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#### Abstract

The purpose of this study was to identify the impact of lifelong learning on entrepreneurial motivation among learners in public higher education institutions in terms of identifying the influence of lifelong learning on entrepreneurial motivation. A quantitative approach was used for this study utilizing a survey method that involved 393 respondents with Bachelor Degrees from a public university in Malaysia. The analysis consisted of a descriptive analysis for frequency and mean, as well as an inferential analysis using an ANOVA analysis to determine how the dependent variable was predicted. Results indicate that lifelong learning tendencies significantly predict entrepreneurial motivation ( $\beta = .360$ , p = < .000). However, lifelong learning characteristics did not significantly predict entrepreneurial motivation ( $\beta = .037$ , p = .491). This study concludes that an influence existed between entrepreneurial motivation and lifelong learning tendencies indicating that entrepreneurial motivation can be enhanced by knowing students' lifelong learning tendencies. The output of this study will serve as a guide to improving entrepreneurial motivation by presenting a new perspective on the factors that can influence entrepreneurship motivation. In light of this study is relationship to lifelong learning variables, business and management can also improve their lifelong learning. The originality of this study lies in its investigated variable due to the scarcity of studies that connect lifelong learning tendencies on entrepreneurial motivation among students at a Malaysian public university. Additionally, this study explained how such an influence emay affect entrepreneurial motivation among students at a Malaysian public university.

Keywords: Entrepreneurial Motivation, Demographic, Lifelong Learning Tendency, Lifelong Learning Characteristic, University.

## **INTRODUCTION**

Entrepreneurship experts have acknowledged the important role that entrepreneurship plays in fostering economic growth (Mahmood & Hanafi, 2013). It is no secret that entrepreneurship has grown in importance in the modern world to the extent that emerging nations such as Malaysia have given it a high priority. It is justified that a great deal of effort has been expended by the Malaysian government to create the necessary conditions that will promote entrepreneurship. Government officials remain committed to promoting economic growth in the country despite economic uncertainties and challenges on a global scale (Gbenga & Abiddin 2013a; 2013b). As per the World Bank's annual rankings, Malaysia ranks 12th out of 190 countries in terms of ease of doing business, an improvement from number 15 in 2018 (Song et al., 2021). This ranking indicates the Malaysia has done tremendous effort in improving its business facilities and ecosystem (Abiddin & Ismail, 2014). All sectors are working together to improve the economic sectors of Malaysia holistically (Gbenga & Abiddin 2015). In light of this, education sectors have been strengthening entrepreneurship education in the beginning of the 1980s. Since then, Malaysian entrepreneurship education has progressed rapidly in the right direction (Rahim et al., 2015). However, a study by Yusoff et al. (2015) had reported challenges and issues on entrepreneurial education in Malaysia which had included quality of students that are lacking with soft skills related to communication skills, leadership skills, knowledge of marketing strategies, general business knowledge, and abilities in networking (Hassan et al., 2016). All these skills are crucial for an entrepreneur especially in this digital era whereby digital skills have been included as one of the key skills for entrepreneur (Jardim & Albright, 2021). Thus, the government had put a lot of efforts to develop entrepreneurship among learners, including by selecting entrepreneurial as one of the Key Focus Areas in the Malaysian Education Blueprint 2015-2025 for Higher Education (Ministry of Education Malaysia, 2015). Nowadays, the implementation of entrepreneurship education at higher education institutions incorporates current technologies and pedagogical techniques and had statistically proven effective in enhancing student

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entrepreneurial skills (Din et al., 2020; Gbenga & Abiddin, 2013a).

