ENTREPRENEURIAL INTENTION FROM THE BEHAVIOUR, SKILLS, AND RISK-TAKING PERSPECTIVES OF GRADUATES IN KLANG VALLEY

NOOR MALINDA MOHAMED MOHAN^{1*}, FAZILAH TAMSIR², NOOR AYUERNIE IBRAHIM³, HALIMI PONIRAN⁴, NORJIAH MUSLIM⁵

^{1,2,3,4,5}Faculty of Business and Accountancy, University of Selangor, Malaysia

*Corresponding Author: malinda@unisel.edu.my

Abstract: Entrepreneurship has been viewed as a critical contributor and an economic engine in a country for creating new jobs and graduates must alter their mind-set to become selfemployed. Thus, it is necessary to synthesise the factors that impact the entrepreneurial intentions of fresh graduates. The aim of this research is twofold; first to identify the extent of entrepreneurial intention and second, to investigate the factors influencing entrepreneurial intention among fresh graduates in Klang Valley, Malaysia. This study utilised an online survey research design with further categorisation and analysis of fresh graduates' perceptions of their entrepreneurial intention that was gathered via a questionnaire comprising 20 questions based on five assessment criteria. The respondents consisted of 379 fresh graduates from public and private universities. Remarkably, most fresh graduates have a high level of entrepreneurial intention to start up their business after completing their studies. Further, entrepreneurial behaviour, motivation, and risk-taking tendency were proven to have an influence on the intention to entrepreneurship among fresh graduates. Contrary, fresh graduates' entrepreneurial skills do not influence significantly their entrepreneurial intention. Thus, based on these results, several considerations about the most effective role of education in promoting and developing entrepreneurial skills towards entrepreneurship are considered.

Keywords: Entrepreneurial behaviour, Motivation, Entrepreneurial skills, Risk-Taking propensity, Entrepreneurial intention

1. Introduction

Entrepreneurship has been viewed as a critical contributor and an economic engine of every country as it helps in creating new jobs, and increases innovation as well as competitiveness in the labour market (Barba-Sánchez et al. 2022). Entrepreneurship has gained momentum since the job competition environment as of now has commenced self-employment opportunities for youth to survive. Having a degree does not guarantee employment nowadays. Even with degrees from reputable universities, some fresh graduates still struggle to get a job. For developing countries like Malaysia is not relevant any longer for the youth to depend on the job opportunities advertised by the current companies. With most of the jobs having been replaced by artificial intelligence (AI), robotics, and autonomous, then it is crucial for the fresh graduates to eventually alter their mind-set from searching for a job to creating jobs as a country's government will not be able to ensure sufficient job provision for all tertiary-level graduates in the future (Reuel Johnmark et al., 2016). University students

should shift their focus towards the entrepreneurial revolution (XiaoweiJiang & YonghongSun, 2015).

In Malaysia, the age run of youth is between 15 to 40 years old. However, the governmental development program in this country underlined the youth entrepreneurs age are between 18 and 25 years old. According to The Star dated 7th May 2017, the Ministry of Higher Education (MoHE) targets that by 2020, 15 percent of understudies will wander into entrepreneurship while they are still pursuing studies at higher education institutions (HEIs), with five percent of them having the essential objective of becoming entrepreneurs upon graduating (The Star, 2017). The Deputy Higher Education Serve Datuk Dr. Mary Yap Kain Ching said over 60 percent of understudies in HEIs were effectively included in the entrepreneurship training programs and 3 percent had ended up with business after their tertiary education (The Star, 2017). A Standard Chartered survey conducted in 2020 found that 79% of 25- to 34-year-olds were interested in starting a new business or setting up a second income stream in the wake of the pandemic (Menon, 2020).

All university students in Malaysia must undergo a compulsory entrepreneurship course. This is in line with the Malaysia Education Blueprint 2015-2025, which aims to cultivate an entrepreneurial mindset and a drive to create, rather than merely seek jobs, among graduates. These fresh graduates possess the knowledge and skills that are relevant in starting up their own business, yet there is only a small percentage of students who choose to be self-employed. In the employment sector (among the employed graduates), the involvement of graduates in entrepreneurship is still low; it is only 5.5 percent of graduates running their businesses (Noorkartina Mohamad et al., 2014). Most graduates like hunting jobs rather than doing entrepreneurial activities (Noorkartina Mohamad et al., 2014). This occurrence may be due to a lack of self-confidence, or lack of encouragement or reassurance. This generation is less willing to take risks and explore their entrepreneurial side. Thus, it becomes a major challenge for entrepreneurship educators in designing courses and developing students' innate entrepreneurial capabilities and intentions.

Inclination towards entrepreneurship is commonly associated with several personal characteristics namely values and attitudes, creativity, risk-taking propensity, locus of control, and personal goals. These personal characteristics might be expected to be influenced by a formal education program. However, entrepreneurial activity is limited in Malaysia and it is tougher to justify due to factors such as attitudes, motivation, and risk-taking. Considering this, it is important to understand the factors that affect the entrepreneurial intention of fresh graduates to nurture their future entrepreneurialism in Malaysia. The aim of this study is twofold; first to identify the extent of entrepreneurial intention and second, to investigate the factors influencing entrepreneurial intention among fresh graduates in Klang Valley, Malaysia.

The remainder of this paper is structured as follows. The next section provides a review of relevant literature and a discussion of the hypotheses underpinning this study. The subsequent section outlines the research design. The results are presented in the following section. A discussion of the results and their implications is provided in the last section.

2. Literature Review

2.1 Entrepreneurship Intention

Entrepreneurs play an increasingly important role in the wealth creation of today's society. Entrepreneurial intention lies at the foundation of the entrepreneurial process (Liñán & Fayolle, 2015). Entrepreneurship can be defined as the course of identifying opportunities in the marketplace, perpetrating actions, and necessary resources to exploit the opportunities for long-term personal gain (Uddin & Bose, 2012). Wiklund et al. (2019) referred to entrepreneurship as the process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic, and social risks, and receiving the resulting rewards. Entrepreneurial intention can be defined as an individual's mindset to achieve a specific business goal based on experience, action, and attention (Hong Lu et al., 2020). Entrepreneurial intention among students can be characterised as components that specifically or by implication influence the choices of the students to be an entrepreneur. Intention happens at the beginning point of seeking self-employment and starting a business. According to Hsu et al. (2019), entrepreneurial intention is anticipated through whether the person sees that the profession may be an appropriate fit and vice versa.

