

Entrepreneurial Attributes and Entrepreneurial Intention among Hospitality Students in Malaysian Higher Education Institutions: An Educational Approach

Nur Azah Farhana Mohamed Fadzil¹, Zatul Iffah Mohd Fuza²,
Wan Nor Bayah Wan Kamarudin³

¹Faculty of Hotel and Tourism Management, Universiti Teknologi MARA, UiTM Puncak Alam, Selangor, Malaysia, ^{2,3}Faculty of Hotel and Tourism Management, Universiti Teknologi MARA, UiTM Dungun, Terengganu, Malaysia

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v12-i8/14478> DOI:10.6007/IJARBSS/v12-i8/14478

Published Date: 23 August 2022

Abstract

The effects of the COVID-19 pandemic on the employability of recent graduates is one of the primary worries expressed by academics. However, assessing the entrepreneurial qualities among undergraduate students seems like an initial effort that may enhance career opportunities and marketability. Given the significance of entrepreneurship to a nation's economic growth, it's crucial to begin instilling entrepreneurial values from a young age which can lead to the readiness to become an entrepreneur for employment after graduation. This research aims to explore the significance of entrepreneurial attributes on entrepreneurial intention among Malaysian hospitality students in their last year of study. This study adopted a quantitative method and conducted an online survey on 297 hospitality undergraduates from five (5) Malaysian public higher education institutions (PHEIs). The establishment and collection of self-completion questionnaires was followed by the usage of SPSS to conduct different inferential analyses. According to the findings, opportunity recognition was the most important entrepreneurial attribute for hospitality undergraduates' entrepreneurial intention. Concurrently, the data demonstrated that environmental influences have a substantial implication on students' entrepreneurial intentions. The findings reinforced entrepreneurial characteristics among hospitality students have a substantial effect on their aspiration to become entrepreneurs. Thus, this study may offer a feasible suggestion for the PHEIs and the hospitality sector on hospitality undergraduates' entrepreneurial behavior. Lastly, this study could also serve as a reference for managing the employability of hospitality graduates in the future.

Keywords: Entrepreneurial Attributes, Entrepreneurial Intention, Hospitality Undergraduates

Introduction

New forms of economic activity, societal growth, and a country's wealth are massively driven by entrepreneurial activities (Fu et al., 2019). As stated by Per Li et al. (2020), a country's revenue and employment are positively related to entrepreneurial businesses (Acs, 2006; Reynolds et al., 2002). Thus, entrepreneurship provides essential opportunities, which will eventually result in an increase in a country's per-capita income (Maria & Alexandrina, 2016). Entrepreneurship can generate more job opportunities (Wanhill, 2000) and can directly contribute to the growth of either a local or national economy (Andriotis, 2002). Besides encouraging healthy and eco-lifestyles (Shaw & Williams, 2004), entrepreneurship benefits the community in many ways (Kokkranikal & Morrison, 2002, as cited in Li et al., 2020). As a result, entrepreneurship has emerged as the most important factor that allows businesses to gain a competitive advantage and stand out from the crowd (Taskiran & Iyigun, 2019).

Today, entrepreneurship is a key driver of a country's socioeconomic success (Ezeuduji & Ntshangase, 2017). Thus, entrepreneurship research has been increasingly highlighted as a means of breaking the cycle of poverty and unemployment that is prevalent in developing economies. Most developing countries view entrepreneurship as an idea or a practical approach to achieving long-term economic development (Ibidunni et al., 2020). In Malaysia, there are twenty (20) local universities and over two hundred (200) private universities and colleges (MOE, 2018). This number has continued to grow in line with the country's aspiration to become a regional and world education hub (Hossain et al., 2018). A high unemployment rate among graduates is an indicator that more effective action should be taken. According to Dr. Maszlee Malik, the former Minister of Education Malaysia, findings from the Graduate Tracer Study System 2018 by the Malaysian Ministry of Education (MOE) showed over fifty-one-thousand (51,000) unemployed graduates, whereby nearly 60% are Bachelor's-degree graduates who are struggling to find a job even one year after graduating from university (Metro, 2019). Besides, one of the main current concerns is the impact of the COVID-19 pandemic. Lim (2020) discovered that, in accordance with Bank Negara Malaysia (BNM), the unemployment rate remained steady between 3.3% and 3.4% from 2016 to 2019. Nonetheless, during the COVID-19 pandemic this year, it is anticipated that Malaysia's unemployment rate will increase from 3.3% to 4%. This unpredictable situation has triggered the need for effective management in every sector to safeguard against the pandemic's negative impacts. Besides its high unemployment rate, Malaysia also has a significant scarcity of trained personnel, particularly in the hospitality sector, according to companies (Pusiran et al., 2020). Employers feel that despite spending 3–5 years acquiring a diploma or bachelor's degree in hospitality, many graduates lack the necessary experience, competence, and skill to satisfy the demands of the hospitality business (Malay Mail, 2020). Hence, some studies have investigated the employability of hospitality industry undergraduates in terms of qualifications, particularly working experience, participation in non-formal programmes, and their skills and abilities (Fraser, 2019; Tolkach & Tung, 2019; Kusumawardhana, 2020). Based on the findings by Hossain et al (2018), in Malaysia, having good grades did not ensure that undergraduates would get employed. Besides, the undergraduates themselves are not that interested in joining the hospitality industry. Ahmad et al (2014) found that out of 89 respondents made up of Malaysian undergraduates between 2008 and 2012, only 47.19% worked in the hospitality industry. This is because hospitality undergraduates in Malaysia have an unfavourable perception of hospitality sector

employment that require long working hours, low wages, and high mental and physical stress, resulting in their losing trust and interest in pursuing such a job (Ibrahim et al., 2020). Rae and Woodier-Harris (2013) argue that hospitality entrepreneurship education must be enhanced to increase the career options and employment prospects of graduates, whether by allowing them to establish their own careers as self-employed individuals or entrepreneurs, or by enhancing their long-term value as “entrepreneurial” employees.