While this is true, it is important for graduates to have a high level of motivation in order to enhance their potential to excel in their education (Abiddin & Ismail, 2014; Abiddin & West, 2007, Abiddin, 2007) and to enroll in the entrepreneurship field. The idea of entrepreneurial motivation has been described as a function of many factors, including the entrepreneur's characteristics, the environment at home, the entrepreneur's personal goals, the concept behind the company and its surroundings, and both extrinsic and intrinsic factors (Naffziger et al., 1994). This is the reason why entrepreneurs throughout the world continue to put forth their best effort as well as their greatest determination to achieve their goals, so they can remain motivated and motivated during their business operations. Having said that, for a student to be a successful entrepreneur, they ought to be motivated to learn and progress. It is therefore crucial that they continually acquire new skills as well as acquire new knowledge in order to achieve this goal. As well as that, an entrepreneur also needs to learn and relearn multiple skills in order to compete with others with their various skill sets. It is for this reason that lifelong learning is one of the most important skills for an entrepreneur to possess. An ever-increasing body of literatures had shown that lifelong learning skills have become increasingly significant throughout the years. For instance, the Government of Malaysia had developed a blueprint on Lifelong Learning, which is the Blueprint on Enculturation of Lifelong Learning for Malaysia: 2020, which provided all strategies for enculturation in Malaysia which at the same time had referred to other relevant documents including National Higher Education Plan, 10th Malaysia Plan 2011-2015 and Government Plan for Inclusive Development: Eleventh Malaysia Plan 2016-2020 (Ministry of Higher Education Malaysia, 2011). The blueprint has become the main document for implementing lifelong learning in Malaysia, especially in the academic sector. It is also worth noting that lifelong learning is not merely a concept that has been developed; it has been discussed as one of the priority agendas that can make a significant impact on the country's quality of life. To date, under the Ministry of Higher Education alone, there are 105 academic institutions including a community college which offer the lifelong learning program. Moreover, lifelong learning has been identified in the 12th National Plan as one of the strategies it has been put forward in order to increase the quality of education in the country (Government of Malaysia, 2021).

Although there have been studies looking for entrepreneurial motivation factors, the impact of lifelong learning per se on entrepreneurial motivation has yet to be widely explored, despite there have been studies looking for entrepreneurial motivation factors. It can be justified on the basis of the fact that a number of related articles have already been published in the journal on this field. Having said that, scholars and experts believe that lifelong learning is one of the most important traits of a successful entrepreneur, as this trait contributes to the desire and drive to learn new things, and allows them to constantly explore and learn new things. Moreover, the research by Samad et al. (2019) clearly shows that the level of entrepreneurship readiness for lifelong learning students, in terms of motivation for entrepreneurship, is particularly high when compared to other student groups. It would be useful if this interesting finding could be replicated to generate a deeper understanding of how lifelong learning affects entrepreneurial motivation and how to utilize it. Therefore, the purpose of this study was to identify the impact of lifelong learning on entrepreneurial motivation among learners in public higher education institutions in terms of identifying the influence of lifelong learning on entrepreneurial motivation. Hence, lifelong learning has been set as an independent variable along with a focus on two areas, one of which is characteristic and the other is tendency. Towards achieving this objective, two research questions (RQ) were involved, each of which was accompanied by a pair of hypotheses. A regression coefficient of 0.05 is considered significant, indicating that the null hypothesis is rejected. The research questions and hypothesis were as follow:

Does lifelong learning characteristics predict entrepreneurial motivation among students?

Ho: Lifelong learning characteristics does not predict entrepreneurial motivation among students

Ha: Lifelong learning characteristics does predict entrepreneurial motivation among students

Does lifelong learning tendencies predict entrepreneurial motivation among students?

Ho: Lifelong learning tendencies does not predict entrepreneurial motivation among students

Ha: Lifelong learning tendencies does predict entrepreneurial motivation among students

## LITERATURE REVIEW

## **Entrepreneurial Motivation**

Historically, wealth-seeking has been perceived to be the most important factor to motivate entrepreneurs to startup businesses. With the study of entrepreneurial motivation becoming increasingly deep as the years go by, more academics have identified additional components that are needed to understand how these various factors contribute to the complexity of entrepreneurial motivation. A study conducted by Su et al., (2020) analysed data from six social media accounts belonging to entrepreneurs in order to analyse the link between the inspiration for entrepreneurship and positive feelings related to entrepreneurship. The study showed how entrepreneurs' entrepreneurial drive and process may be strongly affected by their positive emotions, thus influencing their entrepreneurial drive and process. Furthermore, in their study of the entrepreneurial motivation of entrepreneurs in Central and Eastern Europe, Bartha et al. (2019) have concluded that social purpose aspects are the primary factors that are responsible for entrepreneurial motivation among entrepreneurs. Moreover, as Rajabi et al., (2018) pointed out in their study, there is a positive correlation between entrepreneurial drive and business growth. It is argued that it may have a significant impact on the growth of businesses (Hemmert et al., 2019). According to Shi & Wang, (2021) the main motivation for entrepreneurs to start a business is the desire to acquire wealth. However, the pursuit of wealth is not the only factor that drives entrepreneurial activity and the majority of entrepreneurial motivations are based on a variety of factors. In the course of time and economy, the differences between the types of entrepreneurs have gradually grown, and people's reasons for starting up have become more and more diverse over the years.