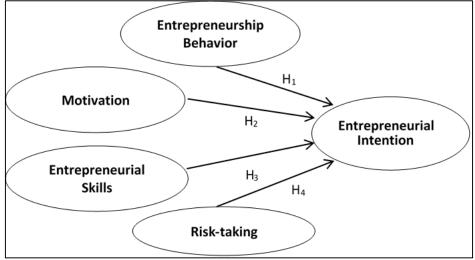


Figure 1. Conceptual framework

Examining entrepreneurial intention can improve our understanding of potential entrepreneurial behaviour. Based on the different models developed on entrepreneurship, various factors affect the entrepreneurial intentions of fresh graduates, such as educational factors, contextual factors, environmental factors, psychological factors, and personality factors but little work is done to understand which factors scholars considered the most in measuring the entrepreneurial intentions of the fresh graduates. According to Huang Jieqi et al. (2021), students' entrepreneurial intentions could be influenced by their previous entrepreneurship behaviour to some extent. Iffan (2018) argued that motivation plays a significant role in entrepreneurship intention since it has great value because it makes people act. Besides, the strength of intention captures motivational factors influencing people's behaviour and reflects the amount of effort people are willing to invest (readiness) (Gielnik et al., 2014). According to Hmieleski and Powell (2018), entrepreneurial skills are crucial to

the decision to go into business, while Barringer and Ireland (2015) supported that the discovery of business opportunities depends mainly on the risk-taking of students to take part in such entrepreneurial activities. Figure 1 proposes that students' entrepreneurship behaviour, motivation, entrepreneurial skills, and risk-taking may have an influence on entrepreneurial intention among fresh graduates. The next sub-sections discuss these determinants briefly.

2.2 Entrepreneurship Behaviour

Behaviour is defined as how someone conducts themselves, either on their own or in the presence of others (Pidduck et al., 2023). In common, behaviour is formed and motivated by cognitions and influences and it's a result of characteristics, information, skills, abilities, and perceived attitudes and eagerness. Tessema Gerba (2012) argued that intention is related to motivation and behaviour of an individual towards starting a new business. Previous studies such as Mumtaz Begam Abdul Kadir et al. (2012) found that behaviour had a positive relationship with entrepreneurial intention. Entrepreneurial action has its cognitive beginning in personal motivation and is caught on to be the exploding figure that sparkles behaviour and gets energy to back and control it towards its objectives (Barba-Sánchez & Atienza-Sahuquillo, 2018). Research exploring the link between behaviour and intention has shown a strong correlation of 0.90 to 0.96 between the two (Ajzen et al., 2009). Thus, given the strong link between the behaviour that an individual shows to start a business and intentions to start a business, this study conjectures the following hypothesis.

H1: There is a positive influence of entrepreneurship behaviour on the entrepreneurial intention

2.3 Motivation

Motivation is defined as an internal process that is used to activate and sustain activities for achieving specific targets and goals (Murnieks et al., 2020). In the context of this study, motivation could be a self-encouragement as commitment to either inside or outside factor that empower to development of entrepreneurial intentions (PingyingZhang et al., 2015). Motivation towards accomplishment can be characterized as the likelihood of performing something at a distance better as compared to another or previous performance (Farrukh et al., 2018). Some researchers are trying to analyse and perceive the relationship between motivation and entrepreneurs (Ward et al., 2019). Tessema Gerba (2012) revealed that inner motivation is connected to the individual capabilities of a person that having the self-confidence to venture into the enterprise.

Likewise, Yamini et al. (2022) supported that intrinsic motivation is found to positively affect the social entrepreneurial intention of individuals. A motivation boost may change an idle intention to drive entrepreneurship (Alam et al., 2019). Individuals who are motivated are courageous enough to take risks in building such businesses (Kah et al., 2022). Therefore, motivation is extremely important because it drives individuals to develop positive entrepreneurial intentions to launch independent businesses. Motivation is undoubtedly a significant component of developing business start-ups (Barba-Sánchez & Atienza-Sahuquillo,

20178). Similarly, Faghih et al. (2021) revealed that motivation is the primary factor motivating a person to acquire information about entrepreneurship and increase their entrepreneurial intention. Motivated entrepreneurs can better understand and retain their passion for establishing a business and encourage people to buy into their concept. Hence, this study proposes the following hypothesis.

H2: There is a positive influence of motivation on the entrepreneurial intention

2.4 Entrepreneurial Skills

Entrepreneurial skills, which reflect entrepreneurial competencies are another essential component representing of entrepreneur 'know-how' (Ming-HueiChen et al., 2017). Entrepreneurial skill is defined as the skill of developing or creating a new thing that will add value to society and generate monetary benefits for the entrepreneur (Ibrahim & Mas'ud, 2016). Entrepreneurial skills can be gained and improved by participating in entrepreneurship programs and tending to adapt during the experimental phase. In other words, entrepreneurial skills boost problem-solving and decision-making skills, as well as improve interpersonal relationships, teamwork, and management of finances (Barton et al., 2018). Previous research such as Juha Ali et al. (2017) proposed that entrepreneurial skills may contribute to the success of a venture and offers the most important skills and competencies that are required to operate a company, including planning skills, strategy skills, financial skills, marketing skills, time management skills, and project management.

Abdullah Al Mamun et al. (2016) stated that entrepreneurial skills can include innovation, ingenuity, the ability to understand business role models, and the ability to recognize opportunities. Ibrahim and Mas'ud (2016) discovered that entrepreneurial skills have a positive influence on entrepreneurial intention among Nigerian students. Vega-Gómez et al. (2020) found that entrepreneurial skills act as determinants of entrepreneurial intention, and in this way, if the entrepreneur considers his or her skills adequate to create a business, he or she will try harder than if the perception is the opposite. Similarly, Gieure et al. (2020) and Hassan et al. (2020) explained that an individual's belief in his or her skills and abilities enhances his or her entrepreneurial intention. Perhaps, individuals with entrepreneurial skills may be able to integrate the challenges involved in a dynamic market as entrepreneurs. Thus, based on the arguments above, this study proposes the following hypothesis.