Therefore, further research is necessary to emphasise the assessment of entrepreneurship education and its influence on entrepreneurship, or to empower students with the much-required “soft skills.” (Asimakopoulos et al., 2019). The hospitality and tourism industry’s future depends on producing high-quality students with strong entrepreneurial intentions (Tsai et al., 2016; Zhang et al., 2020). Consequently, it must be understood that education plays an essential part in establishing an entrepreneurial mindset among university graduates (Gurel et al., 2010, as cited in Zhang et al., 2020). Specifically, entrepreneurial attributes have a significant and direct impact on students’ entrepreneurial intentions (Mahfud et al., 2020). Furthermore, Zhang et al (2020) posits that entrepreneurial intention helps tourism and hospitality students to put their intents into actions, which subsequently leads to the establishment of additional employment possibilities and an economic boost (Altinay et al., 2012).

On the contrary, as employment is positively related to entrepreneurial businesses, relatively, it can create new job opportunities and reduce unemployment. It can be said that hospitality operators that have established enterprises are considered successful entrepreneurs. Misni et al (2020) stated that there is currently an inadequate supply of talent while the demand for jobs does not balance with the supply of talent due to low graduate employability, particularly in the hospitality industry. This scenario is a result of the low standard of higher education in Malaysia. Misni et al (2020) provided helpful tips for implementing a successful curriculum design in both private and public higher education institutions (HEIs), striking a balance between realistic and theoretical foundations. Sani (2019) also proposed that universities measure and specify the effectiveness of their existing initiatives and provide undergraduates with relevant skills and indispensable knowledge to thrive in the real working world. The Malaysia Board of Technologists (MBOT) also asserted that universities should produce undergraduates with complementary soft and hard skills, as they believe that the said skills are important for nurturing creativity, innovative, and entrepreneurial minds and producing excellent undergraduates (Hamiruce, 2018).

Recognising the importance of entrepreneurship in addressing employability issues, incorporating entrepreneurship education can be viewed as a practical solution for youth and undergraduate unemployment, as well as addressing the issue of low living standards (Ojiaku et al., 2018). Nevertheless, there is a disparity between demand and supply in the hospitality industry. Consequently, it is worthwhile to perform research to determine the significance of entrepreneurial characteristics in relation to post-graduation entrepreneurial intention among hospitality students. Thus, immediate actions are crucial to curb this problem, as it may not only affect undergraduates but also the industry, higher education institutions, and the nation as a whole.

Literature Review*Entrepreneurial Intention (EI)*

Entrepreneurial intention is adequately described as the purpose of a person to launch an original commercial endeavour at some unspecified period at some point (Thompson, 2009). This is the psychological condition that motivates a person's choice and effort to launch a venture (Karimi et al., 2014; Maresch et al., 2016). Meanwhile, Fayolle et al (2014) viewed entrepreneurial intention as the mindful state of a person that motivates action and guides the focus towards setting up a new business. In the behavioural and social sciences, the Theory of Planned Behaviour (TPB) has been extensively utilised in the area of entrepreneurship to clarify and foresee humans' intents and actions (Acheampong & Tweneboah-koduah, 2017; Henley et al., 2017). According to Usman and Yennita (2019), the literature shows a link between studies conducted using TPB in examining entrepreneurial intention, which indicates potential generalization. In addition, there is evidence of a beneficial association between the objective of entrepreneurship and the decision-making process. Therefore, entrepreneurship education for undergraduates is clearly required to simulate entrepreneurial success, which involves entrepreneurial intention and behaviour (Usman & Yennita, 2019). Meanwhile, Social Learning Theory (SLT) posits that humans are inherently social and enjoy interacting with other human beings. Above all, this theory emphasises that entrepreneurial intention can be manifested through the learning process in education (Bandura, 1986 as cited in Zhang et al., 2020).

Entrepreneurial Attributes

Entrepreneur attributes are regarded as the characteristics of an entrepreneur (Singh & Rahman, 2013; Ondiba & Matsui, 2019 as cited in Ntshangase & Ezeuduju, 2020). According to Hussain et al (2020), the current job market demands specific skillsets, including managerial and entrepreneurial skills, practical skills, essential entrepreneurial attributes, knowledge, the ability to work in teams, problem-solve, lead, communicate, socialise, apply analytical and scientific methods, and lifelong-learning skills.

The Relationship between Entrepreneurial Attributes and Entrepreneurial Intention

According to Muskat et al. (2019), undergraduates must be sufficiently equipped with entrepreneurial knowledge since this offers vast opportunities for students to learn about career choices and opportunities and helps them create and execute action plans to achieve career goals. However, many undergraduates lack entrepreneurial skills, so their career path after graduation becomes dim after leaving the institution (New Straits Times, 2019). Therefore, undergraduates should be very devoted to investing in gaining the information and abilities linked to being an entrepreneur that are offered in academic courses while simultaneously persuading themselves towards becoming entrepreneurs.

In short, equipping students with the indispensable skills of entrepreneurship will prove beneficial to them and the nation's economic growth (Grecu & Denes, 2017). Besides, entrepreneurship in hospitality should also be one of the main concerns, as university graduates seem to be more open to career paths that they can choose, which is becoming self-employed, apart from relying on employment by existing hotels or tourism centres (Aynalem et al., 2016). Hospitality entrepreneurship can also provide numerous benefits to individuals, the government, and the nation. Entrepreneurial attributes can be concluded to have a positive influence on entrepreneurial intention.

Cognitive factor (also called personal factors) refer to knowledge, expectations, and attitudes. In order to enhance student employment, it seems that focus should be placed on learning outcomes linked with soft skill development (Tang, 2019). The entrepreneurial intention among students is majorly influenced by empirical training. Such training allows students to recognise business opportunities through the maximisation of the elements of creativity and psychology, which will be beneficial in creating entrepreneurial intention among this group. Scholars have debated the variables of empirical training (Zhang et al., 2020). Past researchers have found that student creativity and psychological strengths have increased through the organisation of empirical training (Li & Liu, 2016). To be specific, governments as well as higher education institutions and training centres ought to collaboratively urge employers and industry players, who are major stakeholders, to actively and significantly contribute to the entrepreneurship training programmes in terms of educating and training future entrepreneurs among students (Puad, 2016). Zhang et al. (2020) revealed that theoretical knowledge is essential in improving the skills, knowledge, and attitudes of undergraduates. The findings stated that theoretical enhancement can be categorised under social learning theory (SLT) as a cognitive factor (personal factor). From this viewpoint, the mindset regarding entrepreneurship cannot be evaluated without taking into account the variety and quality of market and economic possibilities. It is also worth noting that organising entrepreneurship programmes can instil positive characteristics among students, encourage an entrepreneurial culture, and create an exciting learning environment (Daniel et al., 2017). Theoretical enhancement training provides professional knowledge that can help improve students' capability to identify opportunities. Developing a person's competence, such as positive psychological capital and a positive entrepreneurial attitude, is one of the advantages offered by theoretical enhancement and empirical training education (Zhang et al., 2020). Research from the past shows that universities should encourage students to take part in extracurricular activities like a practicum or internship, small business talks and discussions, and community service (Nwokolo, 2018).

