Turning Students from Job Seekers into Job Creators: The Role of High Impact Entrepreneurship Educational Practices

Subramaniam Sri Ramalu\(^a\), Gunalan Nadarajah\(^b\), Adejare Yusuff Aremu\(^c\), Othman Yeop Abdullah

This study focuses on the role of High Impact Entrepreneurship Educational Practices (HIEEP) in turning students from job seekers into job creators. The main objective of this study is to examine the direct and indirect effects of the Entrepreneurship Internship Program, Business Incubation Program and Entrepreneurial Supportive Environment on Entrepreneurial Self-Employment mediated by Entrepreneurial Education Knowledge. This quantitative research employed a survey method to collect the data. The data were collected from the students of three public Higher Education Institutions (HEIs) operating in the Northern region of Malaysia. Simple random sampling was used to choose the sample. A total of 664 questionnaires were distributed and 348 were returned, out of which 332 were useable. Meanwhile, the data analysis was performed using PLS-SEM 3.2.8. The results showed that the Entrepreneurship Internship Program, Business Incubation Program, Entrepreneurial Supportive Environment and Entrepreneurial Education Knowledge programs have a significant direct relationship with the Entrepreneurial Self-Employment. Entrepreneurial Education Knowledge also mediates the relationship between the Entrepreneurship Internship Program, Business Incubation Program, Entrepreneurial Supportive Environment and Entrepreneurial Self-Employment among the students, which implies that they will influence students to become job creators instead of job seekers. The findings provide important insights to universities, faculties and ministries of education, government, policy makers and researchers to understand the critical role of HEIs support and HIEEP to shape students’ intentions in becoming self-employed upon graduating. Equally, the findings contribute to the existing literature by empirically and theoretically extending the knowledge on entrepreneurial education in turning students from job seekers into job creators.
Introduction

Entrepreneurship education practices have recently become a major focus for educational systems all over the world (Othman & Othman, 2017). Acclaimed studies indicate that the creation of new ventures and growing businesses are fundamental solutions to unemployment and the quickest way to accelerate the economy and reduce poverty (Boateng, 2019). Entrepreneurship education practices have succeeded in many developed countries and have been adopted in educational institutions in many developing nations (Al-Mamun, Fong, Nawi & Shamsudin, 2015). Moreover, the importance of entrepreneurship education practices in promoting entrepreneurial careers has been extensively recognised (Gelaidan & Abdullateef, 2017). In this light, entrepreneurship education practices play an important role in developing entrepreneurial skills, competencies and attitudes in several ways, which in turn stimulates future entrepreneurial career choices. At the same time, entrepreneurship education practices are considered the most effective means of embedding entrepreneurial culture in HEIs as they foster students’ entrepreneurial mind-sets to increase the supply of future graduate entrepreneurs (Khalifa & Dhiaf, 2016; Hoque, Awang & Siddiqui, 2017; Ismail, Sawang & Zolin, 2018).

The Malaysia Education Blueprint 2015-2025 (Higher Education) was launched on 07 April, 2015 and serves as a new higher education strategy towards attaining a world-class knowledge economy. One of the key focuses of the blueprint is to produce holistic, entrepreneurial and balanced graduates. The blueprint highlights the importance of high impact educational practices to cultivate an entrepreneurial mindset among graduates and turn them into job creators instead of job seekers. Furthermore, entrepreneurship education plays a vital role in flourishing entrepreneurship among the new generation by enhancing the entrepreneurial attitudes and activities among both potential and nascent entrepreneurs. To further support the implementation of the Malaysia Education Blueprint 2015-2025 (Higher Education), The Malaysian Higher Education Ministry on April 13, 2016 launched the Higher Education Institution Entrepreneur Action Plan 2016-2020, a strategic document to implement and develop entrepreneurial education at HEIs. The action plan was also a continuation of the HEI Entrepreneur Development Policy launched in April 13, 2010 and the HEI Entrepreneur Strategic Plan 2013-2015.

