

## Unveiling Entrepreneurial Intentions: Empirical Evidence of the Iban Community in Kuching, Sarawak

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### Abstract

Entrepreneurial intention plays a key role in entrepreneurship. It gives the desire to start a firm or leads to the creation of new firms. Over the years, scholars have explained it using personality traits, cognitive models and, to a lesser extent, the role of social environment among graduates, policymakers, and potentials. However entrepreneurship is found to be significant for the development and well-being of society, a paradigm shift among Iban community is needed to stimulate economic growth and overall development in Sarawak. since it produces jobs and shapes innovativeness. We test our hypotheses on a sample of 100 Iban community from Kuching, Sarawak using partial least squares (PLS). Our results confirm that family upbringing positively influences the entrepreneurial information obtained in social system, which in turn, positively impacts entrepreneurial intention. We also found that entrepreneurial self-efficacy is activated in the context of Iban community, enhancing the influence of this information on entrepreneurial intention.

**Keywords:** Entrepreneurial Intention, Need for Achievement, Risk Taking Propensity, Innovativeness, Family Upbringing, Entrepreneurial Self-Efficacy

### Introduction

Entrepreneurship has the potential to drive economic and social development, improve living standards, and create a sustainable future for local entrepreneurs and their

communities (Chang & Park, 2018; Su et al., 2021). It can lead to job creation, which reduces unemployment rates and provides individuals with income opportunities (Lee & Rodriguez-Pose, 2020). Additionally, entrepreneurship has the potential to generate higher incomes for entrepreneurs, allowing them to improve their financial well-being (Lee & Rodriguez-Pose, 2020). Moreover, entrepreneurship can reduce poverty by fostering economic growth and diversification (Damoah, 2020). It also promotes innovation, which can lead to the development of new products, services, and technologies that benefit the local community (Damoah, 2020). Entrepreneurship education is crucial in supporting local entrepreneurs by providing them with the necessary knowledge and skills to succeed in their ventures (Su et al., 2021).

Although local entrepreneurs have many benefits, becoming an entrepreneur takes time. Various factors are involved in decision-making that can lead someone to become an entrepreneur. One crucial factor is entrepreneurship education, which positively affects entrepreneurial intention (Hong et al., 2020). Specifically, higher levels of entrepreneurship education can strengthen individuals' self-efficacy in entrepreneurial decision-making, influencing their intention to become entrepreneurs (Hong et al., 2020). Self-efficacy in entrepreneurial decision-making mediates between entrepreneurship education and entrepreneurial intention (Hong et al., 2020).

Additionally, self-efficacy in entrepreneurial decision-making has been found to predict the formation of entrepreneurial intention (Hong et al., 2020). Other factors influencing entrepreneurial decision-making include career exploration, the development of career decision-making skills, and encouragement from educational institutions (Hong et al., 2020). It is important to note that the decision-making process in entrepreneurship is complex and can involve different approaches, such as causation, effectuation, and enactment (Rapp & Olbrich, 2020). Furthermore, the decision-making process in employee entrepreneurship is dynamic and interactive, involving mutual decisions between lead entrepreneurs and prospective partners (Ye et al., 2021).

The research study on indigenous entrepreneurship has mainly focused on the Malay and Chinese communities. However, more attention needs to be paid to the Iban community. More studies in the Iban entrepreneurs' community are needed to be made aware of whether entrepreneurs from the Iban community also take the opportunity to venture into the field of entrepreneurship. The involvement of the Iban community in doing business can help increase the Malaysian economy through handicraft products (Tugang & Tingi, 2021), especially among Iban women entrepreneurs (Man, 2010; as cited in Taibi et al., 2018). The research on Iban entrepreneurs has yet to be carried out widely. Subsequently, the factors that influence entrepreneurial intentions from the point of view of personality traits and social learning variables have yet to be fully explored. Thus, this study seeks to analyse and correlate the personality traits and social learning variables that affect entrepreneurial intentions among the Iban community. It is widely known that being independent expands a person's benefit and generates job opportunities as a poverty-reduction tool (Ayoo, 2021).

The problem of entrepreneurship is seen as one of the methods that can bring the Iban community out of the problem of unemployability as Krafft and Rizk (2021) stated that the growing problem of unemployment within society can be solved by considering entrepreneurship as a platform to generate income. In contrast, the younger people who observe entrepreneurship as their second or last choice of employability found that this career choice is not privileged and wastes time (Okoro et al., 2022; Ndebele et al., 2022). Due to the number of Bumiputera entrepreneurs increasing in Malaysia from year to year because

they want to achieve a better living standard Safaruddin & Zainuddin (2019), the government's effort to encourage Bumiputera to be involved in entrepreneurship has been continuously to encourage them to be more proactive. To help local Sarawak entrepreneurs boost Malaysia's economic progress, the Sarawak government has launched several efforts, especially in helping entrepreneurs financially and skills in maintaining existing businesses. Among the initiatives are the launch of the SE\*Hebat Sarawak Blueprint by Sarawak Digital Economy Corporation Berhad or SEDC (Dayak Daily, 2022), the commencement of financial assistance such as grants, soft loans, and subsidies by the Minister for International Trade, Industry, and Investment, Datuk Amar Awang Tengah Ali Hasan Anyap (2023) and the support from the state's Premier Datuk Patinggi Tan Sri Abang Johari Openg by calling out the federal government to channel more provisions to nurture the growth of small and medium enterprises (SMEs) in Sarawak (Malay Mail, 2023).

Despite many initiatives to help local entrepreneurs financially, more is needed if local entrepreneurs, especially among the Iban people, do not have a high entrepreneurial intention to sustain their business, and the lack of knowledge and skills can contribute to this. The lack of management expertise in small organizations is the main reason for the failure of that business (Shrivastava, 2018). Similarly, in the context of Sarawak, many Iban entrepreneurs fail in their business. Most entrepreneurs need help managing their businesses and the absence of wealth (Rosli et al., 2021; Rosli et al., 2023). Some entrepreneurs from the Iban community need more technologies and a shortage of raw materials. Hence, this study aims to raise the levels of involvement and intention of entrepreneurship among the Iban community in Sarawak, especially in Kuching. This research will identify the essential measurements that prompted the Iban community to turn into entrepreneurs and lead them to participate in entrepreneurial activity and start the business.

Using the current framework outlined by Negin et al (2021) on Entrepreneurial Intention (EI) and the Theory of Planned Behaviour (TPB), the current study attempts to contribute to existing studies on Iban entrepreneurs by identifying and examining the personality traits and social learning variables that affected their entrepreneurial intentions.