Entrepreneurial behaviour factors are an individual's efforts to change or maintain a variety of situations (Ossorio, 2006, p. 49 as cited in Bergner, 2011). Creativity and risk-taking have been categorised under the behaviour factor. Based on the previous study, creativity represents a person's capacity to produce fresh ideas and invent new things, which are critical skills required to become an entrepreneur. Nadim and Singh (2011) agreed with this point of view and referred to entrepreneurs as people who take action on their innovative ideas (Zhang et al., 2020). A number of scholars have started to emphasise the impact of creativity on entrepreneurial intention in recent years (Shi et al., 2020). Additionally, as reviewed in past research, entrepreneurs must possess creativity attributes to discover and create new business possibilities (Grabowski & Kittelwegner, 2017, as cited in Zhang et al., 2020; Horng et al., 2020). Therefore, the economic stimulus of creativity should not be underestimated (Shi et al., 2020). In addition, risk-taking inclination has been described by Gürol and Atsan (2006) as an individual tendency, when facing risky circumstances, to take risks or avoid them. Dai et al (2014) pointed out that risk-taking, which is closely linked to entrepreneurial intention, appears to be a significant influence that motivates students to become entrepreneurs. It is essential to provide entrepreneurship training knowledge in order to comprehend how risk-taking and other behavioural traits influence decision-making capacity (Heuer & Kolvereid, 2014 as cited in Ferreira et al., 2016). Zhang et al (2020) reported that, according to Dai et al (2014), risk-taking is crucial to inspiring students to seek

for an entrepreneurial profession. In addition, Antoncic et al (2018) highlighted that risk-taking is an important characteristic in students who aim to pursue a profession in the field of entrepreneurship and build successful organisations (Antoncic et al., 2012; Gantar et al., 2013). Gurol and Atsan (2006) described risk-taking as an individual's tendency to display risk-taking or avoidance in high-risk situations. It is known that entrepreneurship is generally related to risk-taking. Since multiple risks are faced in business, entrepreneurs must always be prepared to face and handle these risks effectively (Brandstätter, 2011, as cited in Embi et al., 2019). In support of the above statement, entrepreneurs have a higher tendency to take risks in the name of making more profit than ordinary managers (Koh, 1996, as cited in Popescu et al., 2016). Again, Yoopetch (2020, as cited in Anderson et al., 2015) stated that risk-taking is part of the company-building business method.

Environmental factors influence social norms, community access, and influence on others. Based on the previous finding, opportunity recognition and social worthiness are the traits best categorised under environmental factors. Recognising opportunities is one of the most crucial components of entrepreneurship and a necessary first step in entrepreneurial activities. Opportunity identification is an ongoing entrepreneurial activity that unfolds across all phases of a business's lifetime: pre-launch, launch, and expansion (Song et al., 2017). As cited in Wang et al (2013); Adcroft et al (2004); Binks et al (2006) the modern business world demands graduates to recognise entrepreneurial opportunities, an essential part of entrepreneurial skills. As a result, current programmes and curricula in universities and colleges are now incorporating entrepreneurship education knowledge. Also, many factors, ranging from individual to external environmental factors, determine one's ability to recognise entrepreneurial opportunities (Wang et al., 2013). Some studies have mentioned increasing the employee's ability to recognise potential entrepreneurial opportunities in the environment via training and education (Wang et al., 2013; Ozgen & Baron, 2007). Besides, individuals could also increase their entrepreneurial opportunity recognition by expanding their respective networks and taking advantage of external knowledge via engagement with other practitioners, researchers, customers, competitors, and suppliers (Wang et al., 2013). Since the tourism and hospitality industry appears to be competitive, it is critical for industry players to continuously explore new and unique possibilities and chances, which, in turn, could boost the local economy, provide job opportunities, and encourage new entrepreneurs in the industry. According to Niammuad et al (2014), opportunity recognition also significantly enhances entrepreneurial potential and creates new products or services. In the interim, Tsai et al (2016) reported that entrepreneurial intention is largely affected by perceived opportunities. This statement is also supported by Cheng et al (2009), as quoted in Zhang et al (2020), where a successful entrepreneur should have the ability to find new opportunities in business and make full use of them to create fortunes and value. A similar finding was generated in a previous study, which found that self-fulfilment is one of the elements of social value (Bacq & Alt, 2018). This result signifies that entrepreneurship can be a medium for students with social value to explore and lean on their interests. Having social worth is vital for everyone who would like to invest in entrepreneurship, particularly in the tourism-and-hospitality industry, as this industry emphasises the need to engage with the society much more than any other field or industry. Academics posit that people with a strong perception of social worth consider sharing economic platforms as more beneficial to the common good and are more inclined to develop trusted ties with communities (Barnes and Mattsson, 2017; Wang et al., 2019b cited in Davlembayeva et al., 2020). To sum up,

having social worth and social support is vital for everyone who would like to invest in entrepreneurship, particularly in the tourism-and-hospitality industry, as this industry emphasises the need to engage well with society more than any other field or industry.

Therefore, as per the literature review described previously and the claims stated here, the hypotheses are as follows:

1. Hypothesis 1 (H1): There is a substantial correlation between Cognitive factors and Entrepreneurial Intention.
2. Hypothesis 2 (H2): There is a substantial correlation between Behavioural factors and Entrepreneurial Intention.
3. Hypothesis 3 (H3): There is a substantial correlation between Environmental factors and Entrepreneurial Intention.