Since then, there have been no clear-cut pedagogical guidelines for entrepreneurship education; teachers are largely responsible for integrating entrepreneurship education into their teaching and finding the best and most useful practices (Maritz, Jones & Shwetzer,
Due to the drawbacks in the current teaching techniques, numerous researchers have presented a number of teaching approaches in entrepreneurship education. A South African University has come out with the “Entrepreneurial Performance Education Model” (EPEM) and the “Entrepreneurial Education Model” (EEM) (Van Vuuren & Nieman, 1999). EPEM emphasises motivation, entrepreneurial skills, and business skills that influence entrepreneurial performance. In the context of Malaysia, despite various efforts to promote entrepreneurship development among the students, the number of graduates who have ventured into entrepreneurship upon graduation is still far below 2%, suggesting the need to revamp the entire approach to entrepreneurship education. It has been revealed that there is an absence of solid, pragmatic, high impact entrepreneurship education practices (HIEEP), which are aligned with the government policy to accelerate the entrepreneurial mind-set among the students (Yusoff, Zainol, & Ibrahim, 2015). As such, a holistic framework of HIEEP needs to be established to address these issues, based on career theories and constructs, such as entrepreneurial self-employment, which acts as the dependent variable, while entrepreneurial education knowledge mediates the relationship between the entrepreneurship internship program, business incubation program and the entrepreneurial supportive environment as independent constructs. This study is therefore intent on establishing a framework for HIEEP for HEIs in the Malaysian context. The framework for HIEEP will direct the HEIs in Malaysia to design the programme curriculum and extra-curricular activities to promote entrepreneurship and to produce entrepreneurs for the society. The business schools will particularly benefit from this research, as it will provide a guideline to create and develop entrepreneurs among business students. It will also predominantly contribute to the process of turning students from job seekers into job creators.

**Literature Review and Hypotheses Development**

**Entrepreneurial Self-Employment**

Self-employment has remained as the most important stimulus on career-related behaviour in social cognitive theory (Odewale, Hani, Migiro & Adeyeye, 2019). Self-employment is generally recognised as a basic concept in social learning theory (Al-Mamun, Fong, Nawi & Shamsudin, 2015); whereby the actions, intuitions and the environment constantly affect each other in developing an individual’s attitude towards a particular entrepreneurial business (Gelaidan & Abdullateef, 2017; Odewale, Hani, Migiro & Adeyeye, 2019). Hence, Entrepreneurial Self-Employment is linked to social cognitive theory and highlights the significance of self-beliefs and self-thought in nurturing personal motivation and subsequently, controls behaviour (Otache, 2019; Prabhu). Moreover, according to social learning theory (Odewale, Hani, Migiro & Adeyeye, 2019), Entrepreneurial Self-Employment described a person’s belief in his or her ability to succeed in a particular career. Thus, self-employment as a domain is related to entrepreneurship and could be termed as
“Entrepreneurial Self-Employment.” Self-employment refers to an individual’s confidence about the chances of effectively accomplishing a specific task (Nabi, Liñán, Fayolle, Krueger & Walmsley, 2017; Gelaidan & Abdul lateef, 2017). It is also an important part of career-related tasks, such as entrepreneurial process, as it prompts an individual’s choice, determination, and perseverance (Al-Mamun, Fong, Nawi & Shamsudin, 2015; Boateng, 2019). Thus, self-employment is concerned with an individual’s decision on what is to be done with the skills they possess, not just with the skills individually experienced (Otache, 2019). The greater the individual’s self-employment inclination, the more confident he/she is to be successful in a particular task domain (Otache, 2019). Several studies have established that Entrepreneurial Self-Employment is a strong driver of entrepreneurial behaviour (Al-Mamun, Fong, Nawi & Shamsudin, 2015; Otache, 2019; Boateng, 2019) and anticipated to affect individual choices, goals, effort, emotional responses, ability to cope, and perseverance (Gelaidan & Abdul lateef, 2017; Mamun, Shamsudin, Nawi, Nasi & Zakaria, 2017; Odewale, Hani, Migiro & Adeyeye, 2019). Otache (2019) defined Entrepreneurial Self-Employment as the degree to which an individual is certain that he or she can effectively start a new business venture. Prabhu (2019) then emphasised that individuals with high Entrepreneurial Self-Employment have a higher propensity to become an entrepreneur later in the future. Similarly, Entrepreneurial Self-Employment is regarded as a behavioural pattern that can transform a person’s belief on whether he/she can accomplish the tasks to efficaciously initiate and launch a new business venture (Owoseni, 2014; Matlay, Rae & Woodier-Harris, 2013). Therefore, Entrepreneurial Self-Employment is seen as the level of an individual’s belief that he or she can successfully start a new business venture.