### **Literature Review**

There are many definitions of entrepreneurship. Some of them see entrepreneurship as a process of successful organization, and others define entrepreneurship as building mindset and skills. However, the final destination of entrepreneurship definition is generating jobs opportunities and lead to economic development (Hessels, 2019).

Malaysian government's wanting to help the economy and alleviating poverty in Malaysia. The government introducing New Economic Policy aimed to eliminate scarcity of poverty population in Malaysia and it is found that Iban community is ranking as top five communities in Sarawak with high poverty rate in Malaysia (Doris, 2012). However, Hessels (2019) describes entrepreneurship as the intersection to the development economics. Thus, with Iban involvement in entrepreneurship, we can eradicate this high poverty rate in Malaysia.

According to Sarawak Facts and Figures (2021), the population in Sarawak increased to 2,560,600 in 2020, up from 2,471,140 in 2010. Sarawak is a resource-rich state, located in western Malaysia on the island of Borneo. It primarily exports oil, gas, timber, and palm oil. Sarawak Gross Domestic Products (GDP) recorded a value of RM131.2 billion, a 2.9 % increase compared to the negative 6.8 % recorded in 2020 (Sim, 2022).

Increment in GDP indicates a government huge initiative in product development and expected to be utilized by the Iban entrepreneurs. This is because in Sarawak, the Iban community is the largest ethnic group at 723,400, followed by the Chinese (619,900), Malay (607,800), Bidayuh (197,000), other Bumiputera (141,300), Melanau (133,400), and Indian others (14,800) (Lim, 2022).

Most Iban communities are very independent due to their heavy lifestyle by doing farming and paddy planting for income generation. They are also involved in shifting agriculture as their major economic activity. All these efforts are done by the Iban entrepreneurs to improve efficiency in resource planning and management at the state and districts level. In return, all these can beneficially strengthen the national economy, social development, and people's well-being.

In this study, it is targeted on specific community mainly in Sarawak that is among Iban to investigate the entrepreneurship potential of the indigenous entrepreneurship of its community. The study will focus on the entrepreneurship intention among the Iban community in Kuching. The state, Kuching is selected because Kuching topped the population table at 691,300, followed by Sibu (278,400), Miri (274,000), Bintulu (188,000), Samarahan (100,100), Serian (79,100), Sri Aman (76,300), Sarikei (65,500), Bau (61,000), and Limbang (55,000) (Lim, 2022).

Bird (1988) believed that entrepreneurial intention was an internal psychological activity that enabled entrepreneurs to work hard to achieve ideal results. Entrepreneurial intention is usually influenced by personal and situational factors (Altinay et al., 2012), family factors (Israr & Saleem, 2018), human capital (Marvel et al., 2016), social capital (Salamzadeh et al., 2022) and psychological capital (Porfirio et al., 2023). The current study contributes to the literature examining its antecedents in among Dayak in Kuching, Sarawak, from the Iban community perspective.

### **Need for Achievement**

The motivation to start a firm was originally conceptualized as deriving from individuals' need to excel, achieve, and to strive for success in their social environment (McClelland, 1961). Since then, research has sought to demonstrate whether this personality trait, commonly referred to as need for achievement, could be used to define entrepreneurs and whether it might shape their entrepreneurial intention (Koh, 1996; Krueger et al., 2000). Unfortunately, the initially promising results concerning the positive impact of need for achievement on individuals' intention to start a firm (Gürol and Atsan, 2006) soon gave way to considerable doubts regarding the role played by need for achievement in the start-up phase (Rauch & Frese, 2007). This suggests that the relationship between need for achievement and entrepreneurial intention is one that still demands exploration and that it could benefit from the application of new theoretical approaches (Carsrud & Brannback, 2014).

Individuals with high need for achievement are more likely than low need for achievement individuals to participate in activities that require planning for the future, that offer high degrees of control over outcomes, and that involve personal responsibility and feedback on performance (Perez-Fernandez et al., 2022). Prior research has already considered that these characteristics of need for achievement tie in with entrepreneurial activity Frank et al (2007) and entrepreneurs (Stewart & Roth, 2007). Thus, based on these arguments, we propose the following hypothesis

H1: Need for Achievement has a positive effect on Entrepreneurial Intention.

### **Risk Taking Propensity**

A risk-taking propensity is an individual's personality trait which is important in selecting the project and the decision making involved in the entrepreneurship profession (Sharaf et al., 2018). Entrepreneurs with this personality have risk taking ability that help them to sustain an open innovation journey and to foster competitiveness. In return, they have more self-confidence than non-entrepreneurs. Entrepreneurs who have the confidence to make a highly risky decision on time and have self-confidence, as compared to others, can have more opportunities and are more likely to achieve their entrepreneurial goal (Shahzad et al., 2021). Therefore, we posit the following hypothesis

H2: Risk Taking Propensity has a positive effect on Entrepreneurial Intention.

### **Innovativeness**

Innovativeness plays a crucial role in entrepreneurial intentions (Gill et al., 2021; Jiatong et al., 2021; Palladan & Ahmed, 2021; Puapradit & Supan, 2021). Innovativeness is the predisposition to creativity and experimentation in producing new products, services, and technology through the research and development of new processes (Erden & Erden, 2020), thus extending the process of ideas to implementation and execution (Ugwueze et al., 2022). Studies have shown that innovativeness is successful in carrying out entrepreneurial events (Gill et al., 2021; Schlaegel et al., 2021). We therefore hypothesize that:

H3: Innovativeness has a positive effect on Entrepreneurial Intention.

### **Family Upbringing**

Family upbringing refers to informal treatment for a family member or the provision of instructions to raise a family member to strengthen informal social links through integrated programs, including community and private services. This is achieved by providing family members with emotional, physical, financial, and material resources to help promote family values and accomplish family needs and goals.

A few studies have shown the impact of close relatives on entrepreneurial events and entrepreneurial role models (Grave & Salaf, 2003; Laspita et al., 2012; Murphy & Lambrechts, 2015). This is imperative because the family is a significant institution that people rely on to make start-up decisions and achieve entrepreneurial success (Powell & Eddleston, 2013). Thus, the researchers hypothesized the following:

H4: Family Upbringing has a positive effect on Entrepreneurial Intention.

### **Entrepreneurial Self-Efficacy**

Entrepreneurial self-efficacy is "an individual's belief in one's capability to organize and execute courses of action required to produce given attainments" (Bandura, 1994, p. 3). Entrepreneurial self-efficacy can be identified in two aspects, i.e., as a motivational tool for developing reliable goals and objectives towards the new venture, and as a directing apparatus that enables people to accomplish their objectives (Madawala et al., 2023).