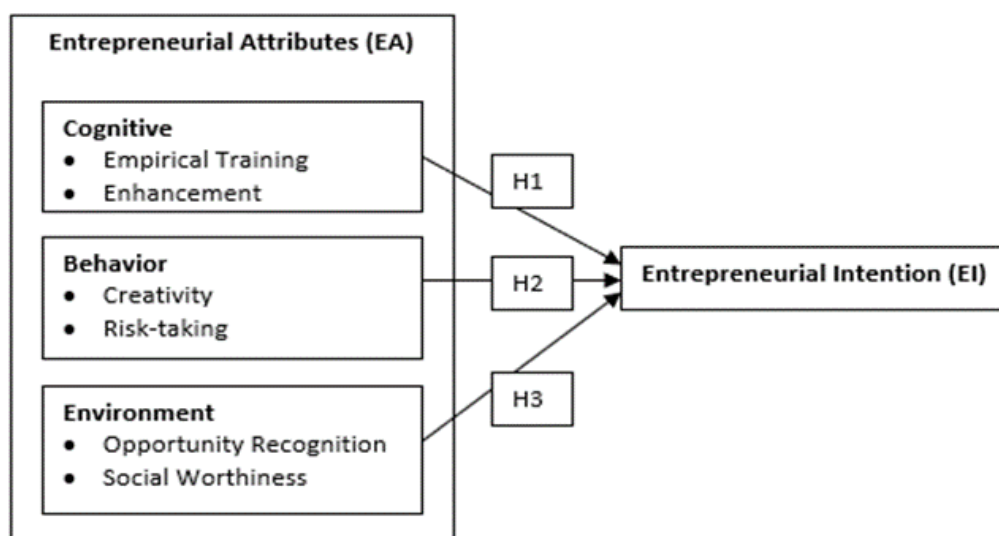


Figure 1: The Study Framework

Figure 1 shows the framework for this research. According to the current literature that has been examined and addressed in the preceding sections, the primary purpose of this research is to evaluate the entrepreneurial traits and intentions of students in Malaysia in the hospitality industry. Thus, Figure 1 above shows this study's proposed research framework. These variables were chosen since they have been the ones that have received major attention in current research studies conducted in the hospitality-entrepreneur field worldwide. This framework was developed based on Social Learning Theory (SLT) founded by Bandura (1977) as cited in Harinie et al (2017); Ajzen's (1991) Theory of Planned Behaviour (TPB). The framework illustrates the Entrepreneurial Attributes, which comprise (i) cognitive, (ii) behavioural, and (iii) environmental dimensions with respective elements. Furthermore, Entrepreneurial Intention is presented in the framework as the dependent variable of this study. A previous study conducted by Usman and Yennita (2019) noted that various scholars used TPB in examining entrepreneurial intention, which indicated potential generalisation. In addition, there is evidence of a beneficial association between the objective of entrepreneurship and the decision-making process.

Methodology

This research applied a quantitative method by means of a survey approach. SPSS was utilised to process and calculate the data. A simple random sampling technique was employed among each student in Malaysian HEIs to give each an equal chance of becoming

a survey participant. G*Power was applied to estimate the appropriate sample size. When there are six predictors, the suggested model needs a minimum of 98 samples to achieve a power of 0.80. Yet, the number of obtained data is 297; hence, a power of approximately 0.99 with a medium effect size was reached. Consequently, the sample size obtained exceeds the minimal requirement. This research used a Google Form Link survey administered online in order to reach a total of 297 full-time hospitality students from five Malaysian PHEIs. The constructs and items developed from previous studies from the work of Zhang et al (2020) were adapted in the current study. The adapted instrument is made up of 29 items and 4 constructs that have been pilot tested and show acceptable reliability results. The Cronbach's Alpha values of all variables range from training (0.892), enhancement (0.884), creativity (0.893), risk-taking (0.786), opportunity recognition (0.920), to social worthiness (0.918). Given that, alpha values above 0.70 normally indicate a reliable set of items. The study of all variables demonstrated a high level of reliability. It is possible to draw the conclusion that the measurements in this study were acceptable, valid, and reliable in accordance with Sekaran and Bougie (2013), and that the internal study consistency was acceptable in accordance with Tay and Jebb (2017), because all of the measurements in this study met the minimal requirements for this analysis (Cronbach's Alpha >.70).

Findings

The sample for this research consisted of 297 full-time final-year hospitality undergraduates from 5 PHEIs in Malaysia. Respondents' demographic information of the sample (N = 297) showed the frequency and percentage of males (65; 21.9%) and females (232; 78.1%). The age among hospitality undergraduates indicated that most were between 18-20 years old (72; 24.2%), 21-23 years old (160; 53.9%) and 24 years old and above (65; 21.9%). The modes of programme were diploma (86 students; 29.0%) and degree (211 students; 71.0%). There were 90 respondents (30.3%) who participated in the university's entrepreneurship club, while 207 respondents (69.7%) were not involved. Furthermore, respondents that had working experience were 201 (67.7%), while those with no working experience were 96 respondents (32.3%). Those respondents that had an entrepreneurial family background were 140 (47.1%), while 157 respondents had none (52.9%).

Table 1
Demographic Characteristics of Participants

Demographic Variables	Categories	Frequency	Percent	
Gender	Male / Female	65/232	21.9%	-
Age	18 – 20/ 21 – 23/ 24 and above	72/ 160/ 65	24.2%	-
			53.9%	-
Program Mode	Diploma/Degree	86/211	29.0%	-
Hospitality Programme	All hospitality programme	297	100%	
University affiliation	Universiti Malaysia Sabah (UMS)/ Universiti Putra Malaysia (UPM)/ Universiti Kelantan (UMK)/ Universiti Utara Malaysia (UUM)/ Universiti Teknologi MARA (UiTM)	28/ 18/ 18/ 16/ 217	9.4% - 6.1% - 6.1% - 5.4% - 73.1%	

The factor analysis was done to simplify the data, for example, by lowering the number of variables in regression models. It represents how effectively the instrument's results are reflective of the theoretical construct on Entrepreneurial attributes dimensions (Cognitive factor, Behavioural factor, and Environmental factor). All items measuring Cognitive Factor: Empirical Training were loaded properly under Factor 2. This was the same with all items measuring Cognitive Factor: Theoretical Enhancement, which were loaded properly under Factor 2. All Behavioural Factor: Creativity-measuring items were loaded properly under Factor 5. All items measuring Behavioural Factor: Risk-Taking were loaded properly under Factor 6, but two items of risk-taking were excluded as they scored a load less than 0.5, which should be removed since the suppressing factor loading value was 0.5. Items measuring Environmental Factor: Opportunity Recognition were loaded properly under Factor 5. Lastly, all items measuring Environmental Factor: Social Worthiness were loaded properly under Factor 3.