## Lifelong Learning Characteristic

Various scholars from around the world have published a long list of lifelong learning characteristics based on their research outcomes. Nevertheless, to follow the existing characteristics as guidance in exploring this matter is justified. Kirby et al. (2010) had proposed one of the established lifelong learning characteristics among students. The characteristics include (1) goal-setting; (2) application of knowledge and skills; (3) self-direction and self-evaluation; (4) information location; and (5) learning strategy adaptation. Then, the American Association of Colleges of Nursing's report on lifelong learning in nursing and medicine is consistent, in part, with the abilities of the lifelong learner described in research by Davis et al., (2014). It identified critical competencies such as accumulating knowledge about evidence-based healthcare through practice-based learning, self-reflection, and literature search and retrieval strategies. The most typical answers focused on maintaining an active mind, curiosity, seeking out new information, and partaking in both academic and practical tasks. Moreover, the ability to apply new knowledge was regarded as being equally important to learning new information. Knowing and learning are dynamic processes that enable the learner to see things from different angles. Additionally, it was believed that lifelong learning contributed to advancement in both the personal and professional spheres.

## Lifelong Learning Tendency

As far as a tendency is concerned, it can be said to be referred to as the propensity to think or act in a particular manner. A lifelong learning tendency can be classified as follows: (i) motivation, (ii) persistence, (iii) absence of organizational learning, and (iv) absence of curiosity according to Coşkuna & Demirel (2010). It is important to note that every class has its own criteria pertaining to it. The motivation dimension contains a wide range of items, including things such as learning new skills and abilities across a variety of industries in order to enhance one's personal development as well as learning information for one's own personal development. Persistence on the other hand is a characteristic that encompasses traits such as a person who is more eager to learn than their peers, who invests more time in studying and researching, who generates opportunities for learning even if it is challenging, and who tries to study to the best of their ability (Ayçiçek & Karafil, 2021). An individual that is persistent with their learning process is said to have a lifelong learning inclination (Pintrich & Schunk, 2002). The absence of an organizing learning dimension also includes placing little emphasis on learning new information and skills so as to ensure their personal growth and development. The absence of an organizing new information and skills so as to ensure their personal growth and development.

learning dimension also means they are not able to use sources of information relevant to their profession (such as books and the internet, except in mandatory situations) as sources of information (Ayçiçek & Karafil, 2021).

As is interesting to note, most previous studies that examined learning tendencies used the Lifelong Learning Tendency Scale as an instrument to measure them. This scale was developed by Coşkuna & Demirel, (2010) with four dimensions as mentioned above. This study examines the relationship between lifelong learning tendencies and a range of variables, including the learners' thinking skills, teachers' competencies, gender (Öz, 2022), and the current Covid-19 situation, which affects the world's population, including learning behaviour (Aras-Tosun & Küçük-Biçer, 2021). In all of these studies, Cronbach's alpha coefficients were high, which indicates that the scales chosen to be used in the studies had a high level of reliability. In addition to this, prior research confirmed that lifelong learning tendencies are related to a positive effect involving aspects of information technology literacy (ÜNVEREN BİLGİÇ et al., 2021). The results of previous studies have also shown a positive relationship between demographic variables and lifelong learning tendencies (Aras-Tosun & Küçük-Biçer, 2021; Şentürk & Duran, 2020; Yildiz Durak et al., 2020).