H3: There is a positive influence of entrepreneurial skills on the entrepreneurial intention

2.5 Risk-taking

Risk-taking is defined as behaviour toward a risky choice or situation in which the risk of a potential negative outcome is willingly taken (Lee & Bourdage, 2020). In the context of entrepreneurship, risk-taking refers to the capacity of the entrepreneur to look for after choices or courses of action that have not turned out to be successful or important for the company. Risk-taking needs individual attention to survey a chance circumstance positively or negatively and to act in a manner. The risks that the entrepreneur takes are strongly related to his career opportunities, family relations, physical health as well as financial well-being. Hence, the risk-taking propensity of an individual is crucial for the decision-making process. Previous studies have shown that a successful entrepreneur is a moderate risk-taker (Angel et al., 2018). According to Badri et al. (2023), risk-taking happens to someone who has the intention to start a business because it requires the person to plan and prepare for it. Similarly, Popescu et al. (2016) considered that risk-taking tendency plays a remarkable role in assessing entrepreneurial intention.

The most recent approach to entrepreneurship is taking calculated risks because risktaking can lead to success and failure. Entrepreneurs should assess the risks of their decisions before taking them, analyse the advantages, and evaluate them. People who dare to take risks can start their new ventures when they make decisions and are willing to bear with uncertainty and risk propensity (Karabulut, 2016). Meanwhile, Sahaida Laily Md Hashim et al. (2017) have identified that risk-taking tendency contributes a great deal to cultivating a positive attitude towards entrepreneurship. Several other authors have conducted studies to determine risk-taking propensity as a key factor in understanding better entrepreneurs (Agustina & Fauzia, 2021; Gurel et al., 2021; Shahzad et al., 2021). They found that risk-taking propensity had a positive effect on entrepreneurship intention. Besides, Shahzad et al. (2021) found that the mediating role of a propensity to take risks also enhances entrepreneurial intention among young graduates from six public and private sector universities in Pakistan. Based on this discussion, this study argues that fresh graduates must be willing to take risks to venture into a business. Hence, this study assumes the following hypothesis.

H4: There is a positive influence of risk-taking on the entrepreneurial intention

3. Research Methodology

This cross-sectional survey was administered to fresh graduates from Malaysian Higher Education Institutions (HEIs) located in Klang Valley, Malaysia. In this study, a fresh graduate is a person who just recently graduated from an undergraduate or postgraduate level and has no prior work experience. Data is collected from June to July 2023. The criteria for selecting the sample in this study were fresh graduates from public and private universities. The second criterion is fresh graduates who have taken entrepreneurship courses before. The convenience sampling method is used in collecting the data based on who is conveniently available to provide it (Sarstedt et al., 2018). These fresh graduates were invited to participate in this study through the distribution of survey links using social media networks such as Facebook, WhatsApp, Instagram, and Telegram. Participants provided informed consent to participate by completing and submitting the questionnaire electronically in an online form hosted on Google Docs. A total of 385 fresh graduates responded to this study. However, some incomplete questionnaires were excluded, and altogether 379 usable questionnaires were selected finally to run the research model.

3.1 Measurement of the Constructs

The questionnaire is divided into six main parts: Section A comprises the demographic profile of the respondents. The other five sections contain items related to dependent and

independent variables. The set of questionnaires is formulated based on the chosen variables from the previous studies. The measures employed in the study along with their sources are listed in Table 1. The measures were scored on a 5-point Likert scale ranging from 'strongly disagree' to 'strongly agree'.

Table 1. Measurement of the Constructs, Items and Sources				
Constructs	Items	Source(s)		
Entrepreneurship Behaviour	4	Soria-Barreto et al. (2017)		
Motivation	4	Rus-Casas et al. (2020)		
Entrepreneurship Skills	4	Fragoso et al. (2020)		
Risk-Taking	4	Abdullah Al Mamun et al. (2017)		
Entrepreneurial Intention	4	Soria-Barreto et al. (2017)		

3.2 Data Analysis

The Statistical Package for Social Sciences (SPSS) version 26 was used in the analysis of the collected data. Frequency tables, simple percentages, descriptive statistics, one-sample t-test, and independent sample t-test analysis were also conducted. Linear regression analysis was used to determine the contribution of the independent variables which are entrepreneurship behaviour, motivation, entrepreneurial skills, and risk-taking towards the intention to be an entrepreneur among fresh graduates.

3.3 Preliminary Assessment

A preliminary assessment of the data was conducted by calculating the values of Cronbach alpha for each construct separately. According to Bougie and Sekaran (2019), the reliability coefficient test indicates how well the items in a set positively correlated with one another. Variables can be considered as reliable if Cronbach's alpha value is set to be 0.7 and above (Pallant, 2020). Table 2 depicts that all constructs measuring entrepreneurship intention are ranging from values 0965 to 0.827. Hence, the internal consistencies of all constructs are considered acceptable since each reliability tests exceeds the suggested threshold.

Table 2. Reliability and Normality Assessment Results						
Constructs	ltem	Cronbach's Alpha	Skewness	Kurtosis		
Entrepreneurship Behavior	4	.938	-0.769	-0.056		
Motivation	4	.827	0.456	-0.235		
Entrepreneurship Skills	4	.965	-0.407	-1.094		
Risk-Taking	4	.876	-0.486	0.536		
Entrepreneurial Intention	4	.964	-1.104	1.494		

Further, the assessment of normality of the metric constructs involves empirical measures of a distribution's shape characteristics (skewness and kurtosis). Table 2 shows that the normality assessment values for all constructs are between ±2.00 as suggested by Pallant (2020). Therefore, this assessment confirms that the data of this study is normally distributed. To further check for multicollinearity, a collinearity diagnostics test (tolerance and VIF values)

was conducted. As shown in Table 3, the tolerance values are greater than 0.10 and the VIF values are lower than 10; hence, no multicollinearity problem exists (Pallant, 2020).