Less research has been conducted in a qualitative or mixed-method approach to identify the factors affecting entrepreneurial behavior (Khoshmaram et al., 2020). In addition, the link

between entrepreneurship and psychological factors should be explored further (Jones et al., 2018). Entrepreneurial self-efficacy should be tested in different national contexts (Crespo et al., 2018) and thus this study will be tested among Iban community. Consequently, we propose the following hypothesis

H5: Entrepreneurial Self-Efficacy has a positive effect on Entrepreneurial Intention.

### **Entrepreneurial Intention**

Entrepreneurial Intention refers to a person's ambition to become a company owner or launch a new venture (Krueger Jr et al., 2000). The literature has identified many internal and external factors that can influence an individual's choices regarding the establishment of a new business. These factors come from their personality traits and are connected to the external environment, which strongly influences their career path (Shahzad, 2021). Individuals with strong entrepreneurial intentions are more likely to start real entrepreneurial activities.

In a multi-ethnic country, lack of exposure in term of managing and utilising resources from various sources like from their own resources, from cultural orientation, economic conditions and political linkages are often cited as factors that depict their different behaviours and hinder certain ethnic group ventures or growth into entrepreneurship (Zimmerman & Chu, 2013). This causes that the success rates among them in Malaysia are still at a low level. Thus, a study like this will be helpful to the various communities and industries in Malaysia.

In Sarawak, just a few studies have examined entrepreneurial intention; however, hardly any study has focused on examining the role of need for achievement, risk taking propensity, innovativeness, family upbringing and self-efficacy in the formation and development of Dayak's entrepreneurial intentions among Iban community in Sarawak. Therefore, this study is conducted to bridge this research gap. By investigating the relationship between these personal and situational factors with Dayak's entrepreneurial intention among Iban community, our study is set to enrich and provide empirical evidence on the correlations between these factors.

### **Methodology**

The sample of the study consists of the Malaysian healthcare sector's management team. 150 questionnaires were self-administered and a purposive sampling technique was adopted in the selection of the respondents.

### **Data Collection Procedure, Variable Measurement, and Method of Data Analysis Figures and Tables**

A structured self-administered questionnaire was used to collect data from the respondents. The sample of the research is the Iban community in Sarawak, East Malaysia. The questionnaire is based on a 5-point Likert scale ranging from strongly disagree to strongly agree. Meanwhile, the measurement to measure Entrepreneurial Intentions is adapted from an entrepreneurial attitude orientation scale developed by (Shane & Venkataraman, 2000). In this study, Entrepreneurial Intention is multidimensional, consisting of Need for Achievement (Khedhaouria et al., 2015), Risk-Taking Propensity (Karabulut, 2016), Innovativeness (Juri, 2009; Hisrich et al. 2005), Family Upbringing (Alstete, 2002), and Entrepreneurial self-efficacy (Bandura, 1982; 1997). Data gathered from the respondents were analysed using SPSS version 26, which also includes descriptive and correlation analyses.

First, the questionnaires were distributed to 150 respondents throughout the state of Sarawak; following data cleaning, 100 questionnaires were found usable. This study applied a number of standard statistical tools to analyse the data. Specifically, PLS-SEM was used for this purpose. Figure 1 illustrates the proposed research framework for this study.

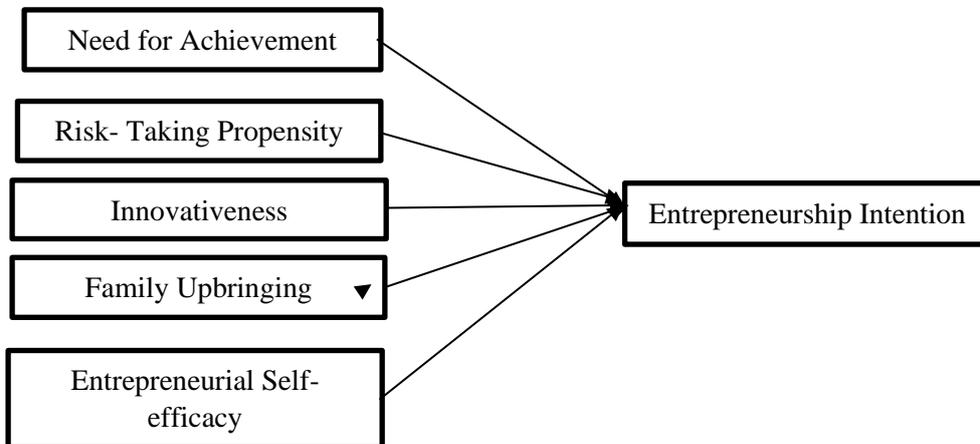


Figure 1: Research Framework

**Results and Discussion**

*Descriptive Results*

Table 1

*Profile of Respondents*

Variables	Item	Frequency	Percentage
Gender	Male	33	33.0
	Female	67	67.0
	Total	100	100.0
Marital Status	Single	75	75.0
	Married	25	25.0
	Total	100	100.0
Age (Years)	20 or less	7	7.0
	21 - 30	66	66.0
	31 - 40	13	13.0
	41 - 50	13	13.0
	51 - 60	1	1.0
	Total	100	100.0
Job Position	Clerical	11	11.0
	Supervisory	14	14.0
	Top Management	5	5.0
	Managerial	16	16.0
	IPTA Student	44	44.0
	Educator	10	10.0
	Total	100	100.0
Job Sector	Government Sector	12	12.0
	Private Sector	39	39.0

	Unemployed	47	47.0
	Self-employed	2	2.0
	Total	100	100.0
Level of Education	SPM or Lower	7	7.0
	STPM/Diploma	22	22.0
	Bachelor Degree	62	62.0
	Post Graduates	9	9.0
	Total	100	100.0
Individual Monthly Gross Income (RM)	RM1000 and below	48	48.0
	RM1001 – RM2000	13	13.0
	RM 2001 – RM3000	15	15.0
	RM3001-RM4000	7	7.0
	RM4001 – RM5000	7	7.0
	RM5001 and above	10	10.0
	Total	100	100.0
Parent's Working Background	Farmer	9	9.0
	Government	32	32.0
	Merchandiser	1	1.0
	Private Sector	25	25.0
	Self-employed/Businessman	27	27.0
	Unemployed	6	6.0
	Total	100	100.0
Family Involvement in Business	No	77	77.0
	Yes	23	23.0
	Total	100	100.0
Self-Involvement in Business	No	55	55.0
	Yes	45	45.0
	Total	100	100.0

### *Descriptive Results*

Because survey research is not normally distributed, the partial least squares (PLS) modelling with the SmartPLS 4.0 updated version (Ringle et al., 2022) was used as the statistical tool to assess the measurement model and structural model (Civelek, 2018). First, the researcher examined full collinearity to test for common method bias, as suggested by Kock & Lynn (2012) and Kock (2015). All variables are regressed against a common variable in this method, and if the VIF is less than 3.3, thus, there is no bias from single-source data. The analysis produced a VIF less than that of single-source bias, indicating that there is no significant issue with our data.