## METHODOLOGY

## **Population and Sampling**

This study is focused on students who are enrolled in Bachelor degrees at a public university in Malaysia for the 2021/2022 session with total population of 3060 students. As according to Krejcie & Morgan (1970), the required sample for the study with that amount of population was 341 students. A purposively random sampling technique was used to select all of the participants for the study

## **Research Instrument**

This study involved the adaptation of three different sets of questionnaires, which were used as part of our research instrument. Due to the fact that these instruments are widely used, adaptation was used in this study as it does not require extensive pilot studies and evaluations, which is important, considering that these instruments have been widely used Daunert & Seel (2020). There was still a need to conduct a pilot study to discover whether or not the instrument was reliable and valid for this particular study. Upon analysis, the instrument had the score of Cronbach's alpha for the 0.82, which indicates an excellent value and can be used for real study George & Mallery (2003). The research instrument was divided into four sections, including Demography, Entrepreneurial Motivation Scale (Vijaya & Tj, 1998), Lifelong Learning Questionnaire (Kirby et al., 2010) and Lifelong Learning Tendency Scale (Coşkuna & Demirel, 2010). Overall, there are 71 items ready to be used in the instrument.

## **Data Collection**

Data collection was done via survey whereby the link for the Google Form was distributed to the Bachelor's Degree students from year 1 to the final year at a public university in Malaysia and the total data obtained was 393 respondents with a 79% rate of return. The high rate of return in the data collection was due to the fact that researcher team had approached the respondents during their lecture, with permission from the lecturer. A QR Code that link to the online questionnaire were projector at the front lecture hall for the respondents to scan and answer the online form. Researcher then check the data on answered form with the attendance list. By doing so, researcher can ensure all respondents completed the survey on time and increase the response rate. Nevertheless, respondents are not required to answer the questionnaire as participation are voluntarily. The use of online survey (Google Form) had assisted researcher by saving time to manually key in the data for analysis. This allows researchers to analyse the data instantly and also reduce the risk of error during data key in process. It also reduces the cost in data collection.

## **Data Analysis**

There are two types of statistical analysis used for this study: descriptive analysis and inferential analysis. The descriptive analysis was used to produce result on frequency and percentage for the demographic data. Meanwhile, the inferential analysis was used to determine the predictor by using ANOVA analysis. This analysis

method was used as it allows prediction of dependent variable based on the independent variables (Kerr et al., 2002).

## RESULTS

Based on Table 1, majority of respondents in this study consisted of male students (64.6%) compared to female students (35.4%).

Gender	Frequency	Percentage
Male	254	64.6
Female	139	35.4
Total	393	100

#### Table 1 Gender of respondents

Based on Table 2, the results show that first-year students recorded the highest number (42.7%) followed by students from the second year (40.5%), then third-year students with a percentage value (12.7%) and student's final year with a value (4.1%). Nevertheless, only Bachelor Degree students were involved in this study.

Year Of Study	Frequency	Percentage
First Year	168	42.7
Second Year	159	40.5
Third Year	50	12.7
Fourth Year	16	4.1
Total	393	100

## Table 2 Year of study

ANOVA was used to test if the characteristic and tendencies of lifelong learning significantly predicted entrepreneurial motivation among respondents. Table 3 shows the output from ANOVA which test whether the overall regression model is a good fit for the data (Kerr et al., 2002). There is statistical significance in predicting the dependent variable based on the independent variables F(2, 390) = 32.88, p = <.000). as shown in the table 3.

#### Table 3 ANOVA

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	18.109	2	9.055	32.877	.000b
	Residual	107.407	390	.275		
	Total	125.516	392			
a. Depende	ent Variable: Ent_Mot					
b. Predictor	rs: (Constant), lifelong le	arning_Te, lifelong learnin	g_Ch			

On the other hand, the analysis indicate that lifelong learning tendencies significantly predict entrepreneurial motivation ( $\beta = .360$ , p = < .000). Thus, the Ho for RQ (ii) is rejected. However, it was found that lifelong learning characteristics did not significantly predict entrepreneurial motivation ( $\beta = .037$ , p = .491), thus the Ho for RQ (i) is accepted. The variable of lifelong learning characteristics was not included in the model for being statistically non-significant. Table 5 shows the analysis output based on a significant level.