Table 2

An Analysis between Entrepreneurial Attributes and Entrepreneurial Intention

Predictors		R ²	Adj.R ²	F	Sig. (P-Value)	β
Dependent Variable:	Entrepreneurial Intention (EI)					
a)	Training	.113	.110	37.559	.000***	.336
b)	Enhancement	.101	.098	33.250	.000***	.318
c)	Creativity	.258	.255	102.370	.000***	.508
d)	Risk-Taking	.139	.136	47.732	.000***	.373
e)	Opportunity Recognition	.389	.387	187.73	.000***	.624
f)	Social Worthiness	.150	.147	52.135	.000***	.388

Note: *p < .05, **p < .01, ***p < .001

Table 2 shows that the regression analysis was performed to analyse the significant predictors of Entrepreneurial Intention. Cognitive factors that comprise the Training and Enhancement constructs accounted for 11.3% and 10.1% of the Entrepreneurial intention variance, respectively ($R^2 = .113$; F-value = 37.559), and if the significant values are $p < .05$, the Training construct can reliably predict Entrepreneurial Intention with high accuracy. The researchers focused on Standardised Coefficients β because the Likert scale was used in this study, revealing a positive ($\beta = .336$) relationship in which Training significantly and positively influenced Entrepreneurial Intention. The Enhancement construct was another dimension of the cognitive factor, accounting for 10.1% of the variance in EI ($R^2 = .101$; F-value = 33.250), and if the significant values are $p < .05$, the Enhancement construct can reliably predict EI. The findings revealed a significant ($\beta = .318$) positive relationship in which Enhancement had a significant and positive influence on Entrepreneurial Intention. It can be concluded that the Cognitive factor represented as H1 is strongly supported.

The Creativity construct explained 25.8% of the variance in Entrepreneurial Intention ($R^2 = .258$; F-value = 102.370), and if the significant values are $p < .05$, the Creativity construct may predict EI with reliability. For the Standardised Coefficients β , the result showed a positive ($\beta = .508$) relationship in which Creativity significantly and positively influenced Entrepreneurial Intention. Meanwhile, the Risk-Taking construct explained 13.9% of the variance in EI ($R^2 =$

.139; F-value = 47.732), and if the significant values are $p < .05$, the Risk-Taking construct can reliably predict EI. For the Standardised Coefficients β , the result showed a positive ($\beta = .373$) relationship in which Risk-Taking significantly and positively influenced Entrepreneurial Intention. It can be concluded that the Behavioural factor for H2 is strongly supported.

The Opportunity Recognition construct explained 38.9% of the variance in EI ($R^2 = .389$; F-value = 187.730), and if the significant values are $p < .05$, the Opportunity Recognition construct can reliably predict EI. For the Standardised Coefficients β , the result showed a positive ($\beta = .624$) relationship in which Opportunity Recognition significantly and positively influenced Entrepreneurial Intention. It can be concluded that H5 is strongly supported. Besides, the Social Worthiness construct explained 15.0% of the variance in EI ($R^2 = .150$; F-value = 52.135), and if the significant values are $p < .05$, the Social Worthiness construct can reliably predict EI. For the Standardised Coefficients β , the result showed a positive ($\beta = .388$) relationship in which Social Worthiness significantly and positively influenced Entrepreneurial Intention. It can be concluded that the Environmental factor for H3 is strongly supported.

What is interesting in this data is that Entrepreneurial Attributes were found to significantly influence Entrepreneurial Intention. Therefore, the researchers rejected the null hypothesis and accepted the alternate hypotheses H1 to H3, which are strongly supported.

Table 3

Result of hypothesis testing

	Hypothesis path	Sig. (P-Value)	Decision
H1	Cognitive factors -> Entrepreneurial Intention	.000***	Supported
H2	Behaviour factors -> Entrepreneurial Intention	.000***	Supported
H3	Environmental factors -> Entrepreneurial Intention	.000***	Supported

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Discussion and Conclusion

The youth are the future generation's successors. In this regard, the education system in higher education institutions will affect their personality and values to some extent. Given the significance of entrepreneurship to a nation's economic growth, it's crucial to begin instilling entrepreneurial values from a young age. In light of the hospitality undergraduates' entrepreneurial attributes and their entrepreneurial intention, the decisions for hypotheses tested using SPSS analyses are shown in (Table 3). The study offered insight into the direct links between the experimentally verified latent variables (H1 to H3). The results demonstrate that the correlations are statistically substantial ($p < 0.001$). Consequently, the results of this investigation indicate that H1, H2, and H3 are supported. This suggests that opportunity awareness was the most important entrepreneurial characteristic among hospitality students with an entrepreneurial mindset. Moreover, the data reveals that environmental influences have a considerable impact on students' entrepreneurial intentions. This study may investigate the extent to which entrepreneurial traits among hospitality students have a significant influence on their entrepreneurial ambitions.

In accordance with the regression analysis between Entrepreneurial Attributes and Entrepreneurial Intention, it can be stated that the greater the absolute value of the beta coefficient (β), the stronger the influence. Besides, from the analysis performed, it is suggested that the environmental factor (opportunity recognition) has the highest value of beta coefficient (β). Furthermore, the higher the F value, the better the model is shown in the environmental factor (opportunity recognition). This research experimentally assessed the influence of entrepreneurial attributes on the entrepreneurial intentions of Malaysian undergraduates in their last year of full-time hospitality studies. The study's result revealed that opportunity recognition prevailed as the most significant entrepreneurial attribute in the variable of environmental factors towards the hospitality undergraduates' entrepreneurial intention. These findings reinforced evidence by Zhang (2020) and Abuzhuri and Hashim (2017) that a successful entrepreneur should be able to discover new opportunities in a company and leverage them to their full potential in order to create fortunes and value. Moreover, the capacity to recognise opportunities may have a motivating influence on people's aspirations to pursue entrepreneurship as a career path (Van Gelderen et al., 2008 as mentioned in Abuzhuri & Hashim, 2017). In spite of this, Kruger (2000) suggested that recognising an opportunity is an intentional activity. Sobakinova et al. (2019) elaborated in their research that when individuals feel that they possess the required expertise, they are more inclined to recognise opportunities.