### *Measurement Model Assessment*

We tested the measurement model to test the instrument's validity and reliability following the guidelines by (Hair et al., 2019; Ramayah et al., 2018). Then the structural model was performed to test the hypothesis developed. We assessed the loadings, average variance extracted (AVE), and composite reliability (CR) for the measurement model. The values of loadings should be  $\geq 0.5$ , AVE should be  $\geq 0.5$ , and CR should be  $\geq 0.7$ . As shown in Table 2,

the AVE is higher than 0.5, and the CR are all higher than 0.7. Convergent validity is the extent to which a measure correlates positively with an alternative measure of the same construct. In order to evaluate convergent validity, we looked at the indicators' outer loadings and the AVE. Meanwhile, indicators with loadings lower than 0.708 can be retained when the minimum AVE result of 0.5 is achieved (Hair et al., 2019). Hence, no item was deleted. Fig. 1 shows the graphical measurement model assessment.

Table 2  
*Measurement Model Assessment*

Construct	Item	Loadings	CA	CR	AVE
EI	C28	0.900	0.964	0.970	0.823
	C29	0.898			
	C30	0.936			
	C31	0.912			
	C32	0.918			
	C33	0.904			
	C34	0.879			
ESE	E23	0.819	0.942	0.956	0.815
	E24	0.921			
	E25	0.950			
	E26	0.907			
	E27	0.912			
FAM	F15	0.846	0.948	0.957	0.738
	F16	0.626			
	F17	0.901			
	F18	0.882			
	F19	0.890			
	F20	0.915			
	F21	0.885			
	F22	0.891			
INN	IN10	0.723	0.851	0.894	0.628
	IN11	0.791			
	IN12	0.868			
	IN13	0.799			
	IN14	0.772			
NFA	N1	0.829	0.862	0.907	0.710
	N2	0.898			
	N3	0.896			
	N4	0.739			
RTP	R5	0.818	0.828	0.879	0.597
	R6	0.539			
	R7	0.833			
	R8	0.838			
	R9	0.795			

*\*No item was deleted as loading Composite Reliability > .708 (Hair et al., 2017)*

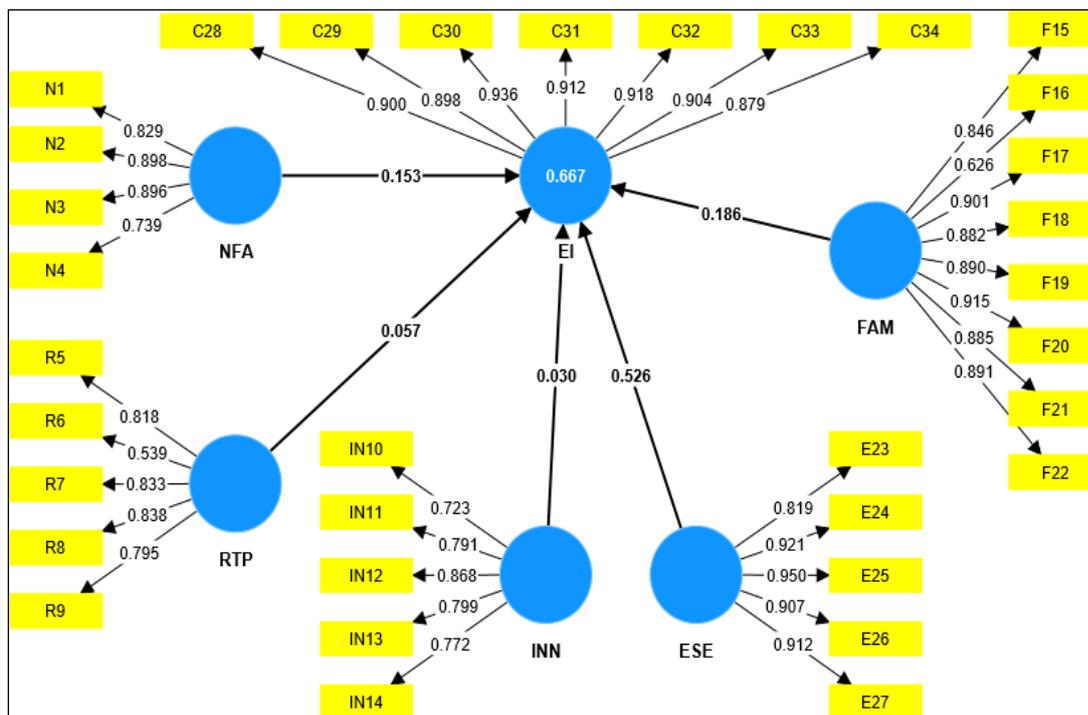


Figure 1: Measurement Model

Step 2 next evaluated the discriminant validity using the HTMT criterion, as described by Hair et al (2019) and displayed in Table 6. (Ringle et al., 2020). Assessing discriminant validity using Henseler's (2015) Heterotrait-Monotrait ratio of correlations criterion. The results indicate that discriminant validity is well-defined at HTMT0.85 Diamantopoulos & Siguaw (2006) as seen in Table 3 Ringle et al (2020) indicating that the correlation values match the corresponding constructs and satisfy the conservative criteria. Therefore, discriminant validity is not a concern. Since there is no multi-collinearity issue between items loaded on distinct constructs in the outer model, the data indicate that it is appropriate to proceed with the structural model assessment to test the study's hypotheses.

Table 3

HTMT Criterion

	EI	ESE	FAM	INN	NFA	RTP
EI	0.667					
ESE	0.819	0.819				
FAM	0.710	0.771	0.710			
INN	0.675	0.771	0.724	0.675		
NFA	0.523	0.459	0.430	0.432	0.523	
RTP	0.661	0.727	0.693	0.882	0.586	0.661

Criteria: Discriminant validity is established at HTMT0.90 (Gold et al., 2001)

Structural Model

We resampled the data with 5000 bootstrap samples to test the hypotheses (Hair et al., 2017). The Beta values for each path coefficient in Table 4 indicate that FAM and ESE have the capability to influence Entrepreneurship Intention positively. According to Table 4, the proposed relationships (H4 and H5) have a substantial impact on Entrepreneurship Intention. In particular, the study revealed support for Hypothesis 4 (FAM -> EI,  $\beta = 0.186$ ,  $p = 0.008$ , LLCI

= 0.060, ULCI = 0.311). The same goes with Hypothesis 5 (ESE -> EI,  $\beta = 0.526$ ,  $p = 0.0000$ , LLCI = 0.370, ULCI = 0.673) In this study, H1 NFA, H2 RTP, and H3 INN did not support Entrepreneurship Intention. Fig. 2 is a graphical representation of the structural model evaluation illustration.

