also investigate other possible mediating or moderating factors that could impact entrepreneurship education and (attitude, subjective norms, and self-efficacy). Hence, through continuous research efforts, we would be able to find a better way to create future entrepreneurs, especially in Malaysia.

Compliance with ethical standards

Conflict of interest

The authors declare that they have no conflict of interest.

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