Constructs	Collinearity	/ Statistics
Constructs	Tolerance	VIF
Entrepreneurship Behaviour	0.489	2.044
Motivation	0.738	1.355
Entrepreneurship Skills	0.407	2.455
Risk-Taking	0.493	2.028

Table	3.	Collinearity	Diagnostics	Results
	•••	•••••••		

4. Results and Discussion

Figure 2a depicts unsurprisingly that females are more than the males as 60.6% of the study's participants were female as compared to 39.4% male, which reflects the gender gap issues in higher learning institutions' enrolment in Malaysia. Further, Figure 2b shows that the majority of the respondents are between 18 and 25 years old. They make up more than half (60%) of the total responses to the survey given.

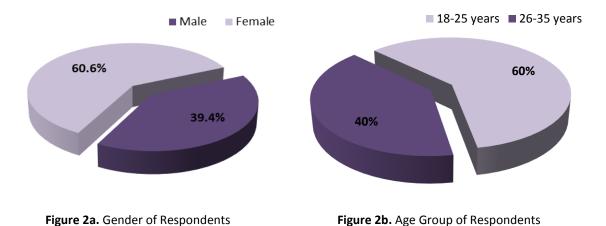
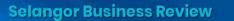
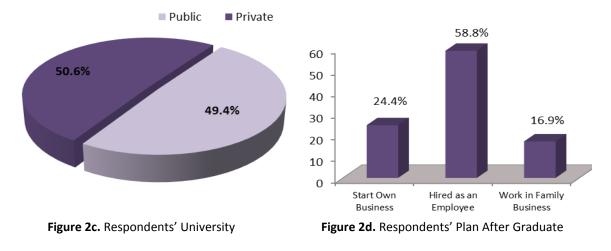


Figure 2c shows that the majority of respondents are fresh graduates from private universities (50.6%), rather than public universities (49.4%). Finally, Figure 2d reveals that only 24.4% of the respondents aim to start their own business, while another 16.9% prefer to continue their family business. Contrary, half of the respondents (58.8%) choose to be hired as an employee.





4.1 The Extent of Entrepreneurial Intention

This section reports the findings that relate to the extent of entrepreneurial intention by the fresh graduates in Klang Valley. One sample t-test was conducted to test whether the mean of overall perceived entrepreneurial intention is significantly equal to or different from a specified constant. Table 4 shows the mean result of 3.9453 for entrepreneurial intention, indicating that most Malaysian fresh graduates have a high level of intention to become entrepreneurs, and this result is significant at a 1 percent level. Overall, fresh graduates are most likely to have a lot of interest in being entrepreneurs and seriously think about starting their own business after completing their studies. Those who are interested in starting a business aim to create a firm in the future. This result is contradicted by Noorkartina Mohamad et al. (2014) that found most graduates like hunting jobs rather than doing entrepreneurial activities. Nowadays, the focus of students is perhaps shifted to work on their own.

Panel A: One-Sample T-Test						
	n	Mean	t-statistic	<i>p</i> -value		
Entrepreneurial Intention	379	3.9453	61.607	.000***		
Panel B: Mean for Itemised Attributes						
Attributes			Mean [*]	Rank		
- I will make every effort to start and run my own firm.			3.94	3		
- I am determined to create a firm in the future.			3.96	2		
- My professional goal is to become an entrepreneur.			3.97	1		
 I have very serious thought of starting a firm. 			3.91	4		

Table 4. The Extent of Entrepreneurial Intention Perceived by Fresh Graduates

Further, an independent sample t-test was conducted to identify the difference in the extent of entrepreneurial intention among respondents with different education levels. Table 5 reports that there is a significant difference (t-test = 2.194, p value < .05***) in the extent of entrepreneurial intention among the two groups of respondents, and it is significant at a 1% level. The mean value of the entrepreneurial intention score reveals that respondents at degree level (mean = 3.989) are more likely to have higher intentions to be entrepreneurs. Perhaps, they have more knowledge in terms of entrepreneurship and are taught more depth

in entrepreneurship subjects during degree level. Contrary, respondents at the diploma level (mean = 3.909) have the least intention to be an entrepreneur.

Education Level		Entrepreneurial Intention		Independent Sample t-Test	
	n —	Mean	SD	t-statistic	p value
Diploma	161	3.909	0.903	2 104	000**
Degree	218	3.989	0.788	2.194	.008**

 Table 5. The Extent of Entrepreneurial Intention by Fresh Graduates Based on Education Level

Note: Results were significantly different at the *** 1 percent level and ** 5 percent level, respectively, using two-tailed tests.

4.2 Factors Influencing Entrepreneurial Intention

Table 6 reveals that the regression model (F (4, 379) = 62.167, p value < $.05^{***}$) is significant at a 1% level, and the variation of the overall model is relatively high with an R2 value of 60.6% variation in the extent of entrepreneurial intention. This finding indicates that 60.6% of the total variation in the extent of entrepreneurial intention can be accounted for by four factors collectively in this model. The remaining 39.4% perhaps may be due to other factors that cannot be explained by this model.

 Table 6. Results of the Factors Influencing Entrepreneurial Intention

Hypotheses	β	t-statistic	Results
H ₁ : Entrepreneurial Behavior \rightarrow Entrepreneurial Intention	0.424	5.953***	Accepted
H ₂ : Motivation \rightarrow Entrepreneurial Intention	0.416	7.188***	Accepted
H ₃ : Entrepreneurial Skills \rightarrow Entrepreneurial Intention	0.067	0.855 ^{NS}	Rejected
H ₄ : Risk Taking \rightarrow Entrepreneurial Intention	0.188	2.235 ***	Accepted

Note: *** denotes significance at .001 level; ** denotes significance at .05 level; NS denotes not significant.