Table 4  
Path Coefficient

Direct Effect	Beta	S.E.	t-value	p-value	LLCI	ULCI	Decision
H1: NFA -> EI	0.153	0.100	1.520	0.064	-0.005	0.324	Not Supported
H2: RTP -> EI	0.057	0.116	0.491	0.312	-0.159	0.226	Not Supported
H3: INN -> EI	0.030	0.103	0.297	0.383	-0.136	0.196	Not Supported
H4: FAM -> EI	0.186	0.077	2.407	0.008	0.060	0.311	Supported
H5: ESE -> EI	0.526	0.093	5.677	0.000	0.370	0.673	Supported

Note: \* $p < 0.05$ , \*\* $p < 0.01$ , Bias Corrected, LL=Lower Limit, UL=Upper Limit  
p-value of 0.01, 0.05 (Hair et al., 2017)

NFA: Need for Achievement; RTP: Risk-Taking Propensity; INN: Innovativeness; FAM: Family Upbringing; ESE: Entrepreneurial Self-efficacy; EI: Entrepreneurship Intention

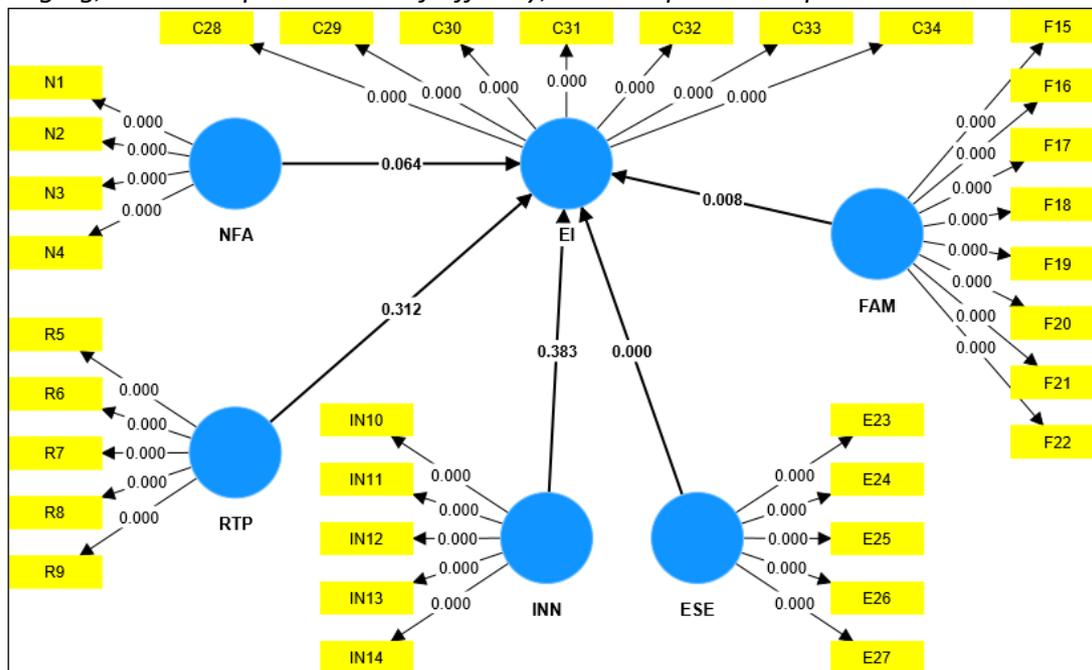


Figure 2: Structural Model

According to Hair et al (2017), the evaluation of the structural model for collinearity is not a concern if all the inner VIF values of the independent variables (Need for Achievement, Risk-Taking Propensity, Innovativeness, Family Upbringing, Entrepreneurial self-efficacy, and Entrepreneurship Intention) are less than 5 or 3.3. (Hair et al., 2017). Subsequently, we assessed the structural model relationship significance and relevance by examining the path coefficient after bootstrapping and evaluating the level of R-Square (coefficient) to predict the model's accuracy and using it as the sum of the exogenous variables' influence on the endogenous variable (s). R<sup>2</sup> is the sum of variance in the endogenous system as characterised by all connected exogenous constructs. Impact ratings vary from 0 to 1, with higher values indicating more prediction accuracy.

This study employs  $R^2$ , as indicated by Cohen (1988), which corresponds to considerable (0.26), moderate (0.13), and low (0.02) levels of predictive precision, respectively. Table 5 displays the model quality evaluation. In this study, the coefficient of determination ( $R^2$ ) and effect size ( $f^2$ ) of exogenous variables on the endogenous variable is determined. All constructs (Need for Achievement, Risk-Taking Propensity, Innovativeness, Family Upbringing) have a minor effect size of  $f^2$  on Entrepreneurship Intention (Cohen, 1988). In contrast, the  $R^2$  coefficient of determination of H1-H5 indicates (Need for Achievement, Risk Taking Propensity, Innovativeness, Family Upbringing, Entrepreneurial self-efficacy: 0.667) revealing a substantial influence on Entrepreneurship Intention (Chin, 1998). The multicollinearity of indicators was also evaluated. Both indicators satisfy the VIF values, and their values are consistently lower than the anticipated collinearity concerns of 5.0 (Hair et al., 2014) and 3.3 (Hair et al., 2014). (Diamantopoulos & Siguaw, 2006).

Table 5  
*Model Quality Assessment*

Direct Effect	$f^2$	$R^2$	VIF
H1: NFA -> EI	0.053	0.667	1.326
H2: RTP -> EI	0.004		2.688
H3: INN -> EI	0.001		2.830
H4: FAM -> EI	0.043		2.415
H5: ESE -> EI	0.309		2.697

$f^2 \geq 0.35$  consider Substantial (Cohen, 1988)

$R^2 \geq 0.26$  consider Substantial (Cohen, 1989)

$VIF \leq 3.3$  (Diamantopoulos & Siguaw, 2006) or  $\leq 5.0$  (Hair et al., 2017)

*PLS-Predict*

The prediction relevance of the endogenous construct was examined using the PLSpredict approach (see Shmueli et al., 2019). Table 6 shows that all values for Entrepreneurship Intention indicators had lower RMSE and MAE than the linear model (LM), indicating that Entrepreneurship Intention had a high prediction power (Shmueli et al., 2019). In contrast, use behaviour has low prediction power as indicators had higher RMSE and MAE than the linear model (LM).