Accordingly, by recognising the significance of the aforementioned traits, students must learn specialised abilities, i.e., in addition to being sufficiently qualified to work in the sector, they should also be able to create new business prospects that utilise their attributes. In light of the entrepreneurial intention among hospitality undergraduates in Malaysia, the study pertaining to entrepreneurship education has attracted the attention of various nations that have shown an interest in adopting it. This is because it promotes an entrepreneurial culture by helping to build a business attitude and providing the required knowledge and skills. In conclusion, by identifying the significance of entrepreneurial attributes towards hospitality students' entrepreneurial intentions, it may help provide practical recommendations pertaining to the hospitality undergraduates' behaviour for the further action of PHEIs and the hospitality industry. Besides that, this study provides precedent from the COVID-19 pandemic setting and the students' responses acknowledge the given pandemic environment. It may provide a greater insight into the entrepreneurial intentions of hospitality students. This research extends entrepreneurship literature by investigating entrepreneurial attributes in the framework of HEIs by utilising pedagogical education. Correspondingly, this research discovered that entrepreneurial attributes are a major predictor of undergraduate students' entrepreneurial intentions. Consequent to the findings, the research objectives were achieved, resulting in a better knowledge of students' entrepreneurial intentions, which may lead to the preparedness to become an entrepreneur in lieu of seeking employment after graduation in the Malaysian setting.

Acknowledgments

This study is funded by the Fundamental Research Grant Scheme (FRGS) from the Ministry of Higher Education Malaysia (Sponsorship No. FRGS/1/2019/SS03/UITM/03/6). We would like to express our appreciation for the opportunity provided by the final year hospitality students who participated in the research.

Corresponding Author

Zatul Iffah Mohd Fuza. Faculty of Hotel and Tourism Management Universiti Teknologi MARA, UiTM Dungun, Terengganu, Malaysia.

Email: zatul710@uitm.edu.my

References

- Abuzhuri, N. M., & Hashim, N. B. (2017). The role of entrepreneurial opportunity recognition on relationship among entrepreneurship education and entrepreneurial career option. *European Journal of Business and Management*, 9(30), 99–106.
- Acheampong, G., & Tweneboah-koduah, E. Y. (2017). Does past failure inhibit future entrepreneurial intent? Evidence from Ghana. *Journal of Small Business and Enterprise Development*, 25(5), 849–863. <https://doi.org/10.1108/JSBED-03-2017-0128>
- Ahmad, R., Rashid, B., & Shariff, N. M. (2014). Malaysian hospitality industry: graduates' justification for leaving the industry. *International Journal of Management Studies*, 21(2), 1–20.
- Ajzen, I. (1991). *The Theory of Planned Behavior*. 50(2), 179–211. [https://doi.org/doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/doi.org/10.1016/0749-5978(91)90020-T)
- Albert Bandura. (1977). Social learning theory, a book review. *Group & Organization Studies*, 2(3), 384–388.
- Antoncic, J. A., Antoncic, B., Gantar, M., Hisrich, R. D., Marks, L. J., Bachkirov, A. A., Li, Z., Polzin, P., Borges, J. L., Coelho, A., & Kakkonen, M.-L. (2018). Risk-Taking Propensity and Entrepreneurship : The Role of Power Distance. *Enterprising Culture*, 26(1), 1–26. <https://doi.org/10.1142/S0218495818500012>
- Asimakopoulos, G., Hernández, V., & Miguel, J. P. (2019). Entrepreneurial Intention of Engineering Students : The Role of Social Norms and Entrepreneurial Self-Efficacy. *Sustainability*, 11(16), 4314. <https://doi.org/10.3390/su11164314>
- Aynalem, S., Birhanu, K., & Tesefay, S. (2016). Employment Opportunities and Challenges in Tourism and Hospitality Sectors. *Journal of Tourism & Hospitality*, 5(6). <https://doi.org/10.4172/2167-0269.1000257>
- Bacq, S., & Alt, E. (2018). Feeling capable and valued: A prosocial perspective on the link between empathy and social entrepreneurial intentions. *Journal of Business Venturing*, 33(3), 333–350. <https://doi.org/10.1016/j.jbusvent.2018.01.004>
- Bergner, R. M. (2011). What is behavior? And so what? *New Ideas in Psychology*, 29(2), 147–155. <https://doi.org/10.1016/j.newideapsych.2010.08.001>
- Che Embi, N. A., Jaiyeoba, H. B., & Yussof, S. A. (2019). The effects of students' entrepreneurial characteristics on their propensity to become entrepreneurs in Malaysia. *Education and Training*, 61(7–8), 1020–1037. <https://doi.org/10.1108/ET-11-2018-0229>
- Dai, L., Maksimov, V., Anitra, B., & Fernhaber, S. A. (2014). Entrepreneurial orientation and international scope : The differential roles of innovativeness, proactiveness, and risk-taking. *Journal of Business Venturing*, 29(4), 511–524. <https://doi.org/10.1016/j.jbusvent.2013.07.004>
- Daniel, A. D., Costa, R. A., Pita, M., & Costa, C. (2017). Tourism Education: What about entrepreneurial skills? *Journal of Hospitality and Tourism Management*, 30, 65–72. <https://doi.org/10.1016/j.jhtm.2017.01.002>
- Davlembayeva, D., Papagiannidis, S., & Alamanos, E. (2020). Technological Forecasting & Social Change Sharing economy : Studying the social and psychological factors and the