Except for H3, the proposed research model was largely supported. Among the four constructs influencing entrepreneurial intention, entrepreneurial behavior stands out strongly and significantly influences entrepreneurial intention ($\beta = 0.424$, p < .05***) compared with motivation (β = 0.416, p < .05***) and risk-taking (β = 0.188, p < .05***). The findings indicate that entrepreneurial behaviors could affect future entrepreneurial intentions and actions through an increase in entrepreneurial self-efficacy to become an entrepreneur in the future. This result is in tandem with an argument by YushunSu et al. (2021) whereby they suggested that entrepreneurial behavior reflects the presence of resources and opportunities that one needs. The behavior may be partially based on past behavioral experience and may reduce the perceived difficulty of executing a business in the future (YushunSu et al., 2021). In addition, motivation exists to enhance entrepreneurial intention because respondents might feel that the option of creating a business is seen as a way to gain independence and not rely financially on the family economy given the difficulty of finding a job in the current situation. This is consistent with Yamini et al. (2022) whereby revealed that intrinsic motivation is found to positively affect the social entrepreneurial intention of individuals.

Further, respondents who dare to take risks feel optimistic about starting their new ventures when they make decisions and are willing to bear with uncertainty and risk propensity. This is similar to Al-Mamary and Alshallaqi (2022) who showed a strong relationship between entrepreneurial intention and greater risk-taking. Usually, the entrepreneur is motivated to take risks to succeed and earn the highest possible return. In other words, a risk-taking tendency develops as the desire for success grows; hence students tend to act boldly to achieve financial returns and profits as well as for the success of their new venture.

However, the finding indicates that entrepreneurial skills did not have a significant impact on fresh graduates' intention towards entrepreneurship, according to the results obtained by Karimi et al. (2016). Possibly, the respondents may have gained a realistic picture of both their business skills and being an entrepreneur and decided, in this light, that they do not want to become an entrepreneur. In this sense, this study did not say that the entrepreneurship programs at the Malaysian HEIs did not affect fresh graduates' entrepreneurship intention; the programs may have enhanced the awareness of entrepreneurship among these respondents and led them to assess their future as entrepreneurs with their skills.

5. Conclusion

This study highlights the entrepreneurial intention among fresh graduates in Klang Valley, and the results showed that they are most likely to have a lot of interest in being entrepreneurs and seriously think about starting their own businesses after completing their studies. Further, this study discovers that entrepreneurial behavior, motivation, and risk-taking tendency were proven to have an influence on the intention to entrepreneurship among fresh graduates. Perhaps, previous engagement in entrepreneurship activities during entrepreneurship courses produces a significant impact on the intention to start a new venture among fresh graduates. This finding would imply that the direct behaviour experience could generate positive or negative effects depending on the individual's beliefs. Further, motivation to start a business could exist due to the difficulty of finding a job in the current situation. In addition, creating a business is seen as a way to gain independence and not rely financially on the family economy could motivate fresh graduates to own a business. Finally, the confidence to be able to take risks cannot be separated from the information technology environment that accompanies fresh graduates, where they can easily get all kinds of information related to the business they have started.

This study guides fresh graduates who may benefit from starting their entrepreneurial projects and helps them to improve their role after graduation. First, the current research will help to create awareness among fresh graduates to start new business ventures. It highlights the importance of antecedents of entrepreneurial intention (entrepreneurial behaviour, motivation, and risk-taking propensity) that positively impact people's willingness to become self-employed. It also discusses the significance of entrepreneurial intention and how it can aid an individual in initiating new start-ups. Second, it contributes to enhancing the entrepreneurial choice among fresh graduates by starting their start-ups instead of searching for jobs. In this way, it will contribute to the growth of the economy, especially in Malaysia

where there is an urgent need to provide students with entrepreneurship learning activities. These activities can nurture their behaviour towards entrepreneurship, which leads to entrepreneurial success. Through this study, fresh graduates will also learn to overcome the challenges of starting a business and it will increase their inclination to start a business.

Third, it emphasises the need to provide entrepreneurial skills to fresh graduates to help them start their businesses. Result shows that fresh graduates' entrepreneurial skills do not influence significantly their entrepreneurial intentions fact which highlights the need to improve effectiveness of the entrepreneurship education in the Malaysian higher education institutes' (HEI) curriculum to stimulate students' skills. The culture of entrepreneurship during entrepreneurship courses must help to build skills and innovative techniques. Therefore, it is encouraged for the Ministry of Higher Education to redesign entrepreneurship coaching programmes to Generation Z characteristics, especially in terms of entrepreneurial skills. Various approaches can be developed to enhance entrepreneurial skills for fresh graduates towards their business activities so that a high desire to succeed in realizing entrepreneurial intention is achieved.

This study has several limitations that are necessary to address to increase the research scope. First, the responses to this survey are representative of fresh graduates of public and private universities in Klang Valley only. One area for further research might be to conduct the study using a larger sample and a broader geographical base. Further, it is proposed that future studies should integrate different educational backgrounds and countries. Second, the time frame of this study is cross-sectional, where data were collected at just one point in time. Prospective scholars should use the longitudinal study to confirm the current results. Third, the selection for the determinants of entrepreneurial intention is not exhaustive. There may be other predictors that may contribute to or be a reason for entrepreneurial intention which might provide more insight.

Therefore, for future studies, researchers should expand the other factors to analyse the predictors of entrepreneurship intention such as passion, entrepreneurial alertness, proactive personality, and psychological traits to enrich findings from various perspectives. Fourth, the self-reported behavior on which this study relied is vulnerable to response bias. There is uncertainty regarding the accuracy of responses because self-reports of entrepreneurial intention may be less accurate. To reduce response bias, it is suggested for future research to use in-depth techniques applied to secondary data sources such as interviews or observations. This might help the researcher to explore certain aspects that cannot be discovered using a survey questionnaire.

Acknowledgment

We would like to acknowledge everyone who played a role in our academic accomplishments especially the University Selangor academic staff, each of whom has provided patient advice and guidance throughout the research process.