Table 6  
*PLS-Predict*

Construct	Items	PLS-		LM-		PLS-LM		$Q^2_{predict}$	Predict Power
		RMSE	MAE	RMSE	MAE	RMSE	MAE		
Entrepreneurship Intention	C28	0.647	0.478	0.743	0.574	-0.096	-0.096	0.602	High
	C29	0.767	0.566	0.794	0.605	-0.027	-0.039	0.568	
	C30	0.692	0.497	0.854	0.654	-0.162	-0.157	0.534	
	C31	0.818	0.574	1.121	0.808	-0.303	-0.234	0.432	
	C32	0.854	0.606	1.037	0.786	-0.183	-0.180	0.413	
	C33	0.753	0.552	0.925	0.675	-0.172	-0.123	0.455	
	C34	0.777	0.567	0.921	0.671	-0.144	-0.104	0.422	

## Conclusion

Based on the structural model, the Beta values indicate that only Family Upbringing (FAM) and Entrepreneurial Self-efficacy (ESE) have potential to influence Entrepreneurship Intention (EI) positively and have a substantial impact on EI. Meanwhile NFA, RTP and INN did not support EI, where the  $p > 0.05$ . This study also using Model Quality Assessment, to find the coefficient of determination to predict the model accuracy, to shows the exogenous variables influence on the endogenous variable and the value of  $R^2 = 0.667$ , revealing all the factors (NFA, RTP, INN, ESE and FAM) have a substantial influence on EI. It shows that the relationship between independent variables (NFA, RTP, INN, ESE and FAM) and dependent variable (EI) qualify the H1 until H5.

By applying TPB concepts, entrepreneurial intention depends on the personal attitude, subjective norms and perceived behavioural control of the potential entrepreneurs. To date, scholars have analysed effectual logic versus causal logic by studying the behaviour of individuals who have already created companies (Guo et al., 2016; Schmidt & Heidenreich, 2014). However, effectual research fails to analyse entrepreneurial intention (Shahidi, 2020). The literature has not studied the individual risk-taking propensity towards one or the other logic in the case of the potential entrepreneur who intends to become an entrepreneur for the first time. Considering this gap, a study into the propensity and personality traits for effectual behaviour among Iban entrepreneurs before the firm's creation would add value to entrepreneurship research (Martín-Navarro et al., 2021). Based on the above, this paper aims to test the direct and indirect impact of the effectual propensity and personality traits of potential Iban entrepreneurs on their entrepreneurial intention.

Promoting the entrepreneurial intention of potential Iban entrepreneurs will positively impact their entrepreneurial behaviour and, therefore, create jobs and boost the economy (Zhang et al., 2020). For this reason, our study was conducted with the Iban community in Sarawak. Exploring the entrepreneurial intentions of this biggest community in Sarawak is crucial for the current and future development of the state Sarawak, east Malaysia.

For suggestions for future study, there are several more factors that may drive the entrepreneurial intention among Iban community in Kuching Sarawak to be more proactive as entrepreneurial. The status consciousness of the Iban community makes them shy to socialize with people of higher status. Other studies need to find out what is the problem behind these issues. The number of Bumiputera involved in entrepreneurial activity still relatively small in Malaysia as compared to Chinese because they afraid to try something new. The government should think of other methods and solutions to ensure that the Iban community is always improving in the entrepreneurial sector.

## References

- Altınay, L., Madanoğlu, M., Daniele, R., & Lashley, C. (2012). The influence of family tradition and psychological traits on entrepreneurial intention. *International Journal of Hospitality Management*, 31(2), 489–499. <https://doi.org/10.1016/j.ijhm.2011.07.007>
- Anyap, A. (2023). *Sarawak continues to support and empower SMEs*. New Sarawak Tribune. <https://www.newsarawaktribune.com.my/sarawak-continues-to-support-and-empower-smes/>
- Ayoo, C. (2021). Poverty reduction strategies in developing countries. In P. de Salvo & M. V. Pineiro (Eds.), *Rural Development - Education, Sustainability, Multifunctionality* (pp. 1-18). IntechOpen. <https://doi.org/10.5772/intechopen.101472>

- Bandura, A. (1994). Self-efficacy. In: Ramachaudran, V.S. (Ed.), *Encyclopedia of Human Behavior*. Academic Press, New York, 71–81.
- Bird, B. J. (1989). *Entrepreneurial behavior*. Glenview: Scott Foresman and Co
- Carsrud, A. L., & Brannback, M. (2014). Linking achievement motivation to intentions, goals and entrepreneurial behaviors. In *Handbook of entrepreneurial cognition*. Edward Elgar Publishing. <https://doi.org/10.4337/9781781006597.00012>.
- Chang, S. S., & Park, J. Y. (2018). Sustainability orientation and entrepreneurship orientation: Is there a tradeoff relationship between them? *Sustainability*, 10(2), 1-14. <https://doi.org/10.3390/su10020379>
- Chang, C. C., Yao, S. N., Chen, S. A., King, J. T., & Liang, C. (2016). Imagining garage start-ups: Interactive effects of imaginative capacities on entrepreneurial intention. *Creativity Research Journal*, 28(3), 289–297. <https://doi.org/10.1080/10400419.2016.1195635>
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Cohen, J. (1988). *Statistical power analysis for the behavioural sciences*, 2nd edn.(Hillsdale, NJ: L. Erlbaum Associates).
- Crespo, N. F., Belchior, R., & Costa, E. B. (2018). Exploring individual differences in the relationship between entrepreneurial self-efficacy and intentions: evidence from Angola. *Journal of Small Business Enterprise Development*, 27 (1), 1–30.
- Damoah, O. B. O. (2020). Strategic factors predicting the likelihood of youth entrepreneurship in Ghana: a logistic regression analysis. *World Journal of Entrepreneurship, Management and Sustainable Development*, 16(4), 389-401. <https://doi.org/10.1108/WJEMSD-06-2018-0057>
- Dayak Daily. (2022). SDEC launches SE\*Hebat Sarawak Blueprint to support local social enterprises, entrepreneurs. <https://dayakdaily.com/sdec-launches-sehebat-sarawak-blueprint-to-support-local-social-enterprises-entrepreneurs/>
- Diamantopoulos, A., & Siguaw, J. A. (2006). Formative versus reflective indicators in organisational measure development: A comparison and empirical illustration. *British Journal of Management*, 17(4), 263-282.
- Erden, A., & Erden, H. (2020). The relationship between individual innovation and social entrepreneurship characteristics of teacher candidates. *International Journal of Curriculum and Instruction*, 12, 185–206.
- Frank, H., Lueger, M., & Korunka, C. (2007). The significance of personality in business start-up intentions, start-up realization and business success. *Entrepreneurship & Regional Development*, 19(3), 227–251. <https://doi.org/10.1080/08985620701218387>
- Gill, S. A., Bencheva, N., Karayel, S., & Usman, M. (2021). Does entrepreneurial self-efficacy moderate the effects of cognitive flexibility and entrepreneurial alertness on entrepreneurial intentions? *Entrepreneurial Business and Economics Review*, 9(3), 25–41.
- Grave, A., & Salaf, J. W. (2003). Social network and entrepreneurship. *Entrepreneurship Theory and Practice*, 28(1), 1–22.
- Guo, R., Cai, L., & Zhang, W. (2016). Effectuation and causation in new internet venture growth: The mediating effect of resource bundling strategy. *Internet and Higher Education*, 26(2), 460–483. <https://doi.org/10.1108/IntR-01-2015-0003>
- Gürol, Y., & Atsan, N. (2006). Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. *Education training*, 48(1), 25–38. <https://doi.org/10.1108/00400910610645716>

- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science*, 45(5), 616-632.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24.
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, 26(2), 106.
- Henseler, J., Ringle, C., and Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1).
- Hessels, J., & Naudé, W., (2019). The Intersection of the Fields of Entrepreneurship and Development Economics: A Review towards a New View. *Journal of Economic Surveys*, 33(2), 389-403.
- Hong, M., Lee, C. H., & Xiang, Y. (2020). Entrepreneurship education and students' entrepreneurial intention in higher education. *Education Sciences*, 10(9), 1-18. <https://doi.org/10.3390/educsci10090257>
- Israr, M., & Saleem, M. (2018). Entrepreneurial intentions among university students in Italy. *Journal of Global Entrepreneurship Research*, 8(1), 1–14. <https://doi.org/10.1186/s40497-018-0107-5>
- Jiatong, W., Murad, M., Li, C., Gill, S. A., & Ashraf, S. F. (2021). Linking cognitive flexibility to entrepreneurial alertness and entrepreneurial intention among medical students with the moderating role of entrepreneurial self-efficacy: A second-order moderated mediation model. *PLoS ONE*, 16(9), e0256420. <https://doi.org/10.1371/journal.pone.0256420>
- Jones, P., Klapper, R., Ratten, V. & Fayolle, A. (2018). Emerging themes in entrepreneurial behaviours, identities and contexts. *International Journal of Entrepreneurial Innovation*, 19 (4), 233–236.
- Kock, N., & Lynn, G. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for Information Systems*, 13(7).
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration (ijec)*, 11(4), 1-10.
- Koh, H. C. (1996). Testing hypotheses of entrepreneurial characteristics: A study of Hong Kong MBA students. *Journal of Managerial Psychology*, 11(3), 12–25. <https://doi.org/10.1108/02683949610113566>
- Khoshmaram, M., Shiri, N., Shinnar, R.S., Savari, M., 2020. Environmental support and entrepreneurial behavior among Iranian farmers: the mediating roles of social and human capital. *Journal of Small Business Management*, 58(5), 1064–1088.
- Krafft, C., & Rizk, R. (2021). The promise and peril of youth entrepreneurship in the Middle East and North Africa. *International Journal of Manpower*, 42(8), 1500-1526. <https://doi.org/10.1108/IJM-05-2020-0200>
- Krueger, N. F., Jr, Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of business venturing*, 15(5–6), 411–432. [https://doi.org/10.1016/S0883-9026\(98\)00033-0](https://doi.org/10.1016/S0883-9026(98)00033-0)
- Laspita, S., Breugst, N., Heblich, S., & Patzelt, H. (2012). Intergenerational transmission of entrepreneurial intentions. *Journal of Business Venturing*, 27(4), 414–435.

- Lee, N., & Rodriguez-Pose, A. (2020). Entrepreneurship and the fight against poverty in US cities. *Environment and Planning A: Economy and Space*, 53(1), 31-52. <https://doi.org/10.1177/0308518X20924422>
- Lim, P. H. (2022). *Sarawak's population rises to over 2.56 MLN in 2020*. Borneo Post Online. <https://www.theborneopost.com/2022/06/16/sarawaks-population-rises-to-over-2-56-mln-in-2020/>
- Malay Mail. (2023). Sarawak premier calls for more assistance from Putrajaya for growth of SMEs in the state. <https://www.malaymail.com/news/malaysia/2023/07/22/sarawak-premier-calls-for-more-assistance-from-putrajaya-for-growth-of-smes-in-the-state/81037>
- Martin-Navarro, A., Medina-Garrido, J. A., & Velicia-Martin, F. (2021). How effectual will you be? Development and validation of a scale in higher education. *International Journal of Management Education*, 19(3), Article 100547. <https://doi.org/10.1016/j.ijme.2021.100547>
- Marvel, M. R., Davis, J. L., & Sproul, C. R. (2016). Human capital and entrepreneurship research: A critical review and future directions. *Entrepreneurship Theory and Practice*, 40(3), 599–626. <https://doi.org/10.1111/etap.12136>
- McClelland, D. C. (1961). *Achieving society*, No. 15. Simon and Schuster
- Murphy, I., & Lambrchts, F. (2015). Investigating the actual career decisions of the next generations. The impact of family business involvement. *Journal Family Business Strategy*, 6, 33–44.
- Ndebele, N. C. (2022). The challenges of youth entrepreneurship from a local government perspective in South Africa. *International Journal of Management, Entrepreneurship, Social Science and Humanities*, 5(2), 17-32. <https://doi.org/10.31098/ijmesh.v5i2.1149>
- Neging, P., Umban, M., Ali Hassan, A. A., & Kamaruddin, S. F. (2021). Personality traits and social learning variables on entrepreneurial intention (EI) among Iban community: Conceptual framework. *Journal of Sustainable Management Studies*, 2(1), 1-6. <https://majmuah.com/journal/index.php/jsms/article/view/75>
- Okoro, J. P., Nasse, T. B., Ngemendoma, A. B., Carbonell, N., & Nanema, M. (2022). Entrepreneurship education and youth unemployment challenges in Africa: Ghana in perspective. *International Journal of Management & Entrepreneurship Research*, 4(5), 213-231. <https://doi.org/10.51594/ijmer.v4i5.328>
- Palladan, A. A., & Ahmad, M. A. (2021). Does personality traits kindles opportunity recognition? An empirical analysis. *Ianna Journal of Interdisciplinary Studies*, 3(2), 1–14.
- Perez-Fernandez, H., Cacciotti, G., Martin-Cruz, N., & Delgado-Garcia, J. B. (2022). Are interactions between need for achievement and social networks the driving force behind entrepreneurial intention? A trait activation story. *Journal of Business Research*, 149, 65–76. <https://doi.org/10.1016/j.jbusres.2022.04.046>
- Porfírio, J. A., Felício, J. A., Carrilho, T., & Jardim, J. (2023). Promoting entrepreneurial intentions from adolescence: The influence of entrepreneurial culture and education. *Journal of Business Research*, 156, Article 113521. <https://doi.org/10.1016/j.jbusres.2022.113521>
- Powell, G. N., & Eddleston, K. A. (2013). Linking family to business enrichment and support to entrepreneurial success. Do female and male entrepreneurs experience different outcomes? *Journal of Business Venturing*, 28(2), 261–280
- Puapradit, T., & Supatn, N. (2021). Influence of entrepreneurial alertness and self-efficacy on entrepreneurial intention. *Journal of Business Administration*, 10(1), 225–241.