- outcomes of social exchange. *Technological Forecasting & Social Change*, 158(March), 120143. <https://doi.org/10.1016/j.techfore.2020.120143>
- Ezeuduji, I. O., & Ntshangase, S. D. (2017). Entrepreneurial Intention: South African Youth's Willingness to Start Tourism Businesses. *Acta Universitatis Danubius: Oeconomica*, 13(5), 48–58. <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=126203870&site=ehost-live>
- Fayolle, A., Liñán, F., & Moriano, J. A. (2014). Beyond entrepreneurial intentions: values and motivations in entrepreneurship. *International Entrepreneurship and Management Journal*, 10(4), 679–689. <https://doi.org/10.1007/s11365-014-0306-7>
- Ferreira, J. J., Fernandes, C. I., & Ratten, V. (2016). The Influence of Entrepreneurship Education on Entrepreneurial Intentions. *Entrepreneurial Universities*, 19–34. https://doi.org/10.1007/978-3-319-47949-1_2
- Fraser, B. (2019). From Hospitality Classrooms to Successful Careers: A Current Appraisal of Australian International Hotel Requirements. *Journal of Hospitality and Tourism Education*, 1–21. <https://doi.org/10.1080/10963758.2019.1688161>
- Fu, H., Okumus, F., Wu, K., & Köseoglu, M. A. (2019). The entrepreneurship research in hospitality and tourism. *International Journal of Hospitality Management*, 78(September 2018), 1–12. <https://doi.org/10.1016/j.ijhm.2018.10.005>
- Greco, V., & Denes, C. (2017). Benefits of entrepreneurship education and training for engineering students. *MATEC Web of Conferences*, 121, 1–7. <https://doi.org/10.1051/mateconf/201712112007>
- Gürol, Y., & Atsan, N. (2006). Entrepreneurial characteristics amongst university students : Some insights for entrepreneurship education and training in Turkey. *Education and Training*, 48(1), 25–38. <https://doi.org/10.1108/00400910610645716>
- Hamiruce. (2018). How Do Universities Welcome Industry 4.0? *Malaysia Board of Technologists*. <https://www.mbot.org.my/MBOT/files/13/136c4e63-8f2f-4d98-9951-69c96316ca46.pdf>
- Harian Metro. (2019). *60 peratus siswazah menganggur lepas pengajian | Harian Metro*. <https://www.hmetro.com.my/mutakhir/2019/10/507317/60-peratus-siswazah-menganggur-lepas-pengajian>
- Harinie, L. T., Sudiro, A., Rahayu, M., & Fatchan, A. (2017). Study of the Bandura's Social Cognitive Learning Theory for the Entrepreneurship Learning Process. *Social Sciences*, 6(1), 1–6. <https://doi.org/10.11648/j.ss.20170601.11>
- Henley, A., Contreras, F., Espinosa, J. C., Barbosa, D., Henley, A., Contreras, F., Espinosa, J. C., Barbosa, D., Henley, A., Contreras, F., Espinosa, J. C., & Barbosa, D. (2017). Entrepreneurial intentions of Colombian business students. *International Journal of Entrepreneurial Behavior & Research*, 23(6), 1017–1032. <https://doi.org/10.1108/IJEBr-01-2017-0031>
- Hong, J., Hsiao, H., Liu, C., & Chou, S. (2020). Learning innovative entrepreneurship : Developing an influential curriculum for undergraduate hospitality students. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 24, 100–109. <https://doi.org/10.1016/j.jhlste.2020.100289>
- Hossain, M. I., Yagamaran, K. S. A., Afrin, T., Limon, N., Nasiruzzaman, M., & Karim, A. M. (2018). Factors Influencing Unemployment among Fresh Graduates: A Case Study in Klang Valley, Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 8(9), 1494–1507. <https://doi.org/10.6007/ijarbss/v8-i9/4859>

- Hussain, K., Ragavan, N. A., Ming, V. T. T., & Loong, C. L. K. (2020). Conclusion: how is Malaysian hospitality and tourism education working with industry? *Worldwide Hospitality and Tourism Themes, ahead-of-p*(ahead-of-print).
<https://doi.org/10.1108/whatt-12-2019-0084>
- Ibidunni, A. S., Mozie, D., & Ayeni, A. W. A. A. (2020). Entrepreneurial characteristics amongst university students: insights for understanding entrepreneurial intentions amongst youths in a developing economy. *Education and Training*. <https://doi.org/10.1108/ET-09-2019-0204>
- Ibrahim, M. Z. F., Saber, J. M., Mustapha, R. I. P. R., Othman, N., & Salim, A. (2020). Factor affecting university undergraduates students perception's toward career enhancement in hospitality industry: a case of UiTM Penang. *Journal of Social Sciences and Humanities, 4*(2014), 19–26. <http://ejssh.uitm.edu.my>
- Iuliana, C., Maria, C., Iordache, & Alexandrina, S. (2016). Entrepreneurship In The Tourism And Hospitality Industry. *Management Strategies Journal, 31*(1), 264–275. <https://scholar.google.com/scholar?um=1&ie=UTF-8&lr&q=related:VvxRNpWzGsGJuM:scholar.google.com/>
- Karimi, S., Biemans, H. J. A., Lans, T., Chizari, M., Mulder, M., & Building. (2014). Iranian Students ' Entrepreneurial Intentions and Opportunity Identification. *Journal Of Small Business Management, 54*, 187–209. <https://doi.org/10.1111/jsbm.12137>
- Kusumawardhana, I. (2020). *Curriculum Development in Hospitality and Tourism Higher Education: challenges and gaps*. <https://doi.org/10.4108/eai.13-2-2019.2286505>
- Li, Y., Huang, S. (Sam), & Song, L. (2020). Opportunity and necessity entrepreneurship in the hospitality sector: Examining the institutional environment influences. *Tourism Management Perspectives, 34*(October 2019).
<https://doi.org/10.1016/j.tmp.2020.100665>
- Li, Y. Q., & Liu, C. H. (2016). How to establish a creative atmosphere in tourism and hospitality education in the context of China. *Journal of Hospitality, Leisure, Sport and Tourism Education, 18*, 9–20. <https://doi.org/10.1016/j.jhlste.2015.11.001>
- Lim, J. (2020, April 3). Malaysia unemployment rate expected to hit 4% this year due to Covid-19. *Theedgemarkets.Com*. <https://www.theedgemarkets.com/article/malaysia-unemployment-rate-expected-hit-4-year-due-covid19>
- Mahfud, T., Triyono, M. B., Sudira, P., & Mulyani, Y. (2020). The influence of social capital and entrepreneurial attitude orientation on entrepreneurial intentions: the mediating role of psychological capital. *European Research on Management and Business Economics, 26*(1), 33–39. <https://doi.org/10.1016/j.iedeen.2019.12.005>
- Malay Mail. (2020, January 13). Whose problem is graduate unemployment in Malaysia? Experts weigh in. *Bernama*.
<https://www.malaymail.com/news/malaysia/2020/01/13/whose-problem-is-graduate-unemployment-in-malaysia-experts-weigh-in/1827627>
- Maresch, D., Harms, R., Kailer, N., & Wimmer-wurm, B. (2016). The impact of entrepreneurship education on the entrepreneurial intention of students in science and engineering versus business studies university programs. *Technological Forecasting & Social Change, 104*, 172–179.
<https://doi.org/10.1016/j.techfore.2015.11.006>
- Misni, F., Nik Mahmood, N. H., & Jamil, R. (2020). The effect of curriculum design on the employability competency of Malaysian graduates. *Management Science Letters, 10*(4), 909–914. <https://doi.org/10.5267/j.msl.2019.10.005>