Table 5 Analysis output	based on a significant level
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Independent Variable (IV)	Dependent Variable (dv)	Unstandardized coefficients Beta (β)	Standardized coefficients Beta (β)	Sig.
Constant		2.056		
Lifelong learning Characteristics	Entrepreneurial Motivation	.069	.037	0.491
Lifelong learning Tendencies		.580	.360	0.000

#### DISCUSSION

The importance of lifelong learning for an entrepreneur is undeniable as it provides them with skills and knowledge required for their entrepreneurship endeavors and having a lifelong learning mindset has been proven to enhance both objective and subjective career success (Drewery et al., 2020). This study's analysis has demonstrated the existence of influence between the dependent variable and independent variables. It can be concluded that the tendencies of lifelong learning have a positive impact on the entrepreneurial motivation of the students as far as their entrepreneurial motivation is concerned. To put it another way, those who enjoy learning new things in their life, will also have an increased likelihood of becoming entrepreneurs in the future. This is interesting as entrepreneurship itself is among the key competences of lifelong learning (European Commission, 2014). Lifelong learning, which represents long-term motivation and understanding, cannot be isolated from people's motivational dynamics, as according to Pires (2009). Having to learn new things constantly and upgrading oneself with skills such as marketing, innovation, as well as technical skills is one of the most important steps toward becoming a good entrepreneur. It is therefore understandable that those who have equipped themselves with continuous learning will also become a successful entrepreneur. The urge to learn new things and develop new talents falls under the motivational factor (Abiddin & Ismail, 2014). This motivation dimension includes things like gathering all sorts of information for one's development and gaining new knowledge and abilities in various industries (Avcicek & Karafil, 2021).

In addition to lifelong learning tendencies, there are a number of other variables that have been reported to positively influence entrepreneurial motivation, as well as entrepreneurial intentions (Rahmi et al., 2022), selfconfidence and parental support (Annisa et al., 2021). It has also been shown that teacher professionalism is linked to students' entrepreneurial motivation and spirit (Nasiri & Moradisafar, 2018). Other than that, research by Mulyapradana & Anjarini (2020) as well came out with an interesting finding. The research concluded that both entrepreneurial motivation and family support could influence students' entrepreneurial decision-making. Meanwhile, Munawar & Suryana (2020) reported that self-efficacy and knowledge of entrepreneurship influence the entrepreneurial intentions of the students meaning the higher these two variables, the higher the entrepreneurial intention of the students. When it comes to knowledge, Sudarmaji (2021) studied this variable and found that intelligence has a positive relationship to entrepreneurial intentions. His analysis shows that as the student's Adversity Intelligence increases, so does entrepreneurial intention. It is also reported that entrepreneurial education impacts students' subjective norms (Minh Hue et al., 2022). This vast amount of research with intriguing conclusions opens up many new areas for further research from many different angles as a result of the findings. These variables that have been statistically demonstrated to increase entrepreneurial motivation, including lifelong learning tendencies, should be considered in the entrepreneurship lesson model. This is at all education levels. In order to be sustainable, the competence model needs to be continually developed according to the latest research and taking into account the future challenges (Venesaar et al., 2022). Therefore, it is evident that the aforementioned variables can be referenced by the stakeholder in order to ensure the sustainability of the entrepreneurship model at any institution.

On the other hand, another independent variable in this study does not indicate a significant relationship with entrepreneurial motivation, which is the lifelong learning characteristic. It can be concluded that lifelong learning characteristics do not influence the student's entrepreneurial motivation. In light of the findings, one can conclude that no matter what type of lifelong learners one might come across, the motivation for entrepreneurship is not affected by their it. This may be because characteristics are more influenced by the organizational culture itself (Doherty & Stephens, 2019) making it more susceptible to affect motivation. Nevertheless, previous research has shown that characteristics of entrepreneurs can be positively correlated with entrepreneurship success. One study found that three institutional characteristics have a substantial influence on the value of ventures' entrepreneurial initiatives, as reported by Seo (2020). As well as this, the study also reported that a lack of relevant data prevented the study from considering how ventures' business characteristics were affected the causal relationship between the two factors. The results of Rahmi et al. (2022) research demonstrate that not only do lifelong learning characteristics have no association with entrepreneurship motivation, but also that there is no correlation between entrepreneurial motivation and entrepreneurial intention among women entrepreneurs who are in training. The results of this study are likely

not to have any significant impact on stakeholders, given that it provides them with variables which cannot be considered if the intention is to motivate students to become entrepreneurs.