References

Abdullah Al Mamun, Noorshella Che Nawi, Anushah Dewiendren, & Siti Farhah Fazira Shamsudin. (2016). Examining the effects of entrepreneurial competencies on students' entrepreneurial intention. *Mediterranean Journal of Social Sciences*, 7(2), 119-134. https://doi.org/10.5901/mjss.2016.v7n2p119

- Abdullah Al Mamun, Noorshella Che Nawi, Mohiuddin, M., Siti Farhah Fazira Shamsudin, & Syed Ali Fazal. (2017). Entrepreneurial intention and startup preparation: A study among business students in Malaysia. *Journal of Education for Business*, 92(6), 296-314. https://doi.org/10.1080/08832323.2017.1365682
- Agustina, T. S., & Fauzia, D. S. (2021). The need for achievement, risk-taking propensity, and entrepreneurial intention of the generation Z. *Risenologi*, 6(1), 96-106. https://doi.org. 10.47028/j.risenologi.2021.61.161
- Ajzen, I., Czasch, C., & Flood, M. G. (2009). From intentions to behavior: Implementation intention, commitment, and conscientiousness. *Journal of Applied Social Psychology*, 39(6), 1356-1372. https://doi.org/10.1111/j.1559-1816.2009.00485.x
- Al Mamun, A., Nawi, N. B. C., & Shamsudin, S. B. (2016). Examining the effects of entrepreneurial competencies on students' entrepreneurial intention. *Mediterranean Journal of Social Sciences*, 7(2), 119-134.
- Alam, M. Z., Kousar, S., & Rehman, C. A. (2019). Role of entrepreneurial motivation on entrepreneurial intentions and behaviour: Theory of planned behaviour extension on engineering students in Pakistan. *Journal of Global Entrepreneurship Research*, 9(1), 1-20. https://doi.org/10.1186/s40497-019-0175-1
- Ali, J., Zakaria, N., Jaganathan, M., Rashid, N. A. M., Yacob, P., & Gorondutse, A. H. (2017). Determinants of entrepreneurial intention: Empirical insights from Malaysian undergraduate business students. *International Journal of Economic Research*, 14(19), 159-169.
- Al-Mamary, Y. H., & Alshallaqi, M. (2022). Impact of autonomy, innovativeness, risk-taking, proactiveness, and competitive aggressiveness on students' intention to start a new venture. *Journal of Innovation & Knowledge*, 7(4), 100239. https://doi.org/10.1016/j.jik.2022.100239
- Angel, P., Jenkins, A., & Stephens, A. (2018). Understanding entrepreneurial success: A phenomenographic approach. *International Small Business Journal*, 36(6), 611-636. https://doi.org/10.1177/02662426187686
- Badri, E., Liaghatdar, M. J., Abedi, M. R., & Jafari, E. (2023). A survey of entrepreneurship capabilities of Isfahan University students. *Research and Planning in Higher Education*, 12(2), 73-90.
- Barba-Sánchez, V., & Atienza-Sahuquillo, C. (2018). Entrepreneurial intention among engineering students: The role of entrepreneurship education. *European Research on Management and Business Economics*, 24(1), 53-61. https://doi.org/10.1016/j.iedeen.2017.04.001
- Barba-Sánchez, V., Mitre-Aranda, M., & del Brío-González, J. (2022). The entrepreneurial intention of university students: An environmental perspective. *European Research in Management, Business, and Economics,* 10(1), 84-98. https://doi.org/10.1016/j.iedeen.2021.100184
- Barringer, B. R. & Ireland, R. D. (2015). *Entrepreneurship: Successfully launching new ventures*. (5th eEd.). Prentice Hall.
- Barton, M., Schaefer, R., & Canavati, S. (2018). To be or not to be a social entrepreneur: Motivational drivers amongst American business students. *Entrepreneurial Business & Economics Review*, 6(1), 916-352. https://doi.org/10.15678/EBER.2018.060101

- Bougie, R., & Sekaran, U. (2019). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Chen, M. H., Chang, Y. Y., Wang, H. Y., & Chen, M. H. (2017). Understanding creative entrepreneurs' intention to quit: The role of entrepreneurial motivation, creativity, and opportunity. *Entrepreneurship Research Journal*, 7(3), 20160001.
- Faghih, N., Bonyadi, E., & Sarreshtehdari, L. (2021). Entrepreneurial motivation index: Importance of dark data. *Journal of Global Entrepreneurship Research*, 1-13. https://doi.org/10.1007/s40497-021-00277-y
- Farrukh, M., Alzubi, Y., Shahzad, I. A., Waheed, A., & Kanwal, N. (2018). Entrepreneurial intentions: The role of personality traits in perspective of theory of planned behaviour. *Asia Pacific Journal of Innovation and Entrepreneurship*, 12(3), 399-414. https://doi.org/10.1108/APJIE-01-2018-0004
- Fragoso, R., Rocha-Junior, W., & Xavier, A. (2020). Determinant factors of entrepreneurial intention among university students in Brazil and Portugal. *Journal of Small Business* & Entrepreneurship, 32(1), 33-57. https://doi.org/10.1080/08276331.2018.1551459
- Gerba, D. T. (2012). Impact of entrepreneurship education on entrepreneurial intentions of business and engineering students in Ethiopia. *African Journal of Economic and Management Studies*, 3(2), 258-277. https://doi.org/10.1108/20400701211265036
- Gielnik, M. M., Barabas, S., Frese, M., Namatovu-Dawa, R., Scholz, F. A., Metzger, J. R., & Walter, T. (2014). A temporal analysis of how entrepreneurial goal intentions, positive fantasies, and action planning affect starting a new venture and when the effects wear off. *Journal of Business Venturing*, 29(6), 755-772. https://doi.org/10.1016/j.jbusvent.2013.09.002
- Gieure, C., del Mar Benavides-Espinosa, M., & Roig-Dobón, S. (2020). The entrepreneurial process: The link between intentions and behavior. *Journal of Business Research*, 112, 541-548. https://doi.org/10.1016/j.jbusres.2019.11.088
- Gurel, E., Madanoglu, M., & Altinay, L. (2021). Gender, risk-taking and entrepreneurial intentions: Assessing the impact of higher education longitudinally. *Education* + *Training*, 63(5), 777-792. https://doi.org/10.1108/ET-08-2019-0190
- Hashim, S. L. B. M., Ramlan, H. B., Hashim, N. N. B., & Suhaimi, I. S. B. (2017). Postgraduate entrepreneurial intentions among AAGBS students. *International Journal of Accounting*, 2(5), 1-14.
- Hassan, A., Saleem, I., Anwar, I., & Hussain, S.A. (2020). Entrepreneurial intention of Indian university students: The role of opportunity recognition and entrepreneurship education. *Education & Training*, 62(7/8), 843-861. https://doi.org/10.1108/ET-02-2020-0033
- Hmieleski, K. M., & Powell, E. E. (2018). The psychological foundations of university science commercialization: A review of the literature and directions for future research. *Academy of Management Perspectives*, 32(1), 43-77. https://doi.org/10. 5465/amp.2016.0139
- Hong, L. M., Sha'ari, M. A. A. H., Zulkiffli, W. F. W., Aziz, R. C., & Ismail, M. (2020). Determinant factors that influence entrepreneurial intention among students in Malaysia. *Jurnal Manajemen dan Kewirausahaan*, 22(1), 80-86.
- Hsu, D. K., Burmeister-Lamp, K., Simmons, S. A., Foo, M. D., Hong, M. C., & Pipes, J. D. (2019). "I know I can, but I don't fit": Perceived fit, self-efficacy, and entrepreneurial intention.