**Entrepreneurial Education Knowledge**

Entrepreneurial Education Knowledge is a new field in academic circles which has garnered an increasing recognition, since it contributes towards the development of entrepreneurial culture, attitudes, skills and competencies among learners (Hattab, 2014; Joseph, 2017; Mahendra, Djatmika & Hermawan, 2017). Entrepreneurial Education Knowledge was introduced to enhance the students’ ability to identify business opportunities around them that can make them choose self-employment, and eventually become more self-reliant, and in turn, enhance their employability skills (Odewale, Hani, Migiro & Adeyeye, 2019). In this light, Otache (2019), recognised the need for HEIs to promote entrepreneurship and produce graduates with entrepreneurial mind-sets through Entrepreneurial Education Knowledge. In recent years, there have been many studies focusing on Entrepreneurial Education Knowledge (Binti Othman & Othman, 2017; Gelaidan & Abdulateef, 2017; Ismail, Sawang & Zolin, 2018; Shahverdi, Ismail & Qureshi, 2018). Nyadu-Addo and Mensah (2018) and Otache (2019) posited that Entrepreneurial Education Knowledge is a sequence of activities which target empowering a person to improve his/her skills, knowledge and values to define, analyse and resolve a wide variety of problems. Thus, Entrepreneurial Education Knowledge
promotes entrepreneurial intentions and stimulates entrepreneurial skills and awareness, which can be leveraged to address the hindrance imposed by subjective norms and resources towards entrepreneurial activities (Yarima & Hashim, 2016; Shamsudin, Al Mamun, Nawi, Nasir & Zakaria, 2016). According to Yarima and Hashim (2016), Entrepreneurial Education Knowledge aims to improve students’ mind-sets, behaviours, skills and capabilities, thereby creating future graduate entrepreneurs. Equally, Mamun, Shamsudin, Nawi, Nasi and Zakaria (2017) reported that Entrepreneurial Education Knowledge influenced the students’ entrepreneurial behaviour and supported new business start-ups. Additionally, Odewale, Hani, Migiro and Adeyeye (2019) found that Entrepreneurial Education Knowledge significantly affects an individual’s entrepreneurial self-employment decisions. Hence, previous studies highlighted the importance of Entrepreneurial Education Knowledge in increasing entrepreneurial inclination among graduates (Othman & Othman, 2017; Gelaidan & Abdullateef, 2017; Ismail, Sawang & Zolin, 2018; Shahverdi, Ismail & Qureshi, 2018).

**Entrepreneurial Internship Programs**

Internships refer to on the job training programs, which provide students with field knowledge related to their study in a supervised learning environment (Botha & Bignotti, 2016; Chou, Shen, Hsiao & Chen, 2017). Thus, the main objective of the internship program is to embed the modernity characteristic to the students participating in the program, so that they can take risks and learn to be creative, innovative and dynamic. As highlighted in recent literature, entrepreneurship education, including opportunities to participate in the Entrepreneurial Internship Program, focuses on the development of an entrepreneurial mindset and enterprising skills among university graduates and consequently, enhances their employability and increases their potentialities of being future entrepreneurs (Yi, 2018; Winantyo, Kusnadi & Wella, 2018; Suharsono, Rahmawati & Irwansyah, 2019). Generally, Entrepreneurial Internship Programs in universities can help inspire students and increase their interest in considering entrepreneurship as a career option (Zreen, Farrukh, Nazar & Khalid, 2019; Suharsono, Rahmawati & Irwansyah, 2019). Entrepreneurial Internship Programs should be an essential component of the curriculum in HEIs (Mandel & Noyes, 2016; Suharsono, Rahmawati & Irwansyah, 2019; Nurhuda & Soenarto, 2018).