- MOE. (2018). Laporan Kajian Pengesanan Graduan 2018. *Kementerian Pendidikan Malaysia Putrajaya*, 101. <https://www.moe.gov.my/en/muat-turun/laporan-dan-statistik/pendidikan-tinggi/laporan-kajian-pengesanan-graduan/2018-11>
- Muskat, B., Lockstone-Binney, L., Ong, F., & Andresen, M. (2019). Talent in hospitality entrepreneurship: A conceptualization and research agenda. *International Journal of Contemporary Hospitality Management*, 31(10), 3899–3918. <https://doi.org/10.1108/IJCHM-10-2018-0867>
- Niammuad, D., Napompech, K., & Suwanmaneepong, S. (2014). The mediating effect of opportunity recognition on incubated - Entrepreneurial innovation. *International Journal of Innovation Management*, 18(3), 1440005. <https://doi.org/10.1142/S1363919614400052>
- Ntshangase, S. D., & Ezeuduju, I. O. (2020). Profiling entrepreneurial attributes based on the level of formal education: The case of Mtubatuba Local Municipality in South Africa. *African Journal of Hospitality Tourism and Leisure*, 9(1). <https://doi.org/10.30892/gtg.31302-525>
- Nwokolo, E. E. (2018). Curbing unemployment challenges among university graduates through entrepreneurship education and training in South Africa. *Journal of Social Sciences*, 54(1–3), 22–30. <https://doi.org/10.31901/24566756.2018/54.1-3.2221>
- Ojiaku, O. C., Nkamnebe, A. D., & Nwaizugbo, I. C. (2018). Determinants of entrepreneurial intentions among young graduates: perspectives of push-pull-mooring model. *Journal of Global Entrepreneurship Research*, 8(24), 1–17. <https://doi.org/10.1186/s40497-018-0109-3>
- Popescu, C. C., Bostan, I., Robu, I., Maxim, A., & Maxim, L. D. (2016). An Analysis of the Determinants of Entrepreneurial Intentions among Students : A Romanian Case Study. *Sustainability*, 8(8), 771–793. <https://doi.org/10.3390/su8080771>
- Puad, M. H. M. (2016). The role of employability skills training programs in the workforce of Malaysia. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, 77(1-A(E)), No-Specified. <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=psyc13a&NEWS=N&AN=2016-26522-201>
- Pusiran, A. K., Janin, Y., Ismail, S., & Dalinting, L. J. (2020). Hospitality internship program insights. *Worldwide Hospitality and Tourism Themes*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/whatt-12-2019-0079>
- Rae, D., & Woodier-Harris, N. R. (2013). How does enterprise and entrepreneurship education influence postgraduate students' career intentions in the New Era economy? *Education and Training*, 55(8–9), 926–948. <https://doi.org/10.1108/ET-07-2013-0095>
- Sani, R. (2019). Are our students ready for the IR4.0 workplace? *New Straits Times*. <https://www.nst.com.my/education/2019/10/526409/are-our-students-ready-ir40-workplace>
- Sekaran, U., & Bougie, R. (2013). *Research methods for business: A skill building approach*.
- Shi, Y., Yuan, T., Bell, R., & Wang, J. (2020). Investigating the Relationship Between Creativity and Entrepreneurial Intention : The Moderating Role of Creativity in the Theory of Planned Behavior. *Frontiers in Psychology*, 11(June), 1–12. <https://doi.org/10.3389/fpsyg.2020.01209>

- Sitheravellu, C. S. (2019, November 25). Graduates losing out due to skills mismatch. *New Straits Times*. <https://www.nst.com.my/opinion/letters/2019/11/542069/graduates-losing-out-due-skills-mismatch>
- Sobakinova, D., Zhou, Y., & Aureaar, K. A. A. (2019). Self-efficacy, opportunity recognition and business ideas. *ACM International Conference Proceeding Series*, 51–56. <https://doi.org/10.1145/3345035.3345079>
- Song, G., Min, S., Lee, S., & Seo, Y. (2017). The effects of network reliance on opportunity recognition: A moderated mediation model of knowledge acquisition and entrepreneurial orientation. *Technological Forecasting & Social Change*, 117(C), 98–107. <https://doi.org/10.1016/j.techfore.2017.01.004>
- Tang, K. N. (2019). Innovate higher education to enhance graduate employability. *Pertanika Journal of Social Sciences and Humanities*, 27(3), 1727–1738. <https://doi.org/10.4324/9780429058899>
- Tay, L., & Jebb, A. T. (2017). Scale Development. *The SAGE Encyclopedia of Industrial and Organizational Psychology(2nd Ed.)*, July. https://www.researchgate.net/publication/305462834_Scale_%0ADevelopment
- Tolkach, D., & Tung, V. W. S. (2019). Tracing hospitality and tourism graduates' career mobility. *International Journal of Contemporary Hospitality Management*, 31(10), 4170–4187. <https://doi.org/10.1108/IJCHM-10-2018-0857>
- Tsai, K., Chang, H., & Peng, C.-Y. (2016). Refining the linkage between perceived capability and entrepreneurial intention: roles of perceived opportunity, fear of failure, and gender. *International Entrepreneurship and Management Journal*, 12(4), 1127–1145. <https://doi.org/10.1007/s11365-016-0383-x>
- Usman, B., & Yennita. (2019). Understanding the entrepreneurial intention among international students in Turkey. *Journal of Global Entrepreneurship Research*, 9(1). <https://doi.org/10.1186/s40497-018-0136-0>
- Wang, Y., Ellinger, A. D., & Wu, Y. J. (2013). *Entrepreneurial opportunity recognition: an empirical study of R & D personnel*. 51(2), 248–266. <https://doi.org/10.1108/00251741311301803>
- Yoopetch, C. (2020). Women empowerment , attitude toward risk-taking and entrepreneurial intention in the hospitality industry. *International Journal of Culture, Tourism and Hospitality Research*, July. <https://doi.org/10.1108/IJCTHR-01-2020-0016>
- Zhang, S., Li, Y., Liu, C., & Ruan, W. (2020). Critical factors identification and prediction of tourism and hospitality students ' entrepreneurial intention. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 26(May 2019), 100234. <https://doi.org/10.1016/j.jhlste.2019.100234>