- Ramayah, T., Cheah, J., Chuah, F., Ting, H., & Memon, M. A. (2018). Partial least squares structural equation modeling (PLS-SEM) using smartPLS 3.0.
- Rapp, D. J., & Olbrich, M. (2020). On predictive entrepreneurial action in uncertain, ill-structured conditions. *Review of Managerial Science*, 15, 1961-1979. <https://doi.org/10.1007/s11846-020-00411-2>
- Rauch, A., & Frese, M. (2007). Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. *European Journal of work and organizational psychology*, 16(4), 353–385. <https://doi.org/10.1080/13594320701595438>
- Ringle, C. M., Sarstedt, M., Mitchell, R., & Gudergan, S. P. (2020). Partial least squares structural equation modeling in HRM research. *The International Journal of Human Resource Management*, 31(12), 1617-1643.
- Rosli, A., Daud, A., & Saad, J. M. (2021). Iban women and side-income generation in Bintulu. *International Journal of Academic Research in Business and Social Sciences*, 11(17), 254–262. <http://dx.doi.org/10.6007/IJARBS/v11-i17/11407>
- Rosli, A., Daud, A., Saad, J. M., & Robin, T. (2023). Participation of women in side-income: A case study of Iban women as a bread-earner in the family in Sarawak. *International Journal of Academic Research in Business and Social Sciences*, 13(3), 636–660. <http://dx.doi.org/10.6007/IJARBS/v13-i3/16410>
- Safaruddin, S. S., & Zainuddin, A. (2019). The active performance factors that influence the success of Bumiputera women entrepreneurs in Selangor. *Journal of Administrative Science*, 16(1), 71-92. [https://jas.uitm.edu.my/images/2019\\_JUNE/JAS5.pdf](https://jas.uitm.edu.my/images/2019_JUNE/JAS5.pdf)
- Salamzadeh, Y., Sangosanya, T. A., Salamzadeh, A., & Braga, V. (2022). Entrepreneurial universities and social capital: The moderating role of entrepreneurial intention in the Malaysian context. *International Journal of Management in Education*, 20(1), Article 100609. <https://doi.org/10.1016/j.ijme.2022.100609>
- Sarawak facts and figures*. (2021). Borneo Post Online. (n.d.). <https://www.theborneopost.com/tag/sarawak-facts-and-figures-2021/>
- Schlaegel, C., Engle, R. L., Richter, N. F., & Taureck, P. C. (2021). Personal factors, entrepreneurial intention, and entrepreneurial status: A multinational study in three institutional environments. *Journal of International Entrepreneurship*. <https://doi.org/10.1007/s10843-021-00287->
- Schmidt, J., & Heidenreich, S. (2014). Investigating organizational antecedents of effectual corporate entrepreneurship. In: *ISPIM Conference Proceedings; Manchester, June* (pp. 1–33)
- 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. <https://doi.org/10.3390/joitmc7030173>
- Shahidi, N. (2020). The moderating effects of sustainability orientation in the entrepreneurial intention model. *Journal of Enterprising Culture*, 28(01), 59–79. <https://doi.org/10.1142/S021849582050003X>
- Sharaf, A., El-Gharbawy, A., & Ragheb, M. A. (2018). Factors that influence entrepreneurial Intention within university students in Egypt. *Open Access Library Journal*, 5, 1–14.

- Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J. H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: guidelines for using PLSpredict. *European journal of marketing*.
- Shrivastava, V. (2018). *Investigating the relationship between the success and failure factors of business Incubators and those of micro-enterprises*. [Master dissertation, University of the Witwatersrand, Johannesburg, South Africa].  
<https://hdl.handle.net/10539/24891>
- Sim, A. (2022). *Malaysia Census 2020 reveals Sarawak's population totals 2.453 MLN, Kuching District accounts for 609,000*. DayakDaily. <https://dayakdaily.com/malaysia-census-2020-reveals-sarawaks-population-totals-2-453-mln-kuching-district-accounts-for-609000/>
- Stewart, W. H., & Roth, P. L. (2007). A meta-analysis of achievement motivation differences between entrepreneurs and managers. *Journal of small business management*, 45(4), 401–421. <https://doi.org/10.1111/j.1540-627X.2007.00220.x>
- 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 behaviour. *Sustainability*, 13(8), 1-17. <https://doi.org/10.3390/su13084519>
- Taibi, M., Ishak, A. S. Z., & Tuah, M. K. (2018). Melanau women engagement in income generating activity of sago pearls-based food products: Level of participation and motivation factors. *Global Business and Management Research: An International Journal*, 10(2), 96-105. <http://www.gbmrjournal.com/vol10no2.htm>
- Tugang, N., & Tingi, N. (2021). Challenges of handicraft products marketing and promotion amongst Iban entrepreneurs in Sarawak. *International Journal of Applied and Creative Arts*, 4(1), 118-129. <https://doi.org/10.33736/ijaca.4202.2021>
- Ugwueze, A. U., Ike, O. O., & Ugwu, L. (2022). Responding to social change: Innovativeness, entrepreneurial alertness, and entrepreneurial intention in Nigeria: The role of family support. *Entrepreneurship Education*, 5(4), 465–485. <https://doi.org/10.1007/s41959-022-00082-y>
- Ye, Q., Wang, D., & Zeng, K. (2021). Opening the black box of employee entrepreneurship decision-making. *International Journal of Entrepreneurial Behaviour & Research*, 27(6), 1548-1579. <https://doi.org/10.1108/IJEBr-08-2020-0541>
- Zhang, S. N., Li, Y. Q., Liu, C. H., & Ruan, W. Q. (2020). Critical factors identification and prediction of tourism and hospitality students' entrepreneurial intention. *Journal of Hospitality, Leisure, Sport and Tourism Education*, 26(December 2019), Article 100234. <https://doi.org/10.1016/j.jhlste.2019.100234>
- Zimmerman, M., and Chu, H. (2013). Motivation, success, and problems of entrepreneurs in Venezuela, *Journal of Management Policy and Practice*, 14(2), 76–90.