**Business Incubation Programs**

The Business Incubator Program is a modern business assistance program to nurture new and small-scale enterprises. Based on Statistics Canada (2006), a business incubator refers to a real life simulative organisational unit which provides space and support services to help initiate new businesses and support existing businesses to achieve growth and profitability. In the meantime, while business incubators normally involve micro and small businesses, they are also conducted in government organisations and universities to promote entrepreneurial
activities. Zreen, Farrukh, Nazar and Khalid (2019) claimed that an individual’s personal skills and a supportive regulatory environment have a positive impact on one’s entrepreneurial self-employment aspirations. More specifically, administrative bureaucracies, access to finance, stigma related with failure, risk aversion and parents’ attitudes are some of the factors which influence the desirability and feasibility for entrepreneurial self-employment careers (Stal, Andreassi & Fujino, 2016). Previous studies reported the significant relationship between the business incubation program and entrepreneurial self-employment, such as access to special programs in universities (Jamil, Ismail, Siddique, Khan, Kazi & Qureshi, 2016; Allahar & Brathwaite, 2016; Ayatse, Kwahar & Iyortsuun, 2017), information on the potential business opportunity (Mrkajic, 2017), and the social systems (Mumtaz, Shafi & Zafar, 2017).

**Entrepreneurial Supportive Environment**

According to Javed, Yasir and Majid (2018), Entrepreneurial Supportive Environment is defined as a legal, social, financial and economic environment that is likely to promote business start-ups. Past studies argued that attitude and perceived ability towards entrepreneurship are higher when individuals are to be evaluated within an Entrepreneurial Supportive Environment (Keshtidar, Adib Roshan & Sahebkaran, 2018; Mandel & Noyes, 2016). Similarly, Suhaimi, Al Mamun, Zainol and Nawi (2018), mentioned that the Entrepreneurial Supportive Environment comprises of the relevant factors in the institutions environment that provide procedures and norms that either restrict or facilitate an individual’s entrepreneurial actions. Meanwhile, Yarima and Bello (2017), suggested that there is a common environment outside the entrepreneur’s mind which provides guidelines and standards that influence the economy and its values and policies. Yarima and Hashim (2018) also described that the Entrepreneurial Supportive Environment includes societal support, credible and tacit information, credible role models, as well as physical resources. The Entrepreneurial Supportive Environment combines different factors surrounding the business atmosphere that significantly help cultivate entrepreneurial inclination and entrepreneurial activities. Empirically, studies on the Entrepreneurial Supportive Environment advocate that adhering to rules and regulations, providing training and counselling services to start-up entrepreneurs could increase the chances of Entrepreneurial Education Knowledge (Yarima & Hashim, 2016; Winantyo, Kusnadi & Wella, 2018; Suhaimi, Al Mamun, Zainol & Nawi, 2018). Furthermore, factors such as the accessibility of funds, infrastructural facilities, and access to training provided by institutions of higher education could be critical in nurturing new venture developments and entrepreneurial self-employment careers (Sperber & Linder, 2019; Nowiński, Haddoud, Lančarič, Egerová & Czeglédi, 2019; Mamun, Shamsudin, Nawi, Nasi & Zakaria, 2017). According to Keshtidar, Adib Roshan and Sahebkaran (2018), access to funds is undoubtedly one of the fundamental factors in launching a new business. Many studies have reported that substantial numbers of individuals have given up their
entrepreneurial career intentions due to budget constraints (Javed, Yasir & Majid, 2018; Bienkowska, Klofsten & Rasmussen, 2016).

Drawing from the above discussions, the following hypotheses are proposed:

H1: There is a significant positive relationship between entrepreneurship education knowledge and entrepreneurial self-employment.

H2: An Entrepreneurial internship program is positively related to entrepreneurial self-employment among business school students.

H3: The business incubation program is positively related to entrepreneurial self-employment among business school students.

H4: The entrepreneurial supportive environment is positively related to entrepreneurial self-employment among business school students.

Mediation Role of Entrepreneurial Education Knowledge

Many studies provide evidence that Entrepreneurial Education Knowledge mediates the relationship between various entrepreneurial identities and entrepreneurial self-employment career intentions. Meanwhile, Yarima and Bello (2017), suggested that desirability is a predictor of entrepreneurial intent and should be included in the entrepreneurial career intentions model. They advance that students who view entrepreneurial careers as desirable are more likely to create their own business and become entrepreneurs. In addition, an individual’s perceived desirability for entrepreneurial education knowledge strengthens the association between internship programs, incubation programs, supportive environments and entrepreneurial self-employment careers (Mamun, Shamsudin, Nawi, Nasi & Zakaria, 2017; Yarima & Hashim, 2018; Zreen, Farrukh, Nazar & Khalid, 2019). Based on the above reviews, the study proposes the following hypotheses:

H5: Entrepreneurial education knowledge mediates the relationship between entrepreneurship internship programs, business incubation, supportive environments and entrepreneurial self-employment.