Journal of Business Venturing, 34(2), 311-326. https://doi.org/10.1016/j.jbusvent.2018.08.004

- Huang, J., Wu, J., Deng, B., & Bao, S. (2021). Research on the optimization strategy of innovation behavior and entrepreneurship intention in entrepreneurship teaching. *Scientific Programming*, 2021, 1-6.
- Ibrahim, N., & Mas'ud, A. (2016). Moderating role of entrepreneurial orientation on the relationship between entrepreneurial skills, environmental factors and entrepreneurial intention: A PLS approach. *Management Science Letters*, 6(3), 225-236. https://doi.org/10.5267/j.msl.2016.1.005
- Iffan, M. (2018). Impact of entrepreneurial motivation on entrepreneurship intention. In International Conference on Business, Economic, Social Science and Humanities (ICOBEST 2018) (pp. 208-211). Atlantis Press. https://doi.org/ 10.2991/icobest-18.2018.46
- Jiang, X., & Sun, Y. (2015). Research article study on constructing an education platform for innovation and entrepreneurship of university student. *Research Journal of Applied Sciences, Engineering and Technology,* 9(10), 824-829. https://doi.org/10.19026/rjaset.9.2630
- Jieqi, H., Jun, W, Baijun, D., & Shuqin, B. (2021). Research on the optimization strategy of innovation behavior and entrepreneurship intention in entrepreneurship teaching. *Scientific Programming*, 2021(1), 1-6. https://doi.org/10.1155/2021/4872108
- Juha Ali, Norria Zakaria, Mathivannan Jaganathan, Nur 'Arifah Mohd Rashid, Yacob, P., & Gorondutse, A. H. (2017). Determinants of entrepreneurial intention: Empirical insights from Malaysian undergraduate business students. *International Journal of Economic Research*, 14(19), 159-169.
- Kah, S., O'Brien, S., Kok, S., & Gallagher, E. (2022). Entrepreneurial motivations, opportunities, and challenges: An international perspective. *Journal of African Business*, 23(2), 380-399. https://doi.org/10.1080/15228916.2020.1838835
- Karabulut, A. T. (2016). Personality traits on entrepreneurial intention. *Procedia Social and Behavioral Sciences*, 229, 12-21. https://doi.org/10.1016/j.sbspro.2016.07.109
- Karimi, S., Biemans, H. J., Lans, T., Chizari, M., & Mulder, M. (2016). The impact of entrepreneurship education: A study of Iranian students' entrepreneurial intentions and opportunity identification. *Journal of Small Business Management*, 54(1), 187-209. https://doi.org/10.1111/jsbm.12137
- Lee, C. S., & Bourdage, J. S. (2020). *Risk taking*. In Bernardo J. Carducci, Christopher S. Nave, Annamaria Di Fabio, Donald H. Saklofske, Con Stough (Eds.), The Wiley Encyclopedia of pPersonality and iIndividual dDifferences: Personality pProcesses and iIndividual dDifferences, (p. 363-367). https://doi.org/10.1002/9781118970843.ch239
- Liñán, F., & Fayolle, A. (2015). A systematic literature review on entrepreneurial intentions: citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal*, 11, 907–933. https://doi.org/10.1007/s11365-015-0356-5
- Lu, M. H., Muhd Azim Abu Hassan Sha'ari, , Wan Farha Wan Zulkiffli, Roslizawati Che Aziz, & Mohammad Ismail. (2020). Determinant factors that influence entrepreneurial intention among students in Malaysia. *Jurnal Manajemen dan Kewirausahaan*, 22(1), 80-86. https://doi.org/10.9744/jmk.22.1.80–86