In addition, Mulyapradana and Anjarini (2020) have found no evidence that entrepreneurship subjects have any significant impact on entrepreneurial decision-making. It is clear from this data that entrepreneurship attributes do not lie exclusively in the students of the entrepreneurship-related programs, thus making it necessary for entrepreneurship programs to be woven into all programs in order to enhance the entrepreneurial attributes of students. This result has been replicated by Purwana et al. (2018) whereby they reported that locus of control and entrepreneurship education did not affect the entrepreneurial motivation of students. However, these findings cannot justify the importance of entrepreneurship knowledge among students despite the fact that they have produced such results. This is supported by the finding from Kanama (2021) as he stated that Japanese students believe that their lack of business knowledge and competence creates significant risks and barriers for them to launch start-up businesses while entrepreneurial skills itself have been reported to have positive effects on entrepreneurial intention (Minh Hue et al., 2022). Therefore, entrepreneurial knowledge is important for students to initiate their entrepreneurial journey. For this, Lu et al. (2021) suggested a curriculum with several entrepreneurship courses since students may have different entrepreneurial profiles. The different courses would be pivotal in generating student interest in pursuing entrepreneurship.

As mentioned earlier, entrepreneurship plays an essential role in a developing country like Malaysia due to the fact that it is a way of generating income. It is essential that this skill is nurtured as early as possible among the students through the business and management education programs that are being offered. In this regard, the output of this study will serve as a guide to improving entrepreneurial motivation by presenting a new perspective on the factors that can influence entrepreneurship motivation. In order for the business and management fields to be able to enhance the level of entrepreneurial motivation among themselves, this knowledge can be utilized by the business and management field. In light of this study's relationship to lifelong learning variables, business and management can also improve their lifelong learning. The research instrument used in this study allows us to take both lifelong learning and entrepreneurial motivation into account, and it has been verified for appropriate local perspectives making it ready for replication at local level.

## CONCLUSION

As this research mainly focus on two independent variables, namely the lifelong learning characteristics and lifelong learning tendencies, the result had provided new input on the new predictors in both lifelong learning and entrepreneurial motivation. This broadens the range of variables that can be used to improve the entrepreneurship of graduates, both theoretically and practically. As an example, lifelong learning tendencies can be added as one of the elements in Maslow's Theory of Needs, the Self-Fulfillment Needs, as one of the components of this theory as having a plausible basis as one of the levels in that theory. It is also important to note that the research's finding provides information on the predictors of entrepreneurship motivation, which shows that only lifelong learning tendencies have the ability to influence entrepreneurship motivation in a positive way. In addition, this may provide new knowledge that can be used to enhance graduates' motivation to become entrepreneurs in the future.

Nevertheless, the scope of this study is limited to the effect of entrepreneurial motivation on characteristics and tendencies of lifelong learning. Therefore, future research should be conducted on entrepreneurial motivation and other variables in order to gain a deeper understanding of how to increase entrepreneurial motivation among students. In conclusion, this study managed to fulfil its aim, which is to investigate the influence of lifelong learning characteristics and lifelong learning tendencies on entrepreneurial motivation. An influence existed between entrepreneurial motivation and lifelong learning tendencies indicating that entrepreneurial motivation can be enhanced by knowing students' lifelong learning tendencies. This is a very interesting finding since both entrepreneurship and lifelong learning are two dimensions that have become major agendas in the national education development plan. Therefore, stakeholders in particular the faculty and the university itself need to cherish the study result since it can provide information on important educational agendas that may contribute to the improvement of the graduates as a whole.

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### **Author Contributions**

Conceptualization, NZA and RO; methodology, RO; software, RO; validation, NZA, RO; formal analysis, NZA; investigation, NZA; resources, NZA; data curation, NZA; writing—original draft preparation, NZA and RO; writing—review and editing, NZA and RO; visualization, NZA; supervision, NZA; project administration, NZA and RO; funding acquisition, NZA and RO. All authors have read and agreed to the published version of the manuscript.

## **Conflict of Interest**

The authors declare that there is no conflict of interest.

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