Theoretical Underpinning

Entrepreneurial self-employment as a career choice is perceived as a cognitive process which is determined by beliefs, attitudes and prior experiences (Moses, Olokundun, Akinbode, Agboola & Inelo, 2016; Marvel, Davis & Sproul, 2016; Solesvik, 2016). The theoretical base of this study is drawn from Human Capital Theory (HCT) and Social Cognitive Career Theory (SCCT). HCT advocates that human capital can be improved through proper and
quality education and training. Thus, human capital theorists advocate that a nation’s investment in human capital assets can be increased through education, training and development (Moses, Olokundun, Akinbode, Agboola & Inelo, 2016). Consequently, human capital development through education is a critical issue that drives economic growth (Fareed, Noor, Isa & Salleh, 2016) and justifiable development of nations (Neeliah & Seetanah, 2016). The desire to pursue entrepreneurship or self-employment as a career option is a function of incentives and motivation, which are both assimilated through participating in Entrepreneurial Education Knowledge, while previous entrepreneurial experience motivates individuals to consider self-employment as a career option (Marvel, Davis & Sproul, 2016). Thus, this justifies the use of SCCT in this study. SCCT is an extension of Bandura’s Social Cognitive Theory (Horvath, 2017), and has proven that the related concept of outcome expectations, the beliefs about the consequences of executing certain behaviours, together with self-employment beliefs, are the major determining factors for a particular behaviour or action (Liguori, Bendickson & McDowell, 2018). The theory advocates that entrepreneurial education knowledge mediates the relationship between internship programs, business incubation programs, environmental support, an individual’s self-employment learning experiences (acquired through education and training) and important outcomes, such as career decision and choice. Liguori et al. (2018), also empirically supported the SCCT-based meditational model by confirming that Entrepreneurial Education Knowledge mediates the link between exposure to entrepreneurial role models and individual’s entrepreneurial self-employment intentions. Therefore, this study is based on integration of both the HCT and SCCT as a consequence of the contact among relative factors, which would act according to how they affect a person’s perceptions.

Methodology

Research Sample and Data Collection Procedure

The population of this study consisted of students from business schools of three public HEIs in the northern region of Malaysia that offer entrepreneurship programs. A total of 664 questionnaires were distributed using the simple random sampling technique. Of these, 348 were returned, but only 332 were useable, representing a 50% response rate. The data collection process lasted for four months from October 2019 to January 2020. The profiles of the participants were as follows: more than half were female (76.2%), were in the age group of 18-29 years old (93.1%), and Malays (61.4%). The majority of them were pursuing degrees in business (46.1%) and were from state of Kedah (21.4%).
Measures

Entrepreneurial self-employment was operationalised using a scale adapted from Weber et al. (2009) and Chen et al. (1998). The scale is a nine-item self-reporting instrument. Entrepreneurial education knowledge was measured with the eight-item self-reporting scale developed and validated by Weber et al. (2009). The Entrepreneurship internship program was measured using a five-item scale from Keat et al. (2011). Measurement of the Business incubation program was based on the eight-item scale adapted from Sahban et al. (2014). Finally, the entrepreneurial supportive environment was operationalised with a ten-item self-reporting scale developed by Turker et al. (2009). All the measurements were based on a five-point Likert-type scale with rating options from 1=strongly disagree to 5=strongly agree.

Analysis and Discussions

This study used SPSS version 26 and PLS version 3.2.8 to analyse the data, as well as to test the various hypotheses for this study. In regard to PLS analysis, the first step is to evaluate the outer model or measurement model as it is usually called (Refer to Figure 1). Thus, the outer model involves identified individual item reliability, internal consistency reliability, content validity, convergent validity and discriminant validity (Hair et al., 2016).
Internal Consistency Reliability