- Mamun, A. A., Nawi, N. B. C., Mohiuddin, M., Shamsudin, S. F. F. B., & Fazal, S. A. (2017). Entrepreneurial intention and startup preparation: A study among business students in Malaysia. *Journal of Education for business*, 92(6), 296-314.
- Menon, S. (2022, August 14). *More Malaysian youths venturing into business amid challenging market*. The Star Online. https://www.thestar.com.my/news/education/2022/08/14/fortune-favoursthe-bold
- Ming-Huei, C., Yu-Yu, C., Hong-Yan, W. & Ming-Han, C. (2017). Understanding creative entrepreneurs' intention to quit: The role of entrepreneurial motivation, creativity, and opportunity. *Entrepreneurship Research Journal*, 7(3), 20160001. https://doi.org/10.1515/erj-2016-0001
- Mohamad, N., Lim, H. E., Yusof, N., Kassim, M., & Abdullah, H. (2014). Estimating the choice of entrepreneurship as a career: The case of Universiti Utara Malaysia. *International Journal of Business and Society*, 15(1), 65-80.
- Mumtaz Begam Abdul Kadir, B. A. K, Munirah, S.alim, & Halimahton, Kamarudin. (2012). The relationship between educational support and entrepreneurial intentions in Malaysian Higher Learning Institution. *Procedia - Social and Behavioral Sciences*, 69(24), 2164-2173. https://doi.org/10.1016/j.sbspro.2012.12.182
- Murnieks, C. Y., Klotz, A. C., & Shepherd, D. A. (2020). Entrepreneurial motivation: A review of the literature and an agenda for future research. *Journal of Organizational Behavior*, 41(2), 115-143. https://doi.org/10.1002/job.2374
- Noorkartina Mohamad, Hock-Eam, L., Norhafezah Yusof, Mustafa Kassim, & Hussin Abdullah. (2014). Estimating the choice of entrepreneurship as a career: The case of Universiti Utara Malaysia. *International Journal of Business and Society*, 15(1), 65-80.
- Pallant, J. (2020). SPSS sSurvival Mmanual: A Step step by Step step Guide guide to Data data Analysis analysis Using using IBM SPSS. (7th eEd.). Crows Nest. NSW: Allen & Unwin.
- Pidduck, R. J., Clark, D. R., & Lumpkin, G. T. (2023). Entrepreneurial mindset: Dispositional beliefs, opportunity beliefs, and entrepreneurial behavior. *Journal of Small Business Management*, 61(1), 45-79. https://doi.org/10.1080/00472778.2021.1907582
- Pingying, Z., Wang, D. D., & Owen, C. L. (2015). A study of entrepreneurial intention of university students. *Entrepreneurship Research Journal*, 5(1), 61-82. https://doi.org/10.1515/erj-2014-0004
- Popescu, C. C., Bostan, I., Robu, I.- B., Maxim, A., & Diaconu, L. (2016). An analysis of the determinants of entrepreneurial intentions among students: A Romanian case study. *Sustainability*, 8(8), 771-785. https://doi.org/10.3390/su8080771
- Reuel Johnmark, D., Munene, J. C., & Balunywa, W. (2016). Robustness of personal initiative in moderating entrepreneurial intentions and actions of disabled students. *Cogent Business* & Management, 3(1), 1169575. https://doi.org/10.1080/23311975.2016.1169575
- Rus-Casas, C., Eliche-Quesada, D., Aguilar-Peña, J. D., Jiménez-Castillo, G., & La Rubia, M. D. (2020). The impact of the entrepreneurship promotion programs and the social networks on the sustainability entrepreneurial motivation of engineering students. *Sustainability*, 12(12), 4935. https://doi.org/10.3390/su12124935
- Sahaida Laily Md Hashim, Hamidah Ramlan, Nur'Ain Salehudin, Nur Najwa Hashim, & Intan Syamimi Suhaimi. (2017). Postgraduate entrepreneurial intentions among AAGBS students. *International Journal of Accounting*, 2(5), 1-14.

- Sarstedt, M., Bengart, P., Shaltoni, A. M., & Lehmann, S. (2018). The use of sampling methods in advertising research: A gap between theory and practice. *International Journal of Advertising*, 37(4), 650-663. https://doi.org/10.1080/02650487.2017.1348329
- Shahzad, M. F., Khan, K. I., Saleem, S., & Rashid, T. (2021). What factors affect the entrepreneurial intention to start-ups? The role of entrepreneurial skills, propensity to take risks, and innovativeness in open business models. *Journal of Open Innovation: Technology, Market, and Complexity,* 7(3), 173-196. https://doi.org/10.3390/joitmc7030173
- Soria-Barreto, K., Honores-Marin, G., Gutiérrez-Zepeda, P., & Gutiérrez-Rodríguez, J. (2017). Prior exposure and educational environment towards entrepreneurial intention. Journal of Technology Management & Innovation, 12(2), 45-58. https://doi.org/10.4067/S0718-27242017000200006
- Su, Y., Zhu, Z., Chen, J., Jin, Y., Wang, T., Lin, C. L., & Xu, D. (2021). Factors influencing entrepreneurial intention of university students in China: Integrating the perceived university support and theory of planned behavior. *Sustainability*, 13(8), 4519.
- Tessema Gerba, D. (2012). Impact of entrepreneurship education on entrepreneurial intentions of business and engineering students in Ethiopia. *African Journal of Economic and Management Studies*, 3(2), 258-277.
- The Star. (2017, May 7). *More student entrepreneurs by 2020*. https://www.thestar.com.my/news/education/2017/05/07/more-studententrepreneurs-by-2020/The Star Online.
- Uddin, M. R., & Bose, T. K. (2012). Determinants of entrepreneurial intention of business students in Bangladesh. *International Journal of Business and Management*, 7(24), 128-142. https://doi.org/10.5539/ijbm.v7n24p128
- Vega-Gómez, F. I., Miranda González, F. J., Chamorro Mera, A., & Pérez-Mayo, J. (2020). Antecedents of entrepreneurial skills and their influence on the entrepreneurial intention of academics. Sage Open, 10(2), 1-14. 2158244020927411. https://doi.org/10.1177/21582440209274
- Ward, A., Hernández-Sánchez, B., & Sánchez-García, J. C. (2019). Entrepreneurial intentions in students from a trans-national perspective. *Administrative Sciences*, 9(2), 37-521-14. https://doi.org/10.3390/admsci9020037
- Wiklund, J., Nikolaev, B., Shir, N., Foo, M.- D., & Bradley, S. (2019). Entrepreneurship and wellbeing: Past, present, and future. *Journal of Business Venturing*, 34(4), 579-588. https://doi.org/10.1016/j.jbusvent.2019.01.002
- Xiaowei, J. & Yonghong, S. (2015). Research article study on constructing an education platform for innovation and entrepreneurship of university student. *Research Journal* of Applied Sciences, Engineering and Technology, 9(10), 824-829. https://doi.org/10.19026/rjaset.9.2630
- Yamini, R., Soloveva, D., & Peng, X. (2022). What inspires social entrepreneurship? The role of prosocial motivation, intrinsic motivation, and gender in forming social entrepreneurial intention. *Entrepreneurship Research Journal*, 12(2), 71-105. 10.1515/erj-2019-0129
- Yushun, S., Zeren, Z., Jingwen, C., Yuanqing, J., Ting, W., Chien-Liang, L., & Danying, X. (2021).
 Factors influencing entrepreneurial intention of university students in China: Integrating the perceived university support and theory of planned behavior. *Sustainability*, 13(8), 4519. https://doi.org/10.3390/su13084519

Zhang, P., Wang, D. D., & Owen, C. L. (2015). A study of entrepreneurial intention of university students. *Entrepreneurship Research Journal*, 5(1), 61-82.