Internal consistency reliability refers to the extent to which all indicators of a particular (sub) scale are evaluating the same concept (Hair et al. 2016). In line with that, the composite reliability score value must be at least 0.70 and AVE score value to more than 0.50 (Hair et al. 2016). As depicted in Table 1, all the variables included in this study have AVE and composite reliability more than the 182-threshold value of 0.50, which is a suggestion of measurement model reliability. In addition, this study also examined the Cronbach’s Alpha to observe internal consistency of the data. In this present study, values of Cronbach’s are in an acceptable range. Hence, as shown in Table 1, average variance extracted (AVE); Cronbach alpha and composite reliability values of all variables are in an acceptable range.
<table>
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Table 1 depicts that Cronbach’s alpha of all the variables are more than the threshold value of 0.70. Thus, it indicates that all variables of this present study have acceptable internal consistency. It shows that all the variables have high reliabilities and their AVE’s are more than the threshold values, which proved the reliability of the measurement model.

**Discriminant Validity**

In this study, discriminant validity is another criterion which assesses the degree to which a variable is truly not the same as other variables (Hair *et al.* 2016). Thus, it can also be seen as the extent to which a particular element differs from other constructs (Duarte & Raposo, 2010; Fareed, Noor, Isa, Shahzad & Laeeq, 2016). In line with this, a greater level of discriminant validity suggests that a variable is distinct and captures some phenomena that other variables do not (Fareed, Isa, Noor, 2016). In this study, discriminant validity was ascertained using the square root of AVE and it should be greater than the correlations among latent constructs (Aremu, Shahzad & Hassan, 2019). Therefore, to determine the discriminant validity, this research has considered the discriminant validity to confirm the external consistency of the model. Table 2 depicts the square root of AVE of the constructs: Business Incubation Program = 0.89; Entrepreneurial Education Knowledge = 0.83; Entrepreneurial Supportive Environment = 0.83; Entrepreneurial Self-Employment = 0.85 and Entrepreneurship Internship Program = 0.88. Table 2 shows that the square root of AVE is greater than the correlation between latent variables, indicating the acceptable discriminant validity (Fornell & Larcker, 1981).

**Table 2: Discriminant Validity Matrix**

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<td>0.630</td>
<td>0.834</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPSE</td>
<td>0.668</td>
<td>0.682</td>
<td>0.839</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESE</td>
<td>0.674</td>
<td>0.751</td>
<td>0.589</td>
<td>0.850</td>
<td></td>
</tr>
<tr>
<td>IP</td>
<td>0.573</td>
<td>0.694</td>
<td>0.649</td>
<td>0.628</td>
<td>0.881</td>
</tr>
</tbody>
</table>

**Note:** BIP- Business incubation program; ESE- Entrepreneurial self-employment; EEK- Entrepreneurial education knowledge; EPSE- Entrepreneurial supportive environment; IP- Internship program.
**Note:** The diagonal in bold shown in Table 2 represents the square route of average, whilst those of the diagonal represent latent variable correlations.

**Source:** Author’s Own Findings

**Structural Model**

Having established the measurement model, this section examines the structural model with the aim of establishing the relationship of the modelling as a total. However, in the light of the present development, the current study adopted a two-step process to evaluate and report the results of PLS. The present research assessed the structural model. Equally, this research also applied the bootstrapping method with 5000 bootstrap samples to assess the significance of the path coefficients (Hair et al., 2014; Hair et al., 2016). Basically, the main objective of this study is to focus on model assessment with identify of direct-relationships and to examine the hypothesised relationships between the variables via inner model. Hence, five (5) hypotheses proposing the direct and indirect relationships have been tested. All five (5) hypotheses were proven to be supported based on the recommended t-value. Figure 2 reveals the direct and mediation influence of every latent construct on entrepreneurial self-employment (dependent variable). Additionally, Figure 2 depicts the output results generated with the help of SmartPLS 3.2.8 (Hair et al., 2016) and clearly illustrates the path p-value, t-value, coefficient value and also the standard errors. Based on these standard values the hypothesis decision has been made in line with each hypothesis significance level.
Evidently, Table 3 proved that the hypotheses which were supported in this present study have a p-value of less than 0.05. Thus, all the hypotheses were supported in this current study. The result demonstrates the entrepreneurial education knowledge has positive direct impact to entrepreneurial self-employment ($\beta= 0.751; T=25.346; p < 0.000$), hence providing support for H1. Secondly, the entrepreneurship internship program has a direct significant impact on entrepreneurial self-employment ($\beta= 0.382; T= 5.581; p< 0.00$) or H2 is supported. The business incubation program has a positive and direct impact on entrepreneurial self-employment ($\beta= 0.219; T=3.411; p < 0.000$) or H3 is supported. Equally, H4 is supported with the evidence of positive direct impact of the entrepreneurial supportive environment on entrepreneurial self-employment ($\beta= 0.287; T=3.825; p< 0.000$). Therefore, all the hypotheses (H1, H2, H3 and H4) are supported.
Table 3: Result of hypothesis testing (Direct effects)

<table>
<thead>
<tr>
<th></th>
<th>Beta</th>
<th>STD.</th>
<th>T-value</th>
<th>P-Values 5.0%</th>
<th>P-Values 95.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIP</td>
<td>0.219</td>
<td>0.064</td>
<td>3.411</td>
<td>0.000</td>
<td>0.116</td>
</tr>
<tr>
<td>ESE</td>
<td>0.751</td>
<td>0.030</td>
<td>25.346</td>
<td>0.000</td>
<td>0.704</td>
</tr>
<tr>
<td>EEK</td>
<td>0.751</td>
<td>0.030</td>
<td>25.346</td>
<td>0.000</td>
<td>0.704</td>
</tr>
<tr>
<td>EPSE</td>
<td>0.287</td>
<td>0.075</td>
<td>3.825</td>
<td>0.000</td>
<td>0.162</td>
</tr>
<tr>
<td>IP</td>
<td>0.382</td>
<td>0.068</td>
<td>5.581</td>
<td>0.000</td>
<td>0.263</td>
</tr>
</tbody>
</table>

Note: BIP- Business incubation program; ESE- Entrepreneurial self-employment; EEK- Entrepreneurial education knowledge; EPSE- Entrepreneurial supportive environment; IP- Internship program

Consequently, Table 4 presents the results of mediation of entrepreneurial education knowledge on the relationship between independent and dependent variables. The result shows H5 was supported, implying evidence for mediation. The results of mediation of entrepreneurial education knowledge on the relationship between independent and dependent variables are as follows: internship program with t-value of 5.406; business incubation program with the t-value of 3.301 and entrepreneurial supportive environment with t-value of 3.777.

Table 4: Test of Mediation of Entrepreneurial Education Knowledge

<table>
<thead>
<tr>
<th></th>
<th>Beta</th>
<th>Sample (M)</th>
<th>STD.</th>
<th>T-value</th>
<th>P-Values</th>
<th>5.0%</th>
<th>95.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIP</td>
<td>0.164</td>
<td>0.169</td>
<td>0.050</td>
<td>3.301</td>
<td>0.001</td>
<td>0.078</td>
<td>0.240</td>
</tr>
<tr>
<td>ESE</td>
<td>0.216</td>
<td>0.222</td>
<td>0.057</td>
<td>3.777</td>
<td>0.000</td>
<td>0.105</td>
<td>0.302</td>
</tr>
<tr>
<td>IP</td>
<td>0.287</td>
<td>0.280</td>
<td>0.053</td>
<td>5.406</td>
<td>0.000</td>
<td>0.203</td>
<td>0.378</td>
</tr>
</tbody>
</table>

Note: BIP- Business incubation program; ESE- Entrepreneurial self-employment; EEK- Entrepreneurial education knowledge; EPSE- Entrepreneurial supportive environment; IP- Internship program

Discussion and Conclusion

In the conclusion, it is confirmed that this study has contributed empirically to support the proposed relationships between the variables, which have been tested both directly and indirectly in order to answer the research questions and to achieve the related research objectives discussed in the introduction section. In other words, the study has established the framework for high impact entrepreneurship education practices (HIEEP), which is critical to achieve the aim to produce more job creators instead of job seekers. It is evident from this study that entrepreneurship internship programs, business incubation programs, the entrepreneurial supportive environment and resulting entrepreneurial education knowledge formed the HIEEPs. The data were collected from students attending the business schools of
three public HEIs in the northern region of Malaysia that offer entrepreneurship programs. The necessary analysis procedures have been taken to analyse the data by using Smart PLS version 3.2.8. The findings of this study were also compared with the findings of other studies to justify the results of the present study. The positive relationship found between entrepreneurial internship programs and entrepreneurial self-employment among university students indicates that the availability of entrepreneurial internship programs will lead to entrepreneurial self-employment among the students. The findings are in line with previous studies that found similar results (Botha & Bignotti, 2016; Chou, Shen, Hsiao & Chen, 2017; Nurhuda & Soenarto, 2018; Zreen, Farrukh, Nazar & Khalid, 2019). Therefore, universities aimed at entrepreneurial development programs should emphasise the entrepreneurial internship program as an intervention to produce entrepreneurs among the graduates. The findings of this study have also proved that participation in business incubation programs positively impacts entrepreneurial self-employment among university students. The findings concur with past studies (Allahar & Brathwaite, 2016; Ayatse, Kwahar & Iyortsuun, 2017; Zreen, Farrukh, Nazar & Khalid, 2019). Normally, incubator staff need to be well prepared and ready to train students to become real entrepreneurs once they graduate from the universities by organising constant workshops, seminars and training in entrepreneurship.

The positive relationship between entrepreneurial supportive environments and entrepreneurial self-employment among university students in Malaysia implies that the higher the supportive environment, the higher the intention displayed towards entrepreneurial self-employment among university students. The findings are in line with previous studies (Yarima & Bello, 2017; Yarima & Hashim, 2018; Suhaimi, Al Mamun, Zainol & Nawi, 2018). It was also found that entrepreneurial education knowledge positively impacts entrepreneurial self-employment among university students after their graduation. The finding of this present study is in line with past studies (Yarima & Hashim, 2016; Oguntimehin, 2018; Otache, 2019; Odewale, Hani, Migiro & Adeyeye, 2019; Nowiński, Haddoud, Lančarić, Egerová & Czeglédi, 2019).

To sum up, the higher the exposure the students get from academics, industry exposure and incubation programs, as well as internship programs, together with conducive entrepreneurship supportive environments, the higher will be their intention to become self-employed entrepreneurs. Lastly, the findings of this research proved that entrepreneurial education knowledge mediates the relationship between entrepreneurship internship programs, business incubation programs, entrepreneurial supportive environments and entrepreneurial self-employment among university students. Drawing from the mediation finding, it suggests that improvement in entrepreneurial education knowledge is likely to have success in motivating university students to be self-entrepreneurs in the future, basically to prepare them as future job creators. Thus, the result of this study also concurs with previous studies (Yarima & Bello, 2017; Yarima & Hashim, 2018; Zreen, Farrukh, Nazar & Khalid, 2019; Otache, 2019; Odewale, Hani, Migiro & Adeyeye, 2019).
Implication of Study

Evidently, the HIEEP predictor model can enrich the conceptualisation of entrepreneurial self-employment in the context of Malaysian universities. This finding contributes to the human capital and social cognitive theories, in which entrepreneurship internship programs, business incubation programs; entrepreneurial supportive environments and entrepreneurial education knowledge factors could explain the dimensions of attitude towards behaviour, subjective norms and perceived behavioural control in becoming entrepreneurs in future. Consequently, this study may provide better insight to the government to change the mindset of people from being a job seeker to a job creator. Equally, the universities may also do their part in promoting entrepreneurial self-employment by providing necessary support systems such as internship programs, business incubation programs and entrepreneurial supportive environments.

Limitations and Recommendations for Future Research

Most respondents of this study were undergraduate students and slightly more than 50 percent of the respondents were in their second and thirdsemesters. Also, this study was limited to business schools in HEIs alone. From another methodological perspective, this research was limited to a small population. Basically, this research provides a few recommendations for future study as stated below: first, more studies should be conducted to cover a larger population or the country as a whole so that the results can be generalised to the entire population. Second, future study should be generalised among entire student populations in order to see their level of inclination towards becoming self-employed entrepreneurs. Third, universities need to create incubator centres and offer internship programs on entrepreneurship, as this has the potential to strongly affect students’ entrepreneurial perceptions towards becoming entrepreneurs. Lastly, faculty members, specifically academic staff, need to play an active role in shaping the entrepreneurial culture among students.

Conclusion

The present study has achieved its research objectives in identifying entrepreneurial self-employment among university students in Malaysia. The findings of the study depict that entrepreneurial education knowledge has an influence on entrepreneurial inclinations among students to become entrepreneurs. Both undergraduate and postgraduate students’ entrepreneurial perception is equally influenced by the factors studied in